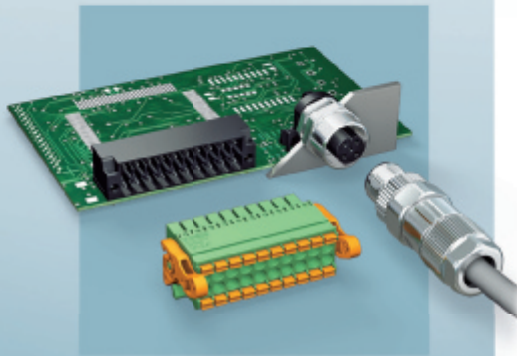
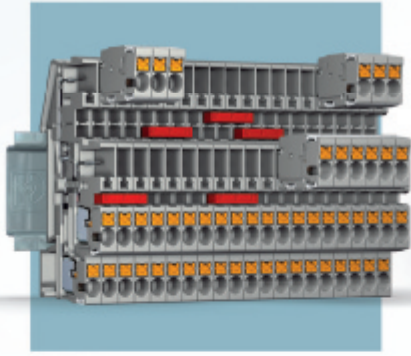


SUPPLEMENT

Catalog

2012

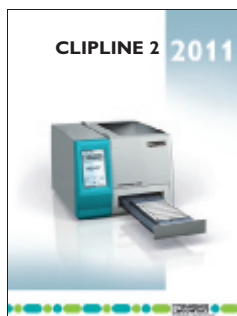


The Phoenix Contact catalog system



CLIPLINE 1

The CLIPLINE 1 catalog offers industrial connection technology products for optimum control cabinet wiring. Here you will find everything, from the CLIPLINE complete unique modular terminal block system through special terminal blocks to PC-supported terminal strip configuration.



CLIPLINE 2

The CLIPLINE 2 catalog provides everything you'll need for the optimum marking, wiring, and mounting of your application. The catalog is therefore the ideal supplement for all other product ranges.



PLUSCON

The PLUSCON catalog documents industrial connectors for data, signal, and power cables, as well as for fiber optics. The complete range for sensor/actuator cabling makes this catalog a standard for field wiring.



COMBICON

The COMBICON catalog offers the entire device connection technology range in protection classes up to IP67. Electronic housings, plug-in card blocks, and DIN socket strips make this catalog a standard for every developer.



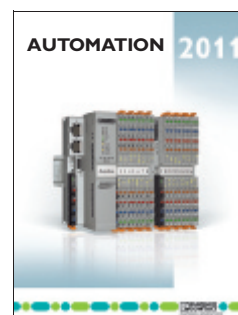
TRABTECH

The products and solutions for "Power and Signal Quality" in the TRABTECH catalog greatly contribute to ensuring interference-free work processes in all sectors. This offers you: simply more availability.



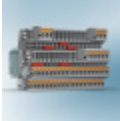






INTERFACE

Covering all aspects of industrial control, the INTERFACE catalog provides all the components required for the signal conditioning of digital, analog, serial, and power signals, such as signal converters, switching devices, and power supply units.

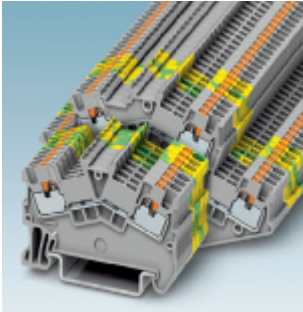


AUTOMATION

From the simplest IT-powered control system through to the fastest I/O module in the world, the AUTOMATION catalog offers the latest automation components and systems from Phoenix Contact.

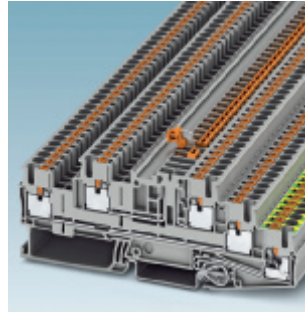
	2		Modular terminal blocks	CLIPLINE 1
	70		Marking systems, tools, and mounting material	CLIPLINE 2
	156		Connection technology for field devices and field cabling	PLUSCON
	236		Device connection technology and electronics housing	COMBICON
	270		Power and signal quality	TRABTECH
	290		Signal converters, switching devices, power supply units	INTERFACE
	334		Automation components and systems	AUTOMATION
	372		Index	

PT push-in connection terminal blocks



Push-in feed-through, multi-conductor, and double-level terminal blocks

PTS 1,5/S... / PTTBS 1,5/S... page 6



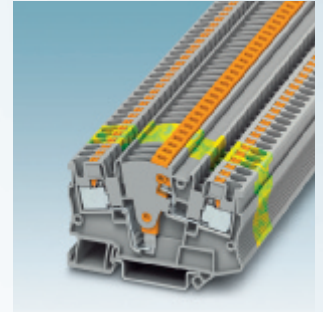
Push-in three-level installation terminal blocks

PTB 2,5... page 10



Push-in feed-through terminal block, 1000 V

PTTB 4-L... page 13



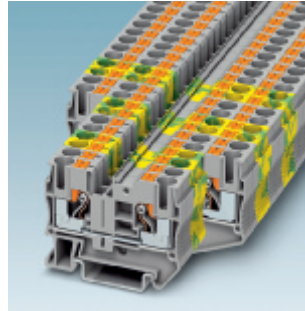
Push-in test disconnect terminal blocks

PTME 4... page 14



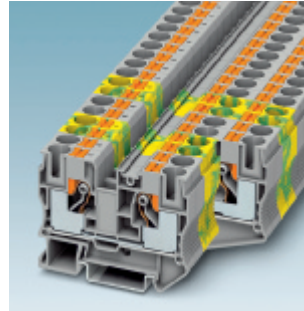
Push-in disconnect and diode terminal blocks for photovoltaics, 1000 V

PTME 6... page 16



Push-in feed-through and multi-conductor terminal blocks

PT 6... page 18



Push-in feed-through and multi-conductor terminal blocks

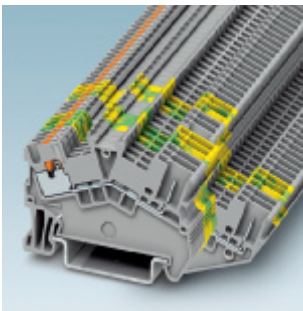
PT 10... page 22



Push-in terminal block bases for potential distribution

PTU... page 26

COMBI plug-in connection solutions



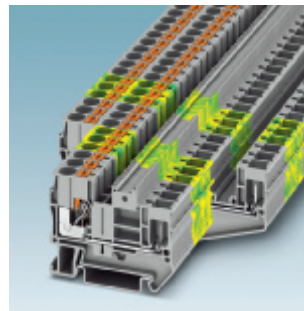
COMBI plug-in push-in feed-through, multi-conductor, and double-level terminal blocks

PTS 1,5/S... / PTTBS 1,5/S... page 32



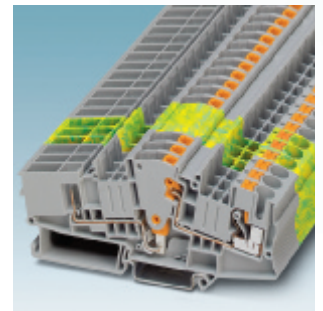
COMBI plug-in push-in four-level terminal blocks

PT 2,5-4L... page 40



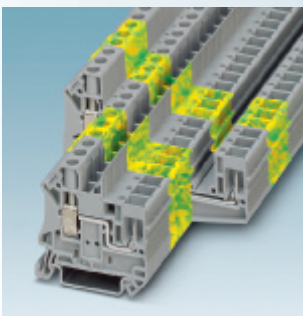
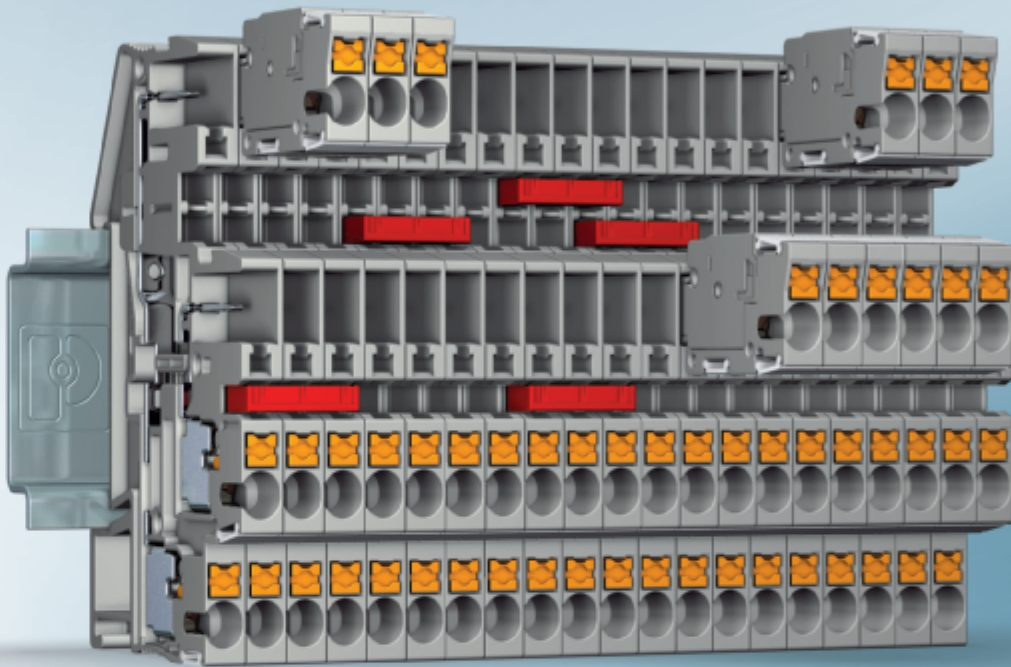
COMBI plug-in push-in feed-through, multiple conductor, and ground terminal blocks

PT 6 ... page 42

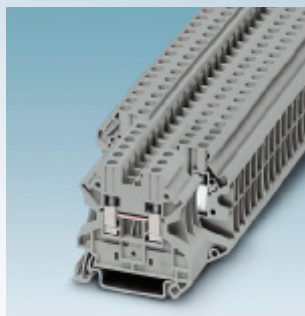


COMBI plug-in push-in test disconnect terminal blocks, automatic short-circuit function

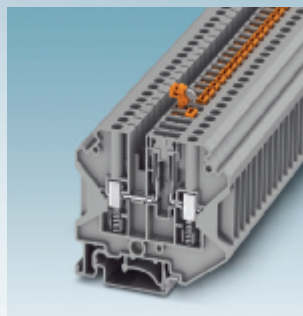
PTME 6-CT... page 46



COMBI plug-in UT screw connection - feed-through, multiple conductor, and ground terminal blocks
UT 6... page 50



UT screw connection - feed-through, multiple conductor, and double-level terminal blocks, 1000 V
UT 4... HV page 54



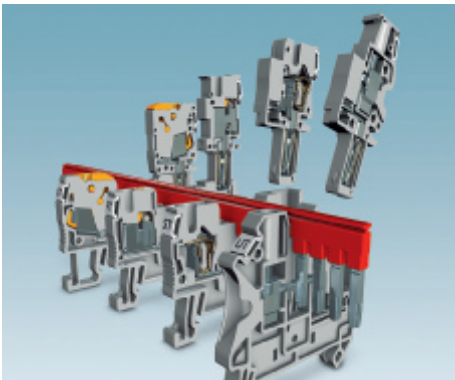
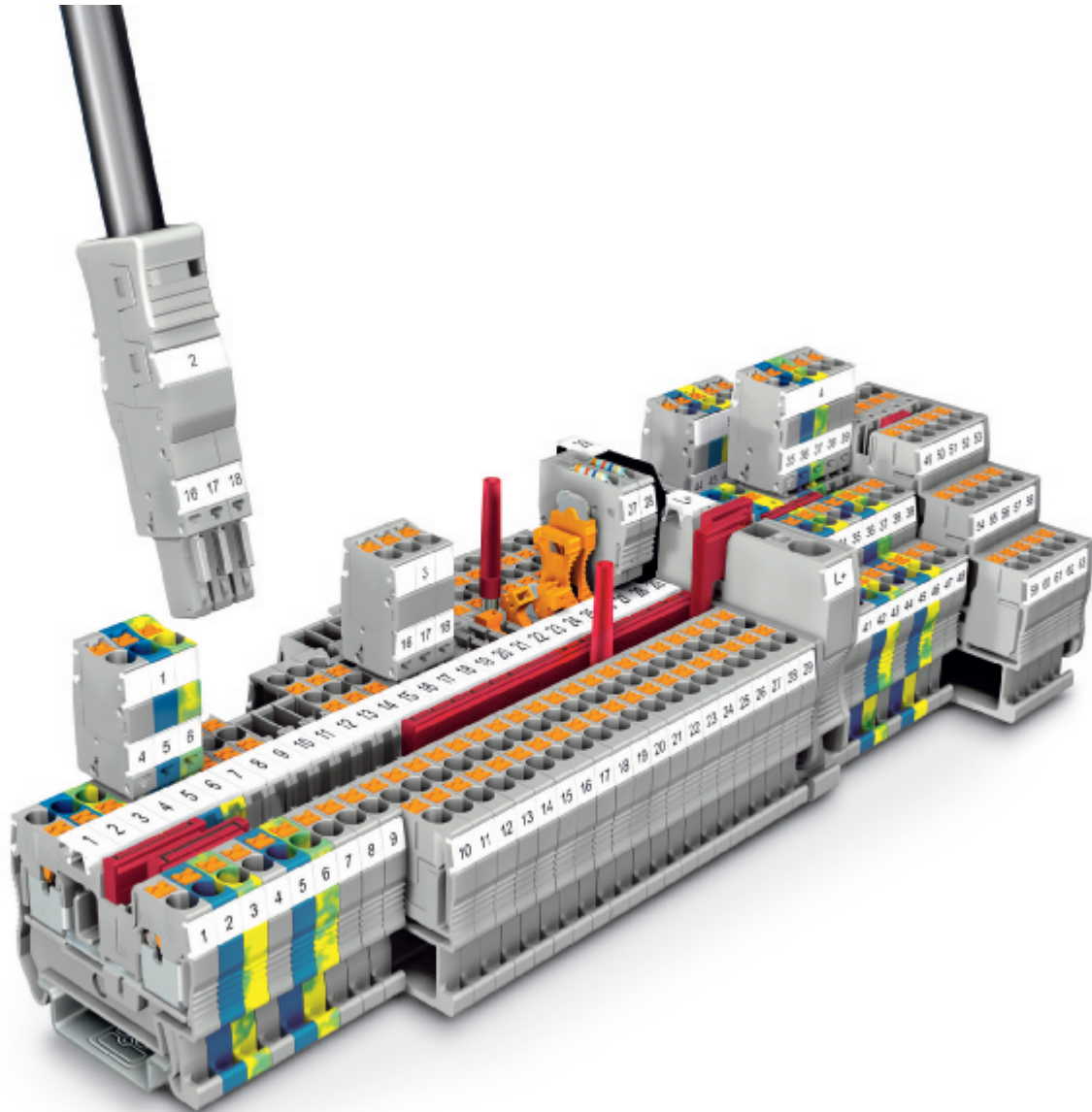
USST spring-supported screw connection, disconnect, knife disconnect, and test disconnect terminal blocks
USST... page 58



UKH screw connection - high-current terminal block bases for direct mounting
UKH...F page 64

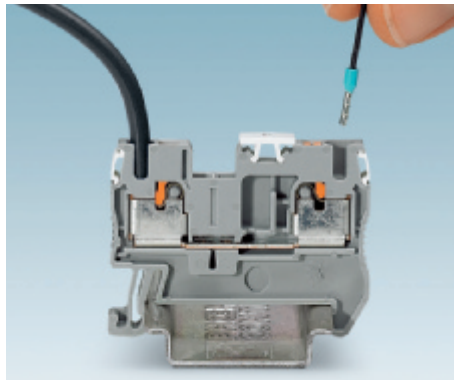
RBO bolt connection terminals, open, for ring- and fork-type cable lugs

RBO... page 66



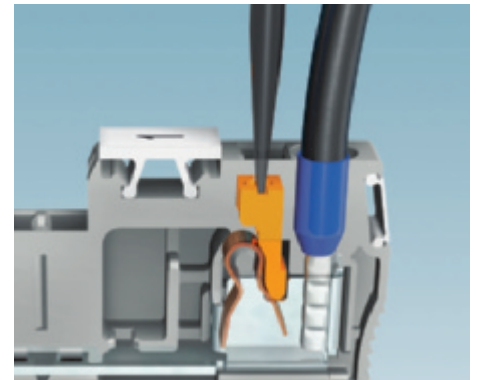
CLIPLINE complete

The push-in technology series is characterized by the easy, direct conductor connection and makes consistent use of the benefits of the CLIPLINE complete system.



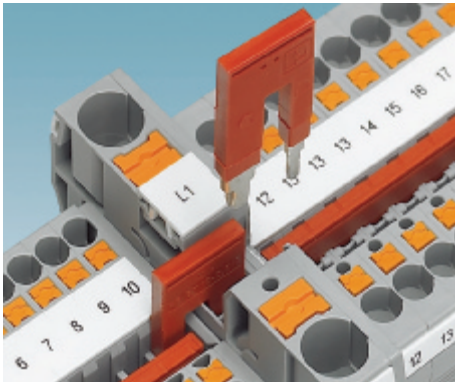
Easy to connect

The up to 50 percent reduction in insertion force offered by push-in technology supports simple and direct insertion of solid and stranded conductors featuring ferrules with a cross section of 0.34 mm² or higher.

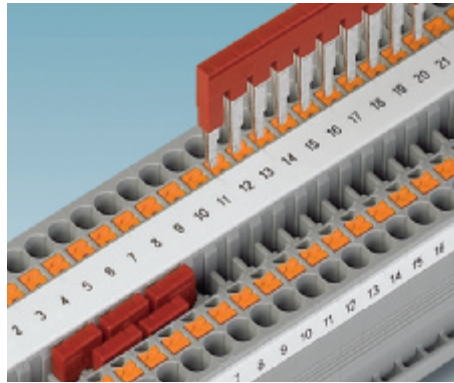


Latch function

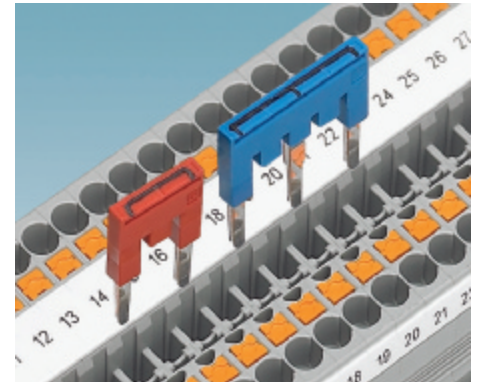
The integrated latch allows you to release connections with any type of tool – easily and without direct contact with live parts.



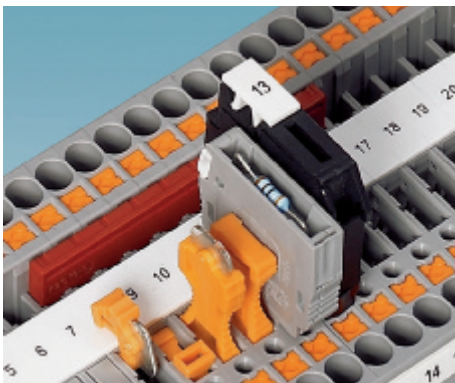
The reducing bridge allows terminal blocks with different nominal cross sections to be connected with ease, e.g., a PT 10 push-in terminal block to a PT 2,5. Infeed blocks can be created at speed with the reducing bridge.



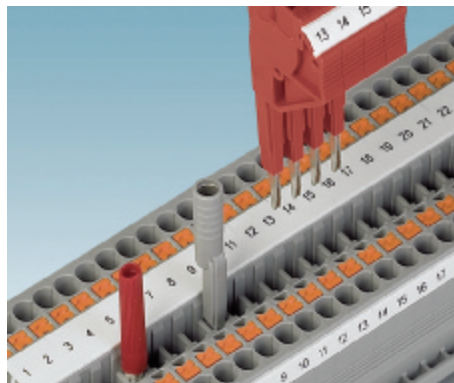
The double function shaft can be used to connect any number of terminal blocks with two-position bridges. The 2 to 50-pos. bridges allow up to 50 terminal blocks to be bridged in one step.



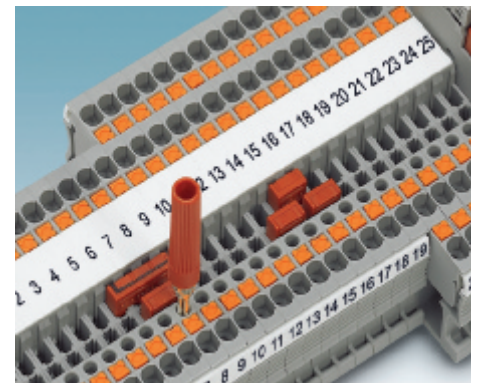
A jumping bridge is created by removing individual contact guides from the standard bridge. Two potentials can then be routed in parallel. The contact points can also be marked.



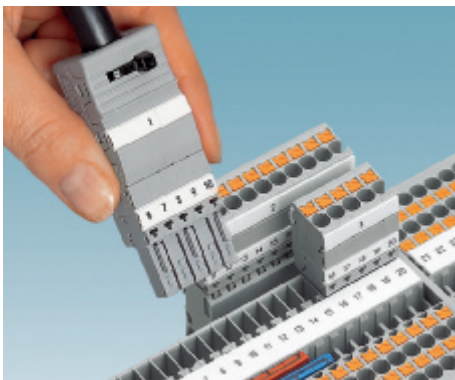
The isolated feed-through connector P-FIX, isolating plug P-DI, component plug P-CO and the cartridge fuse plug P-FU can be used in the universal plug-in zone of the disconnect terminal block.



A test plug with a 2.3 mm diameter is available for measuring lines. All measurement and test work can be completed at speed using test adapters for 4 mm diameter test plugs and the modular test plugs.



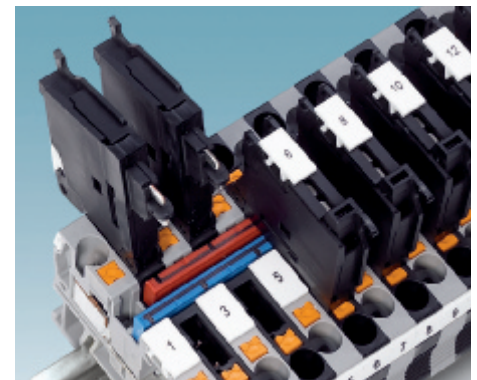
As well as offering a testing facility in the double function shaft, all push-in technology terminal blocks offer an additional test contact for test plugs with a 2.3 mm diameter.



Push-in COMBI terminal blocks are available for the plug-in configuration of signal wiring. The system is touch-proof and offers self-assembly plugs with extensive accessories.



Automatic flat fuse terminal blocks with a 4 mm² conductor connection are available in the same shape as the feed-through terminal blocks. All terminal blocks can be continuously bridged with one another with the double function shaft.

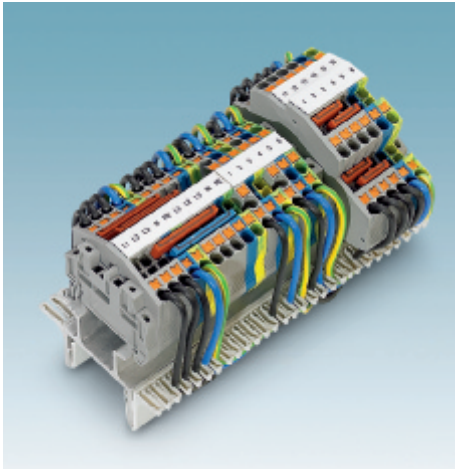


The compact lever-type fuse terminal blocks are of the same shape as the feed-through terminal blocks and can be labeled and bridged continuously. A time-saving potential distribution is easily created using bridging.

Modular terminal blocks

CLIPLINE complete - the modular terminal block system

Push-in desk-design feed-through and double-level terminal blocks



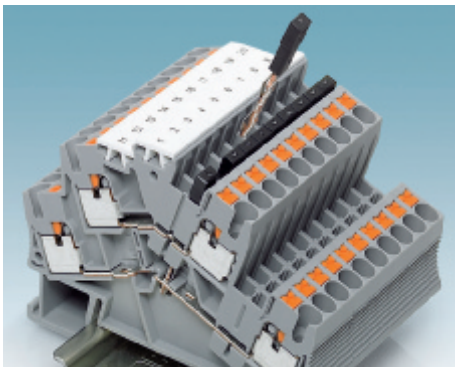
The angled push-in terminal blocks in desk-design were developed for wiring systems where space is saved by means of underfloor wiring. They are characterized by:

PTS 1,5/S...

- 3.5 mm design width
- Angled conductor entry for use in flat terminal boxes
- Large space saving when used in concealed wiring systems
- The PTS 1,5/S, which is equipped with four bridge shafts, offers a wide range of potential bridging options
- 2, 3, and 4-wire terminal blocks with the same shape
- Ground terminal blocks of the same shape are available

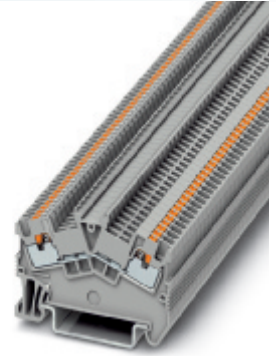
PTTBS 1,5/S

- 3.5 mm design width
- Amount of space required is reduced by 50% compared to single-level terminal blocks
- Two bridge shafts on both levels for all potential distribution tasks
- Two large-surface labeling options
- Potential bridging of levels using the **FBS 1,5/S-PV** vertical potential bridge, see figure below



Notes:

¹⁾ The max. load current must not be exceeded by the total current of all connected conductors.



1.5 (1.5) mm², 17.5 A, feed-through terminal block, 2 connections



Technical Data

Dimensions		Width		Length		Height NS 35/7,5	
		3.5		50.7		38.5	
Max. electrical data		I _{max.} [A]		U _{max.} [V]		max. Ø [mm ²] AWG	
		17.5		500		0.14 - 1.5 26 - 14	
Rated data		Rated voltage [V]		Nominal current/cross section [A]/[mm ²]		Rated cross section [mm ²]	
		500		17.5/1.5		1.5	
		Cross section range AWG		26 - 14		26 - 14	
Connection capacity		One conductor [mm ²]		Plug-in connection cross sections [mm ²]			
		0.14 - 1.5		0.25 - 1.5			
General data		Stripping length [mm]		Insulating material		Inflammability class according to UL 94	
		8		PA		V0	

Ordering data

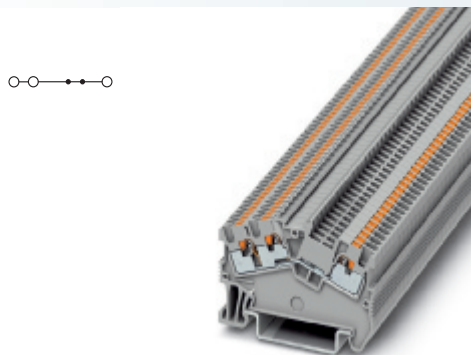
Description	No. of pos.	Color	Type	I _{max.}	Order No.	Pcs. / Pkt.
Terminal block, for mounting on NS 35...		gray	PTS 1,5/S		3214547	50
Terminal block, with equipotential bonder, for mounting on NS 35... ¹⁾		blue	PTS 1,5/S BU		3214550	50

Accessories

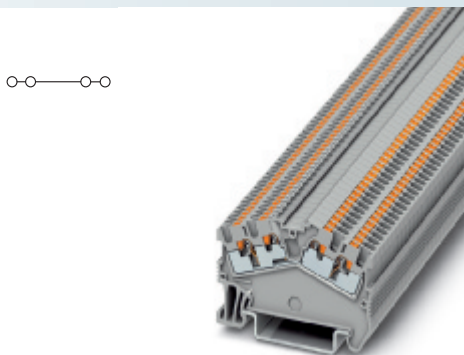
Accessories	Order No.	Pcs. / Pkt.
Cover, width 2.2 mm	gray	
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	10	red
	20	red
Vertical potential bridge, to connect the upper and lower level		
	black	
Partition plate, 2 mm wide	gray	
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part		red
Double marker carrier, can be snapped into push-in double-level terminal blocks PTTB 1,5/S, can be labeled with ZB 3,5 or ZBF 3,5		gray
Screwdriver		
	SZF 0-0,4X2,5	1204504 10

Labeling	Order No.	Pcs. / Pkt.
Center groove labeling	UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)	
Center and side groove labeling	UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)	

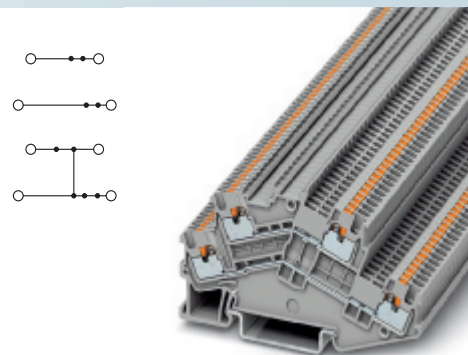
CLIPLINE complete - the modular terminal block system



1.5 (1.5) mm², 17.5 A, feed-through terminal block, 3 connections



1.5 (1.5) mm², 17.5 A, feed-through terminal block, 4 connections



1.5 (1.5) mm², 16 A, double-level terminal block



Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
17.5 ¹⁾	500	0.14 - 1.5	26 - 14
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
17.5 ¹⁾ /1.5	15/-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
17.5 ¹⁾	500	0.14 - 1.5	26 - 14
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
17.5 ¹⁾ /1.5	15/-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	78.8	48.2	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
16	500	0.14 - 1.5	26 - 14
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
16/1.5	15/-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTS 1,5/S-TWIN		3214589	50
PTS 1,5/S-TWIN BU		3214592	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTS 1,5/S-QUATTRO		3214615	50
PTS 1,5/S-QUATTRO BU		3214631	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTTBS 1,5/S		3214657	50
PTTBS 1,5/S BU		3214660	50
PTTBS 1,5/S-PV		3214686	50

Accessories			
D-PTS 1,5/S		3214576	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
ATP-ST 4		3030721	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
SZF 0-0,4X2,5		1204504	10

Accessories			
D-PTS 1,5/S		3214576	50
ATP-ST 4		3030721	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
SZF 0-0,4X2,5		1204504	10

Accessories			
D-PTTBS 1,5/S		3214699	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
FBS 1,5/S-PV		3216263	10
ATP-STTB 4		3030747	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
STP 3,5-2		0830131	100
SZF 0-0,4X2,5		1204504	10

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

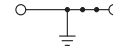
Modular terminal blocks

CLIPLINE complete - the modular terminal block system

Desk-design push-in ground terminal blocks

- Same shape and pitch as the feed-through terminal blocks
- Contact is made free from mechanical and electrical errors by simply snapping onto the DIN rail
- All the requirements of IEC 60947-7-2 standard are met

Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.



1.5 (1.5) mm², ground terminal block, 2 connections



Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	-
Nominal current/cross section	[A]/[mm ²]	-
Rated cross section	[mm ²]	1.5
Cross section range	AWG	26 - 14
Connection capacity		
One conductor	[mm ²]	0.14 - 1.5
Plug-in connection cross sections	[mm ²]	0.25 - 1.5
General data		
Stripping length	[mm]	8
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
max. Ø [mm ²]		AWG	
0.14 - 1.5		26 - 14	
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
solid		stranded	
		ferrule	
		without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1

Description	No. of pos.	Color
Ground terminal block, for mounting on NS 35...		green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTS 1,5/S-PE	3214563	50

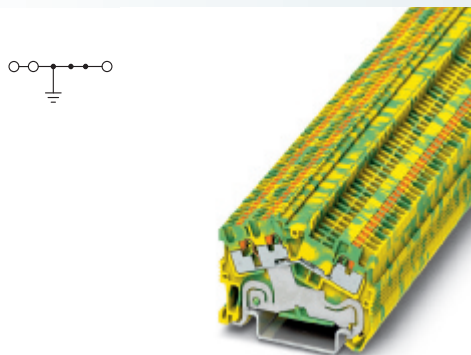
Cover, width 2.2 mm		gray
Plug-in bridge	2	red
	3	red
	4	red
	5	red
	10	red
	20	red
Partition plate, 2 mm wide		gray
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part		red
Double marker carrier, can be snapped into push-in double-level terminal blocks PTTB 1,5/S, can be labeled with ZB 3,5 or ZBF 3,5		gray
Screwdriver		

Accessories		
D-PTS 1,5/S	3214576	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-ST 4	3030721	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
SZF 0-0,4X2,5	1204504	10

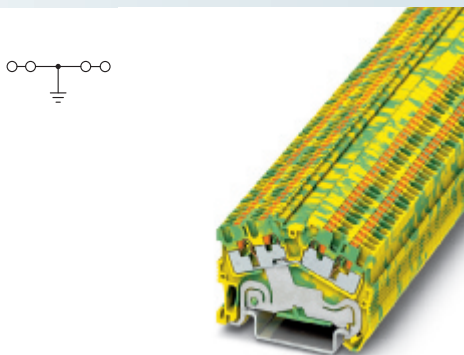
Center groove labeling
Center and side groove labeling

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

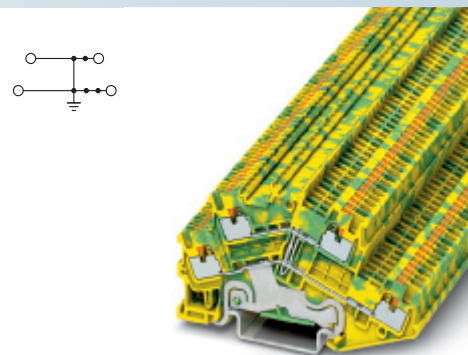
CLIPLINE complete - the modular terminal block system



1.5 (1.5) mm², ground terminal block, 3 connections



1.5 (1.5) mm², ground terminal block, 4 connections



1.5 (1.5) mm², double-level ground terminal block



Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	78.8	48.2	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTS 1,5/S-TWIN-PE	3214602	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTS 1,5/S-QUATTRO-PE	3214644	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTTBS 1,5/S-PE	3214673	50

Accessories		
D-PTS 1,5/S	3214576	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-ST 4	3030721	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
SZF 0-0,4X2,5	1204504	10

Accessories		
D-PTS 1,5/S	3214576	50
ATP-ST 4	3030721	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
SZF 0-0,4X2,5	1204504	10

Accessories		
D-PTTBS 1,5/S	3214699	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-STTB 4	3030747	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
STP 3,5-2	0830131	100
SZF 0-0,4X2,5	1204504	10

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

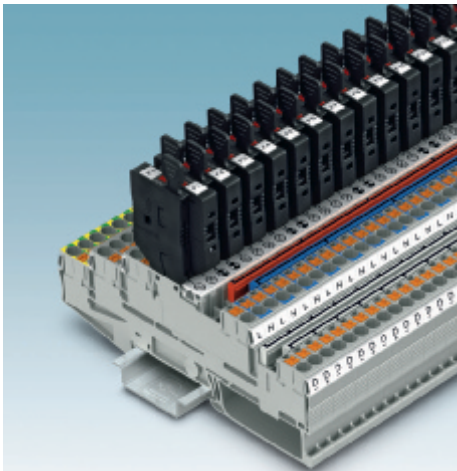
UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

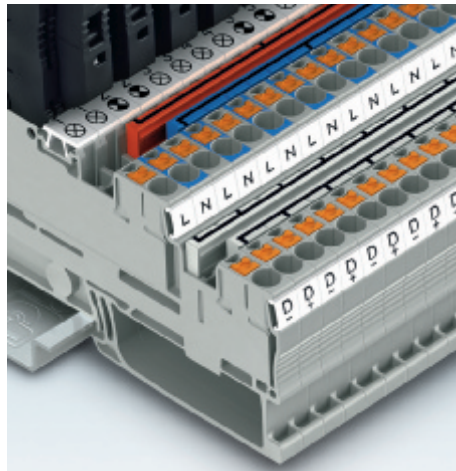
Modular terminal blocks

CLIPLINE complete - the modular terminal block system

Push-in three-level installation terminal blocks with disconnect zone



- The three-level installation terminal blocks have been specially developed for the building installation sector
- DALI-controlled emergency lighting systems can be conveniently fused and wired when space is at a premium



- Two function shafts are available on each level on the inside of the control cabinet
- Quick and easy potential distribution, e.g., from the DALI bus system



- The disconnect zone of the three-level terminal blocks is specially designed for use in standard distribution boards



- The P-FU ...-5 fuse plug can be inserted into the universal disconnect zone of the narrow 5.2 mm three-level terminal blocks with a nested arrangement
- Space-saving overload and short-circuit protection of the individual plus and minus potentials of the emergency lighting systems, for example

Notes:	
For more plug-in bridges, see CLIPLINE catalog, part 1.	
1) Observe max. load current.	
2) Observe max. load current, depending on the power dissipation of the components. Max. 0.5 W with single arrangement.	
3) Current and voltage are determined by the plug used.	
4) 3-pos. termination block.	
5) For maximum power dissipation, see CLIPLINE catalog, part 1.	

Dimensions	
	[mm]

Max. electrical data	

Rated data	
Rated voltage	[V]
Phase conductors/phase conductors	[V]
Phase conductors/PE	[V]
Phase conductors/N	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG

Disconnect level rated data	
Nominal current/cross section	[A]/[mm ²]

Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]

General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Description	No. of pos.	Color
Three-level terminal block with disconnect level , for mounting on NS 35...		gray
Fuse plug , width 5.2 mm		black
With LED for 12 - 30 V DC, 0.35 - 0.95 mA		black
for 30 - 60 V AC/DC, 0.36 - 0.95 mA		black
for 110 - 250 V AC/DC, 0.4 - 0.95 mA		black

Cover , width 2.2 mm		gray
Insulation stop sleeve , cross section range:		
0.08 - 0.2 mm ²		white
0.25 - 0.5 mm ²		gray
0.75 - 1 mm ²		black

Plug-in bridge		
	2	red
	3	red
	10	red

Test adapter , 4 mm test socket hole		gray
Test plug , consisting of: metal part for 2.3 mm Ø socket hole and		
insulating sleeve for MPS metal part		red
Modular test plug , for the individual assembly of test plug strips		red

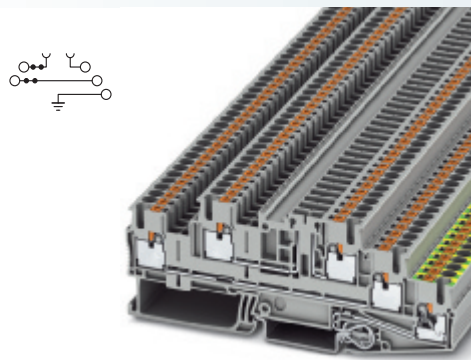
Isolating plug ¹⁾	orange
Feed-through connector ¹⁾	gray
Component plug , labeled with ZBF 5 or UC-TMF 5 ²⁾	gray

Screwdriver	

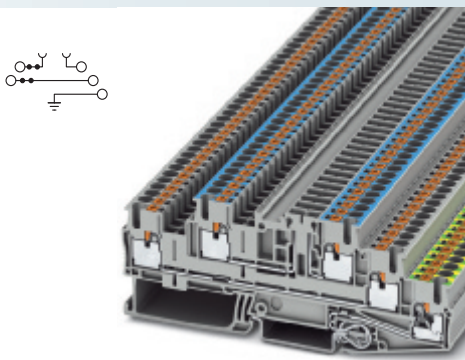
Center groove labeling	

Center and side groove labeling	

CLIPLINE complete - the modular terminal block system



4 (4) mm², 30 A, three-level terminal block, with disconnect zone



4 (4) mm², 30 A, three-level terminal block, with disconnect zone



5.2 mm fuse plug, for 5 x 20 mm cartridge fuses

Technical Data			
Width	Length	Height NS 35/7,5	
5.2	118	42.3	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
30 ³⁾	400 ³⁾	0.14 - 4	26 - 12
IEC	UL/CUL	CSA	IEC/EN 60079-7
400 ³⁾	-	-	-
400 ³⁾	-	-	-
250	-	-	-
-	-	-	-
24/4	-	-	-
4	-	-	-
26 - 12	-	-	-
IEC	UL/CUL	CSA	IEC/EN 60079-7
16/1.5	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 4	0.14 - 4	0.14 - 2.5	0.14 - 2.5
0.34 - 4	-	0.34 - 2.5	0.34 - 2.5
10			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
5.2	118	42.3	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
30 ³⁾	400 ³⁾	0.14 - 4	26 - 12
IEC	UL/CUL	CSA	IEC/EN 60079-7
400 ³⁾	-	-	-
400 ³⁾	-	-	-
250	-	-	-
250	-	-	-
24/4	-	-	-
4	-	-	-
26 - 12	-	-	-
IEC	UL/CUL	CSA	IEC/EN 60079-7
16/1.5	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 4	0.14 - 4	0.14 - 2.5	0.14 - 2.5
0.34 - 4	-	0.34 - 2.5	0.34 - 2.5
10			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
5.2	23.5	-	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
6.3 ³⁾	400	-	-
IEC	UL/CUL	CSA	IEC/EN 60079-7
400	-	-	-
400	-	-	-
-	-	-	-
6.3	-	-	-
-	-	-	-
-	-	-	-
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
-	-	-	-
-	-	-	-
10			
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTB 2,5-PE/LTG		3210539	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTB 2,5-PE/LNTG		3210545	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
P-FU 5X20-5	3209235	10
P-FU 5X20 LED 24-5	3209248	10
P-FU 5X20 LED 60-5	3209251	10
P-FU 5X20 LED 250-5	3209264	10

Accessories			
D-PTB 2,5/3		3210552	50
ISH 2,5/0,2		3002843	50
ISH 2,5/0,5		3002856	50
ISH 2,5/1,0		3002869	50
FBS 2-5	24 A	3030161	50
FBS 3-5	24 A	3030174	50
FBS 10-5	24 A	3030213	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-5		3030983	10
P-DI		3036783	50
P-FIX		3038956	50
P-CO		3036796	10
SZF 1-0,6X3,5		1204517	10

Accessories			
D-PTB 2,5/3		3210552	50
ISH 2,5/0,2		3002843	50
ISH 2,5/0,5		3002856	50
ISH 2,5/1,0		3002869	50
FBS 2-5	24 A	3030161	50
FBS 3-5	24 A	3030174	50
FBS 10-5	24 A	3030213	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-5		3030983	10
P-DI		3036783	50
P-FIX		3038956	50
P-CO		3036796	10
SZF 1-0,6X3,5		1204517	10

Accessories		

UC-TM 5, UCT-TM 5 or ZB 5 (catalog CLIPLINE part 2)
UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

UC-TM 5, UCT-TM 5 or ZB 5 (catalog CLIPLINE part 2)
UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

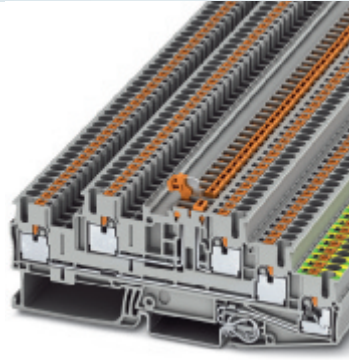
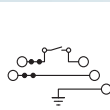
Modular terminal blocks

CLIPLINE complete - the modular terminal block system

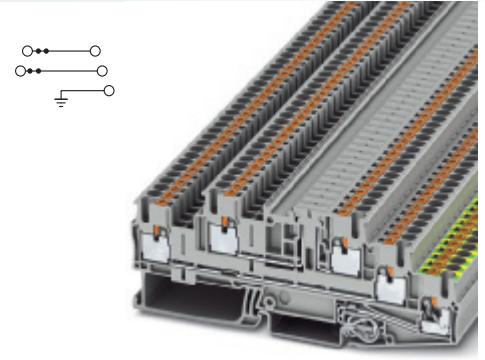
Push-in three-level installation terminal blocks with knife disconnect zone

- Knife disconnect zone in upper level
- Same shape as the three-level installation terminal blocks with universal disconnect zone

Notes:
1) 3-pos. termination block.



4 (4) mm², 30 A, three-level terminal block, with knife disconnect zone



4 (4) mm², 30 A, three-level terminal block

Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	400
Phase conductors/phase conductors	[V]	400
Phase conductors/PE	[V]	250
Nominal current/cross section	[A]/[mm ²]	24/4
Rated cross section	[mm ²]	4
Cross section range	AWG	26 - 12
Disconnect level rated data		
Nominal current/cross section	[A]/[mm ²]	16/1.5
Connection capacity		
One conductor	[mm ²]	0.14 - 4
Two stranded conductors with a TWIN ferrule	[mm ²]	0.14 - 4
Plug-in connection cross sections	[mm ²]	0.34 - 4
General data		
Stripping length	[mm]	10
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data				
Width	Length	Height NS 35/7,5		
5.2	118	42.3		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
30 ¹⁾	400	0.14 - 4	26 - 12	
IEC	UL/CUL	CSA	IEC/EN 60079-7	
400	-	-	-	
400	-	-	-	
250	-	-	-	
24/4	-	-	-	
4	-	-	-	
26 - 12	-	-	-	
IEC	UL/CUL	CSA	IEC/EN 60079-7	
16/1.5	-	-	-	
solid	stranded	ferrule		
0.14 - 4	0.14 - 4	0.14 - 2.5	0.14 - 2.5	
0.34 - 4	-	0.34 - 2.5	0.34 - 2.5	
10	PA	V0		

Technical Data				
Width	Length	Height NS 35/7,5		
5.2	118	42.3		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
30	400	0.14 - 4	26 - 12	
IEC	UL/CUL	CSA	IEC/EN 60079-7	
400	-	-	-	
400	-	-	-	
250	-	-	-	
24/4	-	-	-	
4	-	-	-	
26 - 12	-	-	-	
IEC	UL/CUL	CSA	IEC/EN 60079-7	
-	-	-	-	
solid	stranded	ferrule		
0.14 - 4	0.14 - 4	0.14 - 2.5	0.14 - 2.5	
0.34 - 4	-	0.34 - 2.5	0.34 - 2.5	
10	PA	V0		

Description	No. of pos.	Color
Three-level terminal block with disconnect level, for mounting on NS 35...		gray
Three-level terminal block, for mounting on NS 35...		gray

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PTB 2,5-PE/L/MT		3210549	50

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PTB 2,5-PE/L/L		3210547	50

Accessories		
Accessories	Color	
Cover, width 2.2 mm	gray	D-PTB 2,5/3
Insulation stop sleeve, cross section range:		
0.08 - 0.2 mm ²	white	ISH 2,5/0,2
0.25 - 0.5 mm ²	gray	ISH 2,5/0,5
0.75 - 1 mm ²	black	ISH 2,5/1,0
Plug-in bridge		
2	red	FBS 2-5
3	red	FBS 3-5
4	red	FBS 4-5
5	red	FBS 5-5
10	red	FBS 10-5
20	red	FBS 20-5
Test adapter, 4 mm test socket hole	gray	PAI-4-N GY
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	red	MPS-MT
Modular test plug, for the individual assembly of test plug strips	red	MPS-IH RD
		PS-5
Screwdriver		SZF 1-0,6X3,5

Accessories			
Accessories	Color		
D-PTB 2,5-PE/L/L		3210552	50
ISH 2,5/0,2		3002843	50
ISH 2,5/0,5		3002856	50
ISH 2,5/1,0		3002869	50
FBS 2-5	24 A	3030161	50
FBS 3-5	24 A	3030174	50
FBS 4-5	24 A	3030187	50
FBS 5-5	24 A	3030190	50
FBS 10-5	24 A	3030213	10
FBS 20-5	24 A	3030226	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-5		3030983	10
SZF 1-0,6X3,5		1204517	10

Accessories			
Accessories	Color		
D-PTB 2,5-PE/L/L		3210553	50
ISH 2,5/0,2		3002843	50
ISH 2,5/0,5		3002856	50
ISH 2,5/1,0		3002869	50
FBS 2-5	24 A	3030161	50
FBS 3-5	24 A	3030174	50
FBS 4-5	24 A	3030187	50
FBS 5-5	24 A	3030190	50
FBS 10-5	24 A	3030213	10
FBS 20-5	24 A	3030226	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-5		3030983	10
SZF 1-0,6X3,5		1204517	10

Center groove labeling
Center and side groove labeling

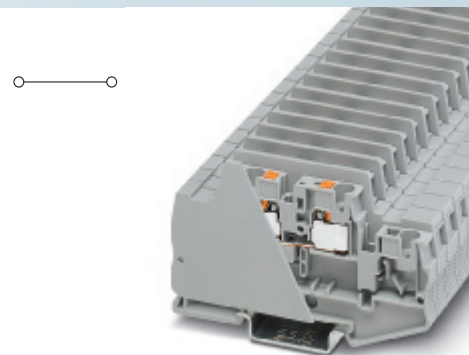
UC-TM 5, UCT-TM 5 or ZB 5 (catalog CLIPLINE part 2)
UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

UC-TM 5, UCT-TM 5 or ZB 5 (catalog CLIPLINE part 2)
UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

Push-in feed-through terminal block, 1000 V

The feed-through terminal block has been developed for IEC or UL applications up to 1000 V, such as wind power plants

- Compact design
- Tests can be carried out in function shaft
- Large labeling option



4 (6) mm², 38 A, 1000 V, feed-through terminal block, 2 connections

Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	83.5	47.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
38	1000	0.2 - 6	24 - 10	
IEC 60947-7-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
1000	-	-	-	
32/4	-	-	-	
4	-	-	-	
24 - 10	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 4	
			0.5 - 1	
0.5 - 6	-	0.5 - 4	0.5 - 4	
Ordering data				
Accessories				

Description	Color
Terminal block , for mounting on NS 35...	gray

Type	Order No.	Pcs. / Pkt.
PTTB 4-L 1000V	3062744	50

Insulation stop sleeve , cross section range:	
0.25 - 0.5 mm ²	gray
0.75 - 1 mm ²	black
Partition plate , 2 mm wide	gray
Test adapter , 4 mm test socket hole	gray
Test plug , consisting of: metal part for 2.3 mm Ø socket hole and	
insulating sleeve for MPS metal part	red
Modular test plug housing , labeling with ZBF 8	red
Modular test plug , for the individual assembly of test plug strips	red
Double marker carrier , can be snapped into STTB 2.5, STTB 4, PTTB 2.5, PTTB 4 double-level terminal blocks, can be labeled with UC-TM 5, ZB 5 or UC-TMF 5, ZBF 5	gray
Screwdriver	
Lateral groove labeling	

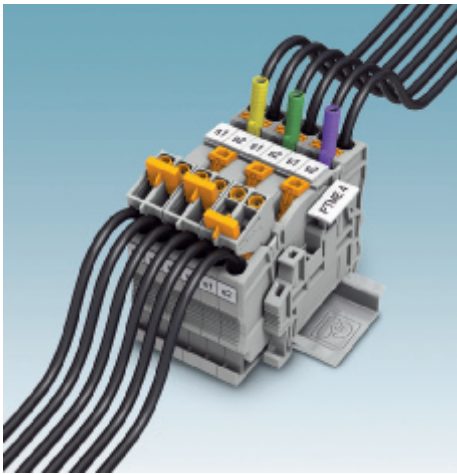
ISH 4/0,5	3002885	50
ISH 4/1,0	3002898	50
ATP-STTB 4	3030747	50
PAI-4-N GY	3032871	10
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PS-8/2,3MM RD	3048564	10
PS-8	3031005	10
STP 5-2	0800967	100
SZF 1-0,6X3,5	1204517	10

UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

Modular terminal blocks

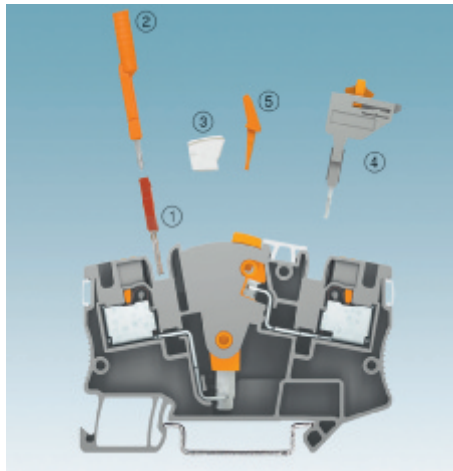
CLIPLINE complete - the modular terminal block system

Push-in test disconnect terminal blocks

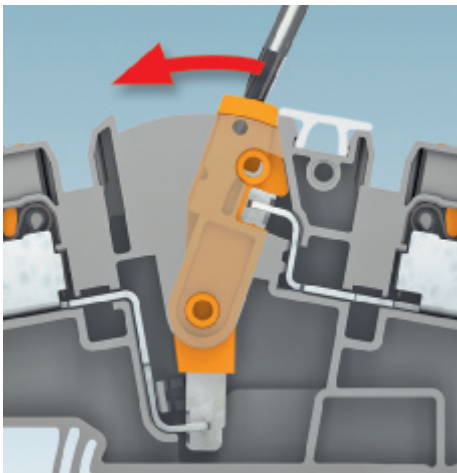


The PTME 4 test disconnect terminal blocks with push-in technology are characterized by:

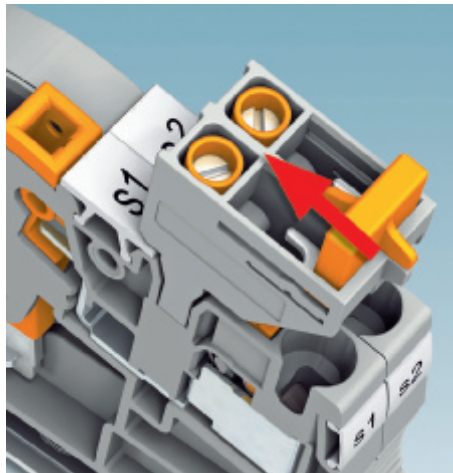
- Compact design
- Easy operation
- Clear structure
- Flexible and comprehensive accessories
- Feed-through and ground terminal blocks with the same shape are available



- Current transformer measuring circuit can be created using just two PTME 4
 - Less space required compared to creating circuits with slide-type terminal blocks
- ① FBS... plug-in bridge for cross connection
 - ② 4 mm Ø PAI-4-FIX... test plug adapter
 - ③ S-ME 4 switching lock
 - ④ SB-ME... switching jumper
 - ⑤ C-ME 4/2 connection bridge



- Reliable contacting and latching of the longitudinal isolating switch in the relevant switching state
- Clear selection thanks to printed switching symbols
- Unintentional switching prevented by means of optional switching lock
- Simultaneous actuation of two switches using connection bridge



- SB-ME ... switching jumpers can be positioned and latched on both sides of the disconnect point in the bridge shaft
- Reliably snapped into the end positions
- Contact made via screw terminal points

Notes:

For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.

For corresponding terminal strip covers AP-ME and AH-ME, see CLIPLINE catalog, part 2.

Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage		[V]
Nominal current/cross section		[A]/[mm ²]
Rated cross section		[mm ²]
Cross section range		AWG
Connection capacity		
One conductor		[mm ²]
Two stranded conductors with a TWIN ferrule		[mm ²]
Plug-in connection cross sections		[mm ²]
General data		
Stripping length		[mm]
Insulating material		
Inflammability class according to UL 94		

Description	No. of pos.	Color
Measuring transducer disconnect terminal block , for mounting on NS 35		gray
Ground terminal block , for mounting on NS 35...		gray
Ground terminal block , for mounting on NS 35...		green-yellow

Cover , width 2.2 mm		gray
Switching jumper , plug-in		
	2	gray/orange
	3	gray/orange
	4	gray/orange

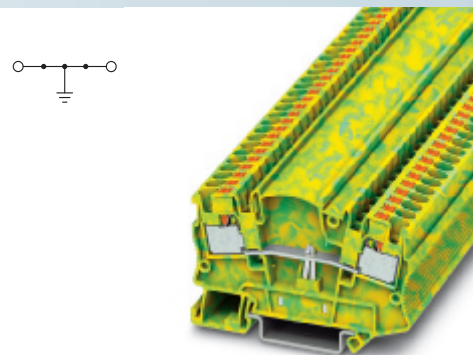
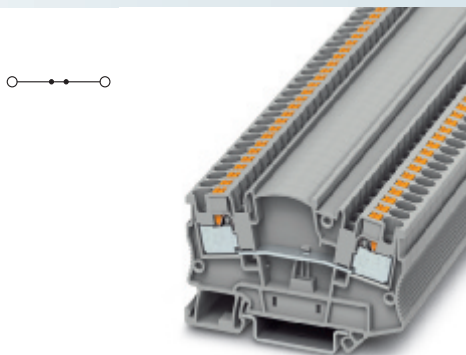
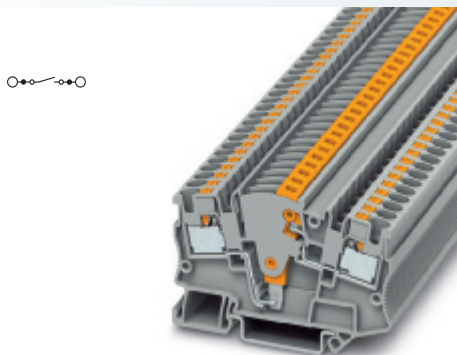
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	10	red
	20	red

Switching lock , plug-in		white
Connection bridge , for connecting two test disconnect terminal blocks		orange
3-pos.		orange
Test adapter , for 4 mm Ø safety test plugs, latches into the bridge shaft		orange

	blue
	red
	yellow
	green
	violet
	black
	brown
	gray

Screwdriver
Center groove labeling
Center and side groove labeling

CLIPLINE complete - the modular terminal block system



4 (6) mm², 24 A, test disconnect terminal block

4 (6) mm², 28 A, feed-through terminal block, same shape

4 (6) mm², ground terminal block, same shape



Technical Data			
Width	Length	Height NS 35/7,5	
6.2	70.5	49.5	
I_{max} [A]	U_{max} [V]	max. \varnothing [mm ²]	AWG
24	500	0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	300	300	-
24/4	26/-	26/-	-
4	-	-	-
24 - 10	24 - 10	24 - 10	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 4
			0.5 - 1
0.5 - 6	-	0.5 - 4	0.5 - 4
12	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	70.5	49.5	
I_{max} [A]	U_{max} [V]	max. \varnothing [mm ²]	AWG
28	500	0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	300	300	-
28/4	26/-	26/-	-
4	-	-	-
24 - 10	24 - 10	24 - 10	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 4
			0.5 - 1
0.5 - 6	-	0.5 - 4	0.5 - 4
12	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	70.5	49.5	
		max. \varnothing [mm ²]	AWG
		0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
-	-	-	-
4	-	-	-
24 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 4
			0.5 - 1
0.5 - 6	-	0.5 - 4	0.5 - 4
12	PA	V0	

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTME 4		3212139	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTMED 4		3212141	50

Ordering data			
Type	Order No.	Pcs. / Pkt.	
PTMED 4-PE	3212154	50	

Accessories			
D-PTME 4	3212167	10	
SB-ME 2-6	25 A 3035755	10	
SB-ME 3-6	25 A 3035756	10	
SB-ME 4-6	25 A 3035757	10	
FBS 2-6	32 A 3030336	50	
FBS 3-6	32 A 3030242	50	
FBS 4-6	32 A 3030255	50	
FBS 5-6	32 A 3030349	50	
FBS 10-6	32 A 3030271	10	
FBS 20-6	32 A 3030365	10	
S-ME 4	3035758	10	
C-ME 4/2	3035759	10	
C-ME 4/3	3035760	10	
PAI-4-FIX-5/6 OG	3035974	10	
PAI-4-FIX-5/6 BU	3035975	10	
PAI-4-FIX-5/6 RD	3035976	10	
PAI-4-FIX-5/6 YE	3035977	10	
PAI-4-FIX-5/6 GN	3035978	10	
PAI-4-FIX-5/6 VT	3035979	10	
PAI-4-FIX-5/6 BK	3035980	10	
PAI-4-FIX-5/6 BN	3035981	10	
PAI-4-FIX-5/6 GY	3035982	10	
SZF 1-0,6X3,5	1204517	10	

Accessories			
D-PTME 4	3212167	10	
SB-ME 2-6	25 A 3035755	10	
SB-ME 3-6	25 A 3035756	10	
SB-ME 4-6	25 A 3035757	10	
FBS 2-6	32 A 3030336	50	
FBS 3-6	32 A 3030242	50	
FBS 4-6	32 A 3030255	50	
FBS 5-6	32 A 3030349	50	
FBS 10-6	32 A 3030271	10	
FBS 20-6	32 A 3030365	10	
PAI-4-FIX-5/6 OG	3035974	10	
PAI-4-FIX-5/6 BU	3035975	10	
PAI-4-FIX-5/6 RD	3035976	10	
PAI-4-FIX-5/6 YE	3035977	10	
PAI-4-FIX-5/6 GN	3035978	10	
PAI-4-FIX-5/6 VT	3035979	10	
PAI-4-FIX-5/6 BK	3035980	10	
PAI-4-FIX-5/6 BN	3035981	10	
PAI-4-FIX-5/6 GY	3035982	10	

Accessories			
D-PTME 4	3212167	10	
FBS 2-6	3030336	50	
FBS 3-6	3030242	50	
FBS 4-6	3030255	50	
FBS 5-6	3030349	50	
FBS 10-6	3030271	10	
FBS 20-6	3030365	10	
PAI-4-FIX-5/6 OG	3035974	10	
PAI-4-FIX-5/6 BU	3035975	10	
PAI-4-FIX-5/6 RD	3035976	10	
PAI-4-FIX-5/6 YE	3035977	10	
PAI-4-FIX-5/6 GN	3035978	10	
PAI-4-FIX-5/6 VT	3035979	10	
PAI-4-FIX-5/6 BK	3035980	10	
PAI-4-FIX-5/6 BN	3035981	10	
PAI-4-FIX-5/6 GY	3035982	10	
SZF 1-0,6X3,5	1204517	10	

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)
UC-TMF 6, UCT-TMF 6 or ZBF 6 (catalog CLIPLINE part 2)

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)
UC-TMF 6, UCT-TMF 6 or ZBF 6 (catalog CLIPLINE part 2)

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)
UC-TMF 6, UCT-TMF 6 or ZBF 6 (catalog CLIPLINE part 2)

Modular terminal blocks

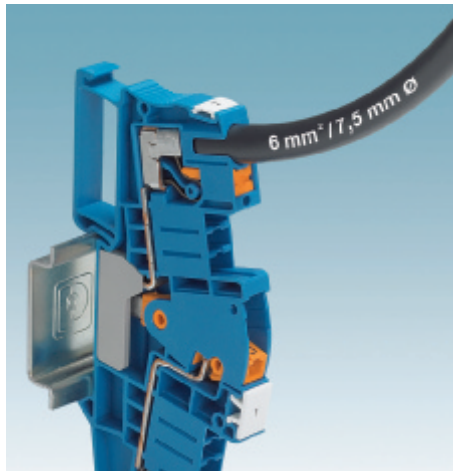
CLIPLINE complete - the modular terminal block system

Push-in disconnect and diode terminal blocks for photovoltaics, 1000 V

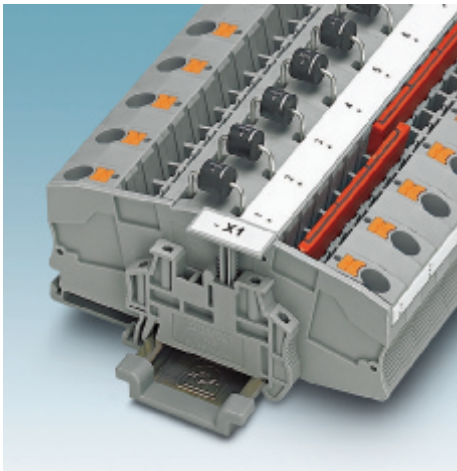


The new disconnect and diode terminal blocks were designed especially for applications in solar technology and are characterized by:

- A dielectric strength of up to 1000 V DC
- Continuous function shafts allowing the individual PV lines to be easily gathered with plug-in bridges

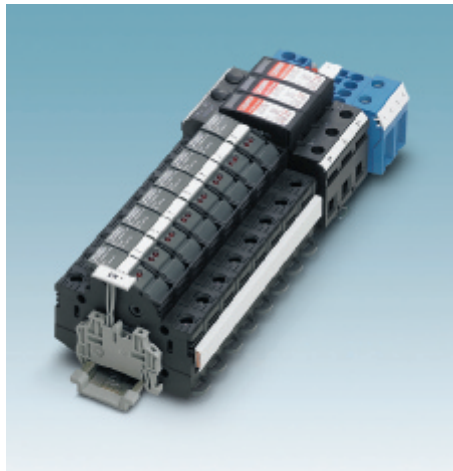


- Connection of standard solar cables up to 6 mm² and with 7.5 mm outside diameter



- A space-saving design of the same shape for compact generator switching boxes

- The spacer plate DP-STMED 6 provides sufficient space between two neighboring diode terminal blocks, see figure below



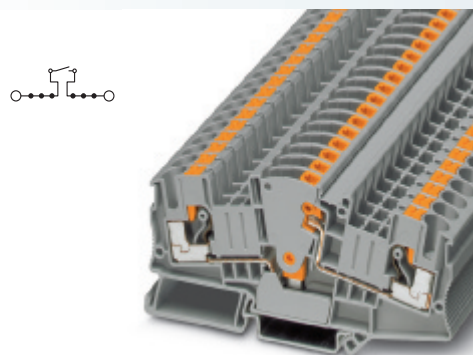
- Fuse terminal blocks up to 1500 V are available for protecting monocrystalline and polycrystalline PV lines, see page 62 and CLIPLINE catalog, part 1

Notes:
If several diode terminal blocks need adding to the DIN rail, a spacer plate must be placed between them.
Covers should ensure that the parts are not touched.
For corresponding terminal strip covers AP-ME and AH-ME, see CLIPLINE catalog, part 2.
For more test adapters, see CLIPLINE catalog, part 1.
¹⁾ If the diode is loaded to 5 A, the surface reaches a temperature of 140°C.
²⁾ 1000 V reverse voltage.

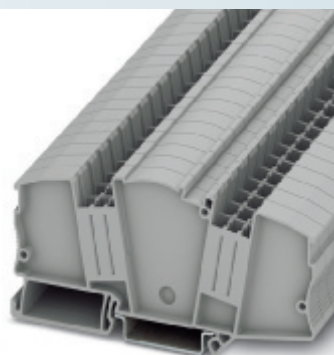
Dimensions	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Description	No. of pos.	Color
Terminal block , for mounting on NS 35...		gray blue
Spacer plate		gray
Terminal block , with integrated diode, conducting from left to right		gray
Terminal block , with integrated diode, conducting from right to left		gray
Cover , width 2.2 mm		gray
Switching jumper , plug-in, 2-pos.		
	2	gray/orange
	3	gray/orange
	4	gray/orange
Plug-in bridge		
	2	red
	5	red
	6	red
	10	red
Switching lock , plug-in		white
Connection bridge , for connecting two test disconnect terminal blocks		orange
3-pos.		orange
Test adapter , for 4 mm-Ø safety test plug, snapped into bridge shaft		orange
		yellow
		green
		violet
		black
		blue
		red
Partition plate , with storage option for switching jumpers		gray
Screwdriver		
Center groove labeling		
Center and side groove labeling		

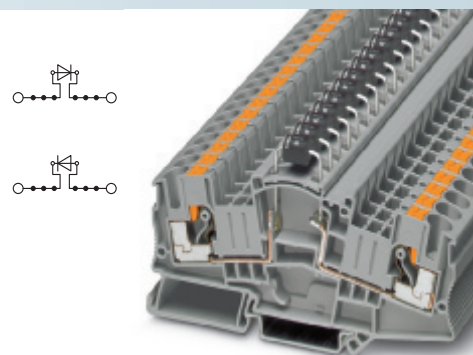
CLIPLINE complete - the modular terminal block system



6 (10) mm², 30 A, 1000 V, disconnect terminal block



Spacer plate, same shape



6 (10) mm², 5 A, 1000 V, diode terminal block, same shape

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	100.8	49.6	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
30	1000	0.5 - 10	20 - 8
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
30/6	-	-	-
6	-	-	-
20 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
12			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	100.8	49.6	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
-	-	-	-
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
-	-	-	-
1 - 10	-	-	-
12			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	100.8	60	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
5 ¹⁾	1000 ²⁾	0.5 - 10	20 - 8
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000 ²⁾	-	-	-
5 ¹⁾ /6	-	-	-
6	-	-	-
20 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
12			
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTME 6 HV		3035696	50
PTME 6 HV BU		3035695	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
DP-STMED 6		3035690	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTME 6-DIO/L-R HV		3035697	50
PTME 6-DIO/R-L HV		3035698	50

Accessories			
D-DTME 6		3034426	10
SB-ME 2-8	30 A	3034468	10
SB-ME 3-8	30 A	3032800	10
SB-ME 4-8	30 A	3034484	10
FBS 2-8	41 A	3030284	10
FBS 5-8	41 A	3030310	10
FBS 6-8	41 A	3032470	10
FBS 10-8	41 A	3030323	10
S-ME 6		3034439	10
C-ME 6/2		3034442	10
C-ME 6/3		3034390	50
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
CARRIER 35-8		3034387	10
SZF 2-0,8X4,0		1204520	10

Accessories			
D-DTME 6		3034426	10
FBS 2-8	41 A	3030284	10
FBS 5-8	41 A	3030310	10
FBS 6-8	41 A	3032470	10
FBS 10-8	41 A	3030323	10
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
CARRIER 35-8		3034387	10
SZF 2-0,8X4,0		1204520	10

Accessories			
D-DTME 6		3034426	10
FBS 2-8	41 A	3030284	10
FBS 5-8	41 A	3030310	10
FBS 6-8	41 A	3032470	10
FBS 10-8	41 A	3030323	10
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
CARRIER 35-8		3034387	10
SZF 2-0,8X4,0		1204520	10

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
 UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
 UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
 UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

Modular terminal blocks

CLIPLINE complete - the modular terminal block system

Push-in feed-through and multi-conductor terminal blocks



The compact, space-saving 6 mm² push-in connection terminal blocks offer the following features:

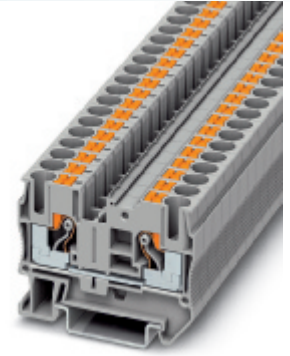
- Quick and easy potential distribution with the double function shaft
- Reducing bridges enable terminal blocks with different cross sections to be easily connected, e.g., a PT 6 to a PT 1,5/S or PT 2,5
- You can find flexible options for reduction bridging on page 25
- Three and four-conductor terminal blocks are ideal for use as space-saving potential distributors in ring line systems or solar plants up to 1000 V, for example
- The large conductor connection space enables solar cables with an outside diameter of up to 7.5 mm to be accommodated, for example

Terminal strip service

We produce fully pre-assembled terminal strips for fitting straight into the control cabinet or switch system. This simplifies installation, saves time, and cuts costs.



Notes:
1) The max. load current must not be exceeded by the total current of all connected conductors.
2) The reducing bridge table should be followed, see page 25.



6 (10) mm², 52 A, feed-through terminal block



Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	57.7	43.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
52	1000	0.5 - 10	20 - 8	
IEC 60947-7-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage	600	-	-	
Nominal current/cross section	41/6	40/-	-	
Rated cross section	6	-	-	
Cross section range	20 - 8	20 - 8	-	
Connection capacity		solid	stranded	ferrule
		without/with plastic sleeve		
One conductor	0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6
Two stranded conductors with a TWIN ferrule	-	-	-	0.5 - 1.5
Plug-in connection cross sections	1 - 10	-	1 - 6	1 - 6
General data				
Stripping length	12			
Insulating material	PA			
Inflammability class according to UL 94	V0			

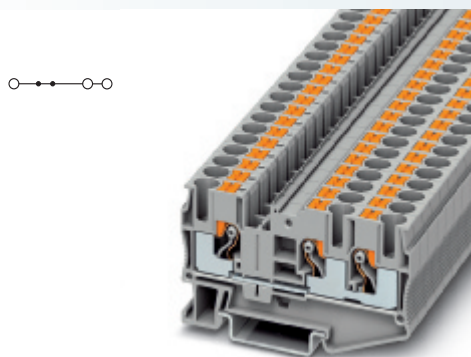
Description	No. of pos.	Color
Terminal block, for mounting on NS 35...		gray blue

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PT 6		3211813	50
PT 6 BU		3211819	50

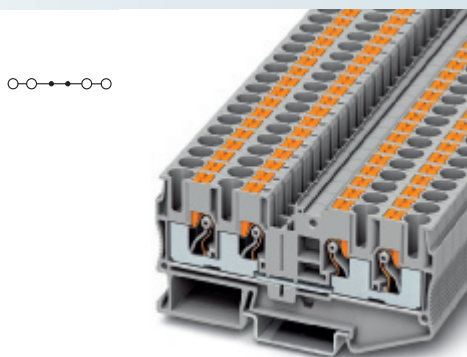
Cover, width 2.2 mm		gray
Switching jumper, plug-in, 2-pos.	2	gray/orange
	3	gray/orange
	4	gray/orange
Plug-in bridge	2	red
	3	red
	4	red
	5	red
	10	red
Reducing bridge ²⁾		
	2	red
	2	red
Partition plate, 2 mm wide		gray
Test adapter, 4 mm test socket hole		gray
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part		red
Modular test plug, for the individual assembly of test plug strips		red
Screwdriver		
Center groove labeling		
Center and side groove labeling		

Accessories			
Type	I _{max}	Order No.	Pcs. / Pkt.
D-PT 6		3212044	50
SB-MER 2-8	24 A	3000587	10
SB-MER 3-8	24 A	3000588	10
SB-MER 4-8	24 A	3000589	10
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
RB ST 6-(2,5/4)		3030860	10
RB ST 6-1,5/S		3213250	10
ATP-ST 6		3024481	50
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-8		3031005	10
SZF 2-0,8X4,0		1204520	10
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)			
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)			

CLIPLINE complete - the modular terminal block system



6 (10) mm², 52 A, feed-through terminal block, 3 connections



6 (10) mm², 52 A, feed-through terminal block, 4 connections

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	72.4	43.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
52 ¹⁾	1000	0.5 - 10	20 - 8
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾ /6	-	-	-
6	-	-	-
20 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
12			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	90.5	43.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
52 ¹⁾	1000	0.5 - 10	20 - 8
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾ /6	-	-	-
6	-	-	-
20 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
12			
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PT 6-TWIN		3211929	50
PT 6-TWIN BU		3211485	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PT 6-QUATTRO		3212934	10
PT 6-QUATTRO BU		3212947	10

Accessories			
D-PT 6-TWIN		3211508	50
SB-MER 2-8	24 A	3000587	10
SB-MER 3-8	24 A	3000588	10
SB-MER 4-8	24 A	3000589	10
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
RB ST 6-(2,5/4)		3030860	10
RB ST 6-1,5/S		3213250	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-8		3031005	10
SZF 2-0,8X4,0		1204520	10

Accessories			
D-PT 6-QUATTRO		3212963	10
SB-MER 2-8	24 A	3000587	10
SB-MER 3-8	24 A	3000588	10
SB-MER 4-8	24 A	3000589	10
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
RB ST 6-(2,5/4)		3030860	10
RB ST 6-1,5/S		3213250	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-8		3031005	10
SZF 2-0,8X4,0		1204520	10

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

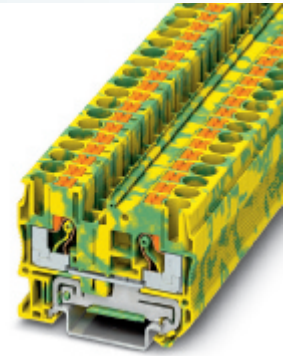
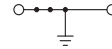
Modular terminal blocks

CLIPLINE complete - the modular terminal block system

Push-in ground, feed-through, and multi-conductor terminal blocks

- Same shape and pitch as the feed-through terminal blocks
- Contact is made free from mechanical and electrical errors by simply snapping onto the DIN rail
- All the requirements of IEC 60947-7-2 standard are met

Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.



6 (10) mm², ground terminal block, 2 connections



Dimensions		
		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	-
Nominal current/cross section	[A]/[mm ²]	-
Rated cross section	[mm ²]	6
Cross section range	AWG	20 - 8
Connection capacity		
One conductor	[mm ²]	0.5 - 10
Two stranded conductors with a TWIN ferrule	[mm ²]	0.5 - 6
Plug-in connection cross sections	[mm ²]	1 - 10
General data		
Stripping length	[mm]	12
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	57.7	43.5	
		max. Ø [mm ²]	AWG
		0.5 - 10	20 - 8
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
-	-	-	-
6	-	-	-
20 - 8	20 - 8	-	-
		ferrule	
		without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6
			0.5 - 1.5
1 - 10	-	1 - 6	1 - 6

Description	No. of pos.	Color
Ground terminal block , for mounting on NS 35...		green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 6-PE	3211822	50

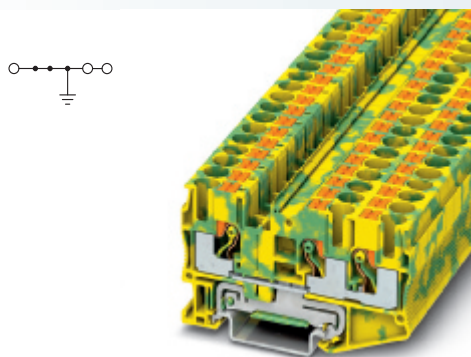
Cover , width 2.2 mm	gray
Plug-in bridge	
	2 red
	3 red
	4 red
	5 red
	10 red
Partition plate , 2 mm wide	gray
Test adapter , 4 mm test socket hole	gray
Test plug , consisting of: metal part for 2.3 mm Ø socket hole and	
insulating sleeve for MPS metal part	red
Modular test plug , for the individual assembly of test plug strips	red

Accessories		
D-PT 6	3212044	50
FBS 2-8	3030284	10
FBS 3-8	3030297	10
FBS 4-8	3030307	10
FBS 5-8	3030310	10
FBS 10-8	3030323	10
ATP-ST 6	3024481	50
PAI-4-N GY	3032871	10
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PS-8	3031005	10
SZF 2-0,8X4,0	1204520	10

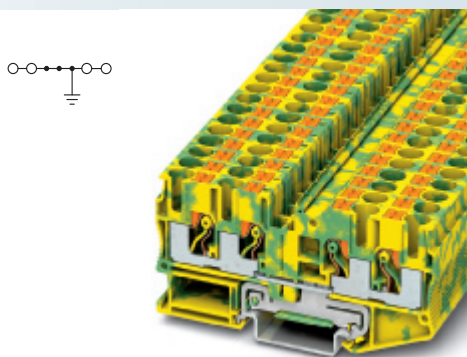
Center groove labeling
Center and side groove labeling

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

CLIPLINE complete - the modular terminal block system



6 (10) mm², ground terminal block,
3 connections



6 (10) mm², ground terminal block,
4 connections

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	72.4	43.5	
		max. Ø [mm ²]	AWG
		0.5 - 10	20 - 8
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
-	-	-	-
6	-	-	-
20 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
12			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	90.5	43.5	
		max. Ø [mm ²]	AWG
		0.5 - 10	20 - 8
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
-	-	-	-
6	-	-	-
20 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
12			
PA			
V0			

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 6-TWIN-PE	3211498	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 6-QUATTRO-PE	3212950	10

Accessories		
D-PT 6-TWIN	3211508	50
FBS 2-8	3030284	10
FBS 3-8	3030297	10
FBS 4-8	3030307	10
FBS 5-8	3030310	10
FBS 10-8	3030323	10
PAI-4-N GY	3032871	10
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PS-8	3031005	10
SZF 2-0,8X4,0	1204520	10

Accessories		
D-PT 6-QUATTRO	3212963	10
FBS 2-8	3030284	10
FBS 3-8	3030297	10
FBS 4-8	3030307	10
FBS 5-8	3030310	10
FBS 10-8	3030323	10
PAI-4-N GY	3032871	10
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PS-8	3031005	10
SZF 2-0,8X4,0	1204520	10

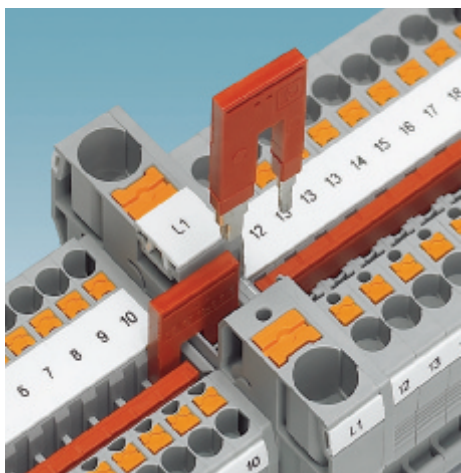
UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

Modular terminal blocks

CLIPLINE complete - the modular terminal block system

Push-in feed-through and multi-conductor terminal blocks

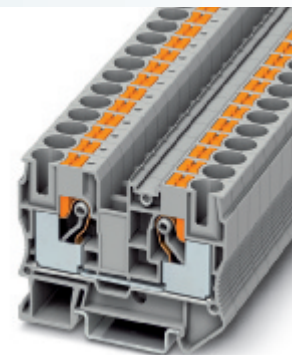


The compact, space-saving 10 mm² push-in connection terminal blocks offer the following features:

- Quick and easy potential distribution with the double function shaft
- Reducing bridges enable terminal blocks with different cross sections to be easily connected, e.g., a PT 10 with a PT 2,5 or PT 4
- You can find flexible options for reduction bridging on page 25
- The standard plug-in bridges and identically shaped ground terminal blocks enable a PEN function to be easily implemented according to IEC 60947-7-2 with a rated cross section of 10 mm² or above
- Three-conductor terminal blocks are ideal for use as space-saving potential distributors in ring line systems or solar plants up to 1000 V, for example
- The large conductor connection space enables solar cables up to 10 mm² to be accommodated, for example

Notes:

- 1) The max. load current must not be exceeded by the total current of all connected conductors.
- 2) The reducing bridge table should be followed, see page 25.



10 (16) mm², 70 A, feed-through terminal block, 2 connections



Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/7,5		
10.2	67.7	50.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
70	1000	0.5 - 16	20 - 6	
IEC 60947-7-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage				
57/10	-	-	-	
Rated cross section				
10	-	-	-	
Cross section range				
20 - 6	-	-	-	
Connection capacity		ferrule		
solid	stranded	without/with plastic sleeve		
0.5 - 16	0.5 - 10	0.5 - 10	0.5 - 10	
			1.5 - 2.5	
1 - 16	-	4 - 10	2.5 - 10	
General data				
Stripping length	[mm]	18		
Insulating material		PA		
Inflammability class according to UL 94		V0		

Description	No. of pos.	Color
Terminal block, for mounting on NS 35...		gray blue

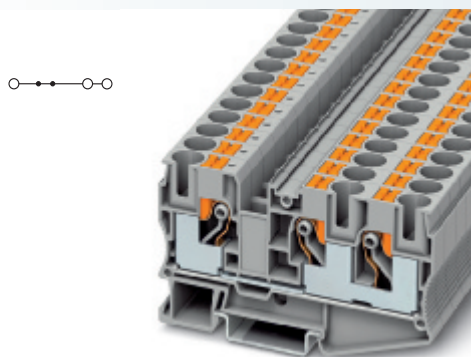
Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PT 10		3212120	50
PT 10 BU		3212123	50

Cover, width 2.2 mm	gray
Plug-in bridge	2 red
Reducing bridge ²⁾	2 red
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	2 red
Screwdriver	red

Accessories			
D-PT 10		3212057	50
FBS 2-10	57 A	3005947	10
RB ST 10-(2,5/4)		3030873	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
SZF 3-1,0X5,5		1206612	10

Center groove labeling
Center and side groove labeling

UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)
UC-TMF 10, UCT-TMF 10 or ZBF 10 (CLIPLINE catalog, part 2)



10 (16) mm², 70 A, feed-through terminal block, 3 connections



Technical Data

Width	Length	Height NS 35/7,5	
10.2	88.9	50.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
70*)	1000	0.5 - 16	20 - 6
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
1000	-	-	-
57*)/10	-	-	-
10	-	-	-
20 - 6	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.5 - 16	0.5 - 10	0.5 - 10	0.5 - 10 1.5 - 2.5
1 - 16	-	4 - 10	2.5 - 10
18			
PA			
V0			

Ordering data

Type	I_{max}	Order No.	Pcs. / Pkt.
PT 10-TWIN		3208746	50
PT 10-TWIN BU		3208747	50

Accessories

Accessories	I_{max}	Order No.	Pcs. / Pkt.
D-PT 10-TWIN		3208748	50
FBS 2-10	57 A	3005947	10
RB ST 10-(2,5/4)		3030873	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
SZF 3-1,0X5,5		1206612	10

UC-TM 10, UCT-TM 10 or ZB 10
(CLIPLINE catalog, part 2)
UC-TMF 10, UCT-TMF 10 or ZBF 10
(CLIPLINE catalog, part 2)

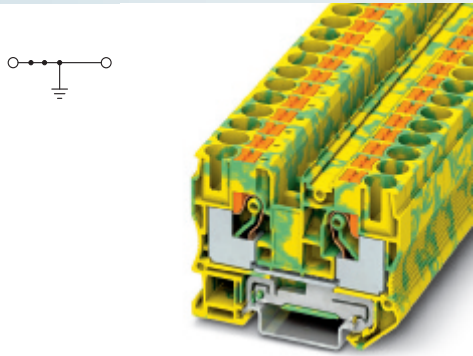
Modular terminal blocks

CLIPLINE complete - the modular terminal block system

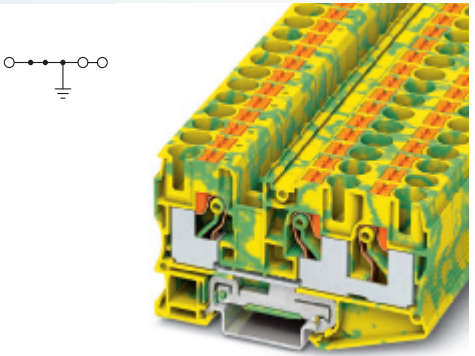
Push-in ground, feed-through, and multi-conductor terminal blocks

- Same shape and pitch as the feed-through terminal blocks
- Contact is made free from mechanical and electrical errors by simply snapping onto the DIN rail
- All the requirements of IEC 60947-7-2 standard are met

Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.



10 (16) mm², 70 A, ground terminal block, 2 connections



10 (16) mm², 70 A, ground terminal block, 3 connections

Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	-
Nominal current/cross section	[A]/[mm ²]	57/10
Rated cross section	[mm ²]	10
Cross section range	AWG	20 - 6
Connection capacity		
One conductor	[mm ²]	0.5 - 16
Two stranded conductors with a TWIN ferrule	[mm ²]	0.5 - 10
Plug-in connection cross sections	[mm ²]	0.5 - 10
General data		
Stripping length	[mm]	18
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data				
Width	Length	Height NS 35/7,5		
10.2	67.7	50.5		
I _{max.} [A]	max. Ø [mm ²]		AWG	
70	0.5 - 16		20 - 6	
IEC 60947-7-2				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
solid				
stranded		ferrule		
without/with plastic sleeve				
0.5 - 16	0.5 - 10	0.5 - 10	0.5 - 10	
		1.5 - 2.5		
1 - 16	-	4 - 10		2.5 - 10
18				
PA				
V0				

Technical Data				
Width	Length	Height NS 35/7,5		
10.2	88.9	50.5		
I _{max.} [A]	max. Ø [mm ²]		AWG	
70	0.5 - 16		20 - 6	
IEC 60947-7-2				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
solid				
stranded		ferrule		
without/with plastic sleeve				
0.5 - 16	0.5 - 10	0.5 - 10	0.5 - 10	
		1.5 - 2.5		
1 - 16	-	4 - 10		2.5 - 10
18				
PA				
V0				

Description	No. of pos.	Color
Ground terminal block, for mounting on NS 35...		green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 10-PE	3212131	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 10-TWIN-PE	3208745	50

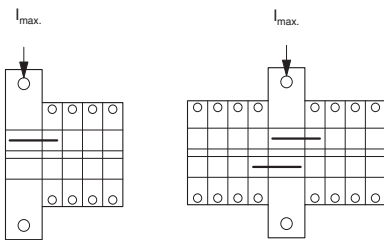
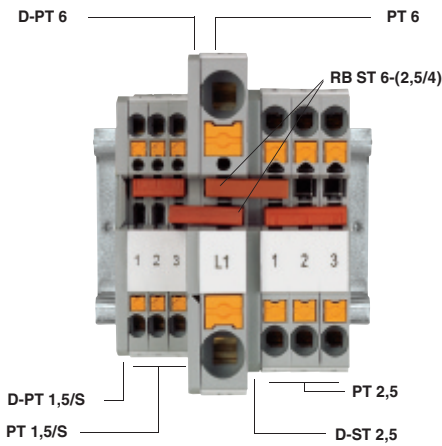
Cover, width 2.2 mm	gray
Plug-in bridge	2 red
Test adapter, 4 mm test socket hole	gray
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	red
Screwdriver	
Center groove labeling	
Center and side groove labeling	

Accessories		
Type	Order No.	Pcs. / Pkt.
D-PT 10	3212057	50
FBS 2-10	3005947	10
PAI-4-N GY	3032871	10
MPS-MT	0201744	10
MPS-IH RD	0201676	10
SZF 3-1,0X5,5	1206612	10
UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)		
UC-TMF 10, UCT-TMF 10 or ZBF 10 (CLIPLINE catalog, part 2)		

Accessories		
Type	Order No.	Pcs. / Pkt.
D-PT 10-TWIN	3208748	50
FBS 2-10	3005947	10
PAI-4-N GY	3032871	10
MPS-MT	0201744	10
MPS-IH RD	0201676	10
SZF 3-1,0X5,5	1206612	10
UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)		
UC-TMF 10, UCT-TMF 10 or ZBF 10 (CLIPLINE catalog, part 2)		

Reduction bridging with PT standard feed-through terminal blocks

Example of a 6 mm² central supply with RB ST 6-(2,5/4) reducing bridges to 2.5 mm² PT



Single-sided supply

Central supply

Reducing bridges enable easy connection of standard terminal blocks with different nominal cross sections and connection technologies from the CLIPLINE complete system. Supplies with large cross sections can be easily distributed among several smaller output terminal blocks. The connection technologies and the connected cross sections must be taken into consideration in order to select suitable reducing bridges. The appropriate reducing bridge and the maximum permissible bridge current for single-sided and central supplies can be determined using the adjacent table.

Supply		Pick-off		Single-sided supply	Central supply	Bridge
Terminal block	Cross section [mm ²]	Terminal block	Cross section [mm ²]	I _{max.} [A]	I _{max.} [A]	
PT 2,5	2.5	PT 1,5/S	1.5	24	30	RB ST (2,5/4)-1,5/S 3214356
		ST 1,5	1.5	31	31	RB ST (2,5/4)-1,5 3038943
		QTC 1,5	1.5	31	31	FBS 2-5 3030161
PT 4	4	PT 1,5/S	1.5	24	40	RB ST (2,5/4)-1,5/S 3214356
		ST 1,5	1.5	35	40	RB ST (2,5/4)-1,5 3038943
		PT 2,5	2.5	40	40	FBS 2-5 3030161
		ST 2,5	2.5	40	40	
		QTC 1,5	1.5	35	40	FBS 2-6 3030336
QTC 2,5	2.5	40	40			
PT 6	6	PT 1,5/S	1.5	26	52	RB ST 6-1,5/S 3213250
		PT 2,5	2.5	40	56	RB ST 6-(2,5/4) 3030860
		PT 4	4	45	56	
		ST 2,5	2.5	40	56	
		ST 4	4	45	56	
		QTC 1,5	1.5	35	56	
		QTC 2,5	2.5	40	56	
PT 10	10	PT 2,5	2.5	40	65	
		PT 4	4	45	65	
		ST 2,5	2.5	40	65	
		ST 4	4	45	65	
		QTC 1,5	1.5	35	65	
		QTC 2,5	2.5	40	65	

Push-in terminal block bases for potential distribution

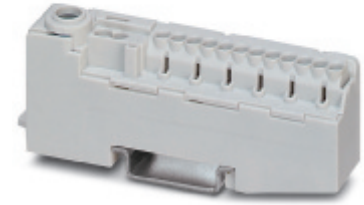


The terminal block bases are ideal for use in building installation and mechanical engineering applications, thanks to the following features:

- Quick and easy potential distribution with 14 push-in terminal points
- Compact design
- 25 mm² screw connection
- Large labeling option

Notes:
1) The max. load current must not be exceeded by the total current of all connected conductors.

1 ... 12



16 (25) mm², 80 A, terminal block base, 15 connections

Dimensions		[mm]	
Max. electrical data			
Rated data, external screw connection			
Rated voltage	[V]	690	-
Nominal current/cross section	[A]/[mm ²]	76 ¹⁾ /16	-
Rated cross section	[mm ²]	16	-
Cross section range	AWG	16 - 4	-
Connection capacity screw connection			
One conductor	[mm ²]	1.5 - 25	2.5 - 16
Two conductors (of the same type)	[mm ²]	1.5 - 10	1.5 - 6
Two stranded conductors with a TWIN ferrule	[mm ²]		
Rated data, 2 internal push-in connections			
Rated voltage	[V]	690	-
Nominal current/cross section	[A]/[mm ²]	20 ¹⁾ /2.5	-
Cross section range	AWG	14 - 12	-
Connection capacity, 2 internal push-in connections			
One conductor	[mm ²]	1.5 - 4	-
Two conductors with a TWIN ferrule	[mm ²]		
Plug-in connection cross sections	[mm ²]	1.5 - 4	-
Rated data, 12 external push-in connections			
Rated voltage	[V]	690	-
Nominal current/cross section	[A]/[mm ²]	16 ¹⁾ /1.5	-
Cross section range	AWG	12 - 14	-
Connection capacity, 12 external push-in connections			
One conductor	[mm ²]	1 - 2.5	-
Two conductors with a TWIN ferrule	[mm ²]		
Plug-in connection cross sections	[mm ²]	1 - 2.5	-
General data			
Stripping length screw connection	[mm]	12	
Stripping length push-in connection	[mm]	12	
Screw thread		M5	
Tightening torque	[Nm]	2 - 3	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Technical Data				
Width	Length	Height NS 35/7,5		
17.5	89.5	36		
I _{max.} [A]	U _{max.} [V]	max. Ø [mm ²]	AWG	
80 ¹⁾	690	1.5 - 25	14 - 4	
IEC 60998-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
solid				
stranded				
ferrule				
without/with plastic sleeve				
1.5 - 25	2.5 - 16	1.5 - 16	1.5 - 16	
1.5 - 10	1.5 - 6	1.5 - 6	-	
1.5 - 6				
IEC 60998-2-2				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
690	-	-	-	
20 ¹⁾ /2.5	-	-	-	
14 - 12	-	-	-	
solid				
stranded				
ferrule				
without/with plastic sleeve				
1.5 - 4	-	1 - 2.5	1 - 2.5	
			0.5 - 1.5	
1.5 - 4	-	1	1	
IEC 60998-2-2				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
690	-	-	-	
16 ¹⁾ /1.5	-	-	-	
12 - 14	-	-	-	
solid				
stranded				
ferrule				
without/with plastic sleeve				
1 - 2.5	-	0.75 - 1.5	0.75 - 1.5	
			0.25 - 0.75	
1 - 2.5	-	1.5	1.5	

Description	Color
Terminal block , for mounting on NS 35...	gray blue green
Three-compartment marker carrier , can be snapped into ST 2,5-3... and PT 2,5-3... three-level terminal blocks, can be labeled with UC-TMF 5 or ZBF 5	gray

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTU 16/14X2,5 GY	3214016	10

Accessories		
Type	Order No.	Pcs. / Pkt.
STP 5-3	0810562	100

1 ... 12



16 (25) mm², 80 A, terminal block base,
15 connections

1 ... 12



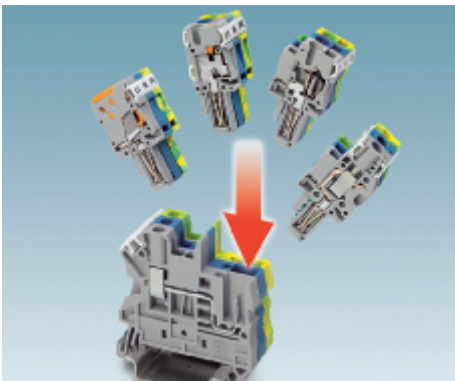
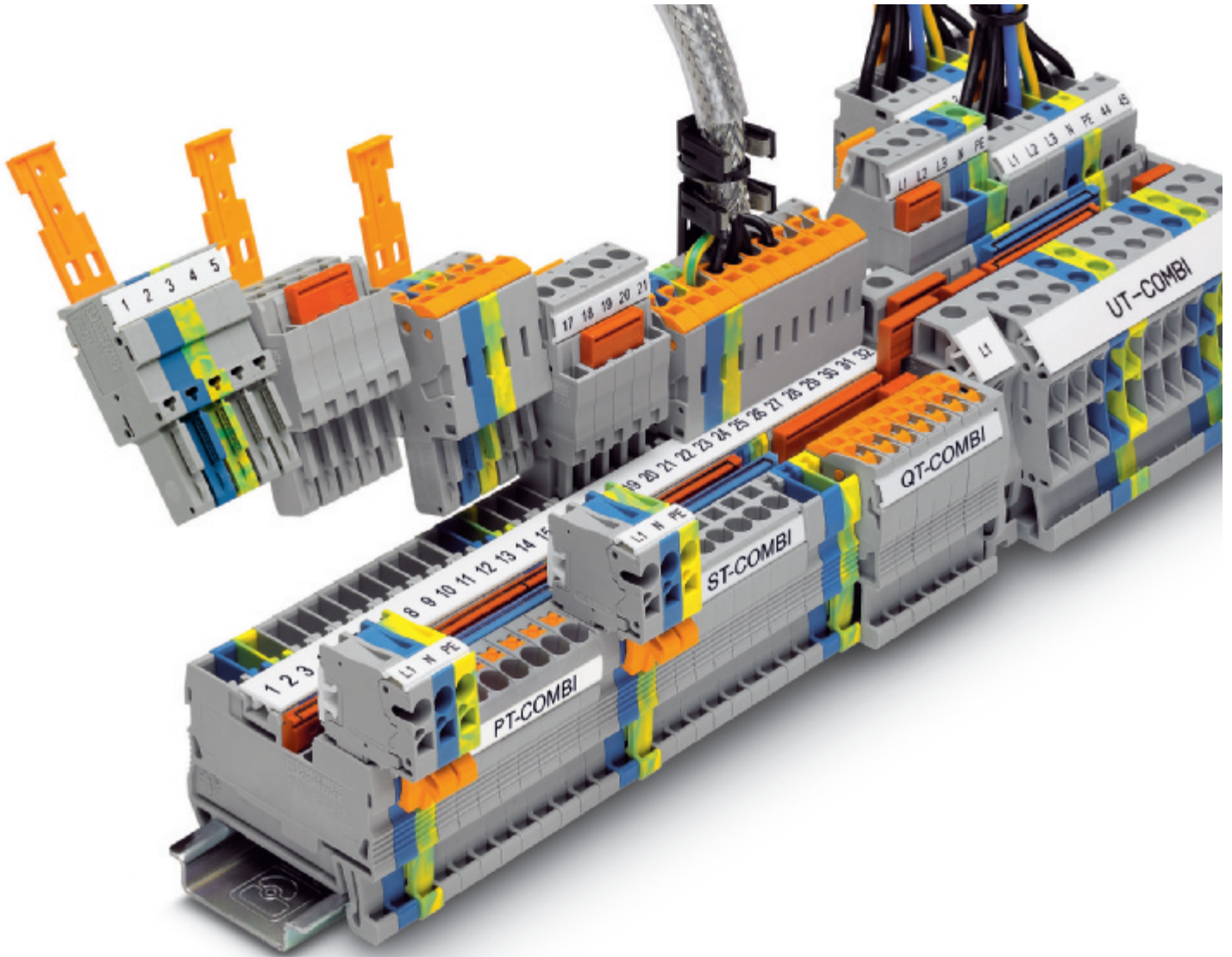
16 (25) mm², 80 A, terminal block base,
15 connections

Technical Data			
Width	Length	Height NS 35/7,5	
17.5	89.5	36	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
80 ¹⁾	690	1.5 - 25	14 - 4
IEC 60998-1			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
690	-	-	-
76 ¹⁾ /16	-	-	-
16	-	-	-
16 - 4	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
1.5 - 25	2.5 - 16	1.5 - 16	1.5 - 16
1.5 - 10	1.5 - 6	1.5 - 6	-
			1.5 - 6
IEC 60998-2-2			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
690	-	-	-
20 ¹⁾ /2.5	-	-	-
14 - 12	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
1.5 - 4	-	1 - 2.5	1 - 2.5
			0.5 - 1.5
1.5 - 4	-	1	1
IEC 60998-2-2			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
690	-	-	-
16 ¹⁾ /1.5	-	-	-
12 - 14	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
1 - 2.5	-	0.75 - 1.5	0.75 - 1.5
			0.25 - 0.75
1 - 2.5	-	1.5	1.5
12			
12			
M5			
2 - 3			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
17.5	89.5	36	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
80 ¹⁾	690	1.5 - 25	14 - 4
IEC 60998-1			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
690	-	-	-
76 ¹⁾ /16	-	-	-
16	-	-	-
16 - 4	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
1.5 - 25	2.5 - 16	1.5 - 16	1.5 - 16
1.5 - 10	1.5 - 6	1.5 - 6	-
			1.5 - 6
IEC 60998-2-2			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
690	-	-	-
20 ¹⁾ /2.5	-	-	-
14 - 12	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
1.5 - 4	-	1 - 2.5	1 - 2.5
			0.5 - 1.5
1.5 - 4	-	1	1
IEC 60998-2-2			
IEC	UL/CUL	CSA	IEC/ EN 60079-7
690	-	-	-
16 ¹⁾ /1.5	-	-	-
12 - 14	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
1 - 2.5	-	0.75 - 1.5	0.75 - 1.5
			0.25 - 0.75
1 - 2.5	-	1.5	1.5
12			
12			
M5			
2 - 3			
PA			
V0			

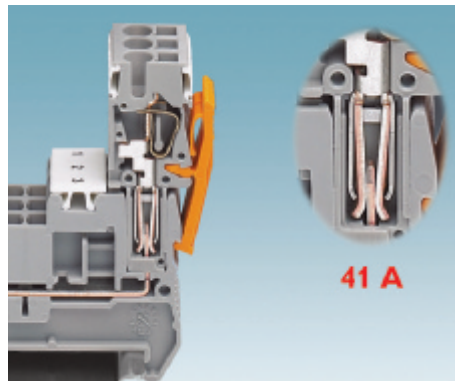
Ordering data		
Type	Order No.	Pcs. / Pkt.
PTU 16/14X2,5 BU	3214014	10
Accessories		
STP 5-3	0810562	100

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTU 16/14X2,5 GN	3214015	10
Accessories		
STP 5-3	0810562	100



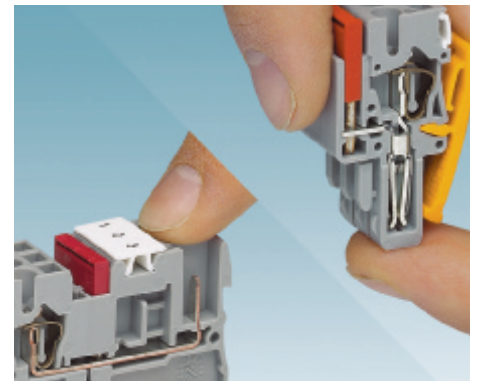
Flexible and plug-in

The COMBI range offers a free choice of connection technologies. The standardized COMBI plug-in zone allows terminal blocks and plugs to be combined to suit the application regardless of connection technology.



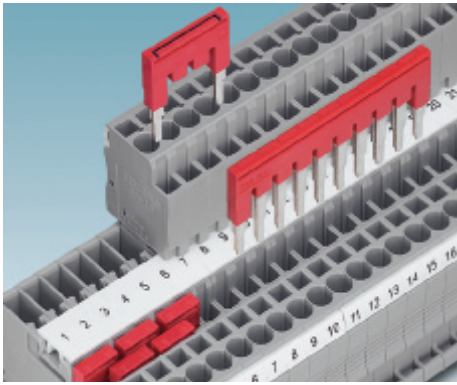
Powerful contact

The COMBI plug-in system enables a plug-in wiring solution up to a nominal current of 41 A and a nominal voltage of 1000 V to be implemented. The contact system features an integrated covering spring so that it can withstand extreme vibration levels.

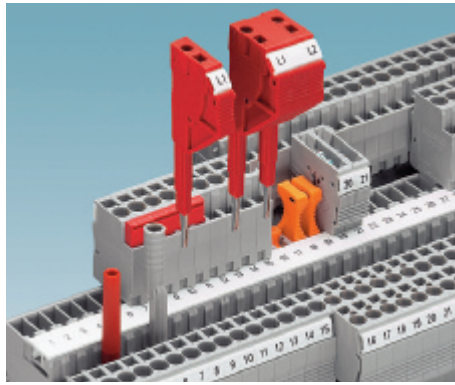


Touch proof

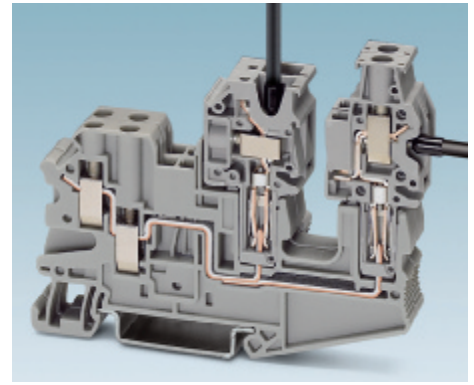
The COMBI system offers outstanding user protection since both the basic terminal blocks and the plugs are touch-proof. Alongside the safety aspect, this offers great flexibility for configuration work: the supply may be routed via the terminal blocks or plugs.



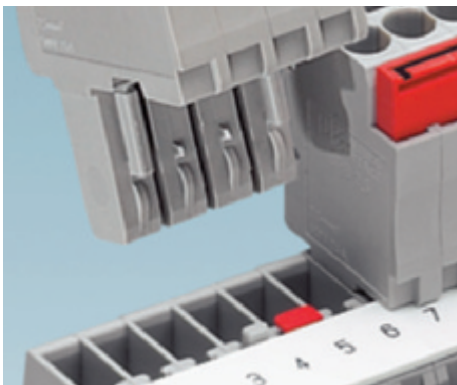
The standardized bridge system enables up to 50 terminal blocks to be connected with one bridge in an efficient manner suited to the application. A jumping bridge can be created by removing individual forks.



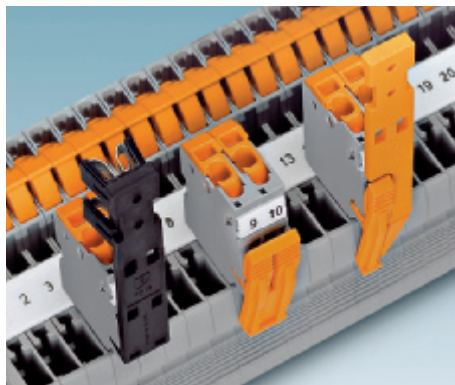
A test plug with a 2.3 mm diameter is available for measuring lines. All measurement and test work can be completed at speed using test adapters for 4 mm diameter test plugs and the modular test plugs.



Plugs with different conductor output directions (to the side or upwards) allow for practical, efficient wiring. This results in great flexibility as required in various areas of application.



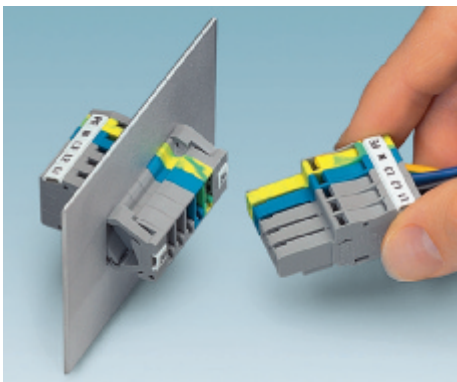
The simple and individual coding option increases wiring reliability and also protects against incorrect connecting. To do this, the pin must be released from the plug turned, and inserted in the basic terminal block.



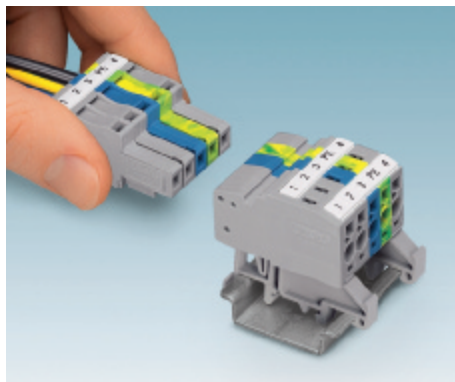
Snap-on strain relief is available if required to relieve the strain on cables at the plugs. Latching is also available and can be used to permanently fix plugs to basic terminal blocks.



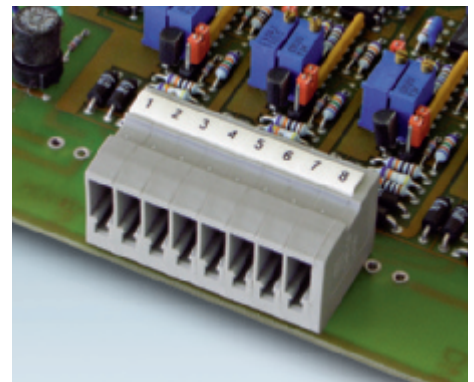
The cable housings are used for robust strain relief. These housings are split in two, making them easy to fit and safe to latch onto the COMBI plugs provided. Bend protection sleeves and shield connections are available as accessories.



Panel feed-throughs can be produced efficiently by simply snapping the panel feed-through SSL onto the standard receptacle. The panel feed-through is slid into the cut-out and automatically latches into place.



A receptacle version which can be fitted on rails offers a solution for applications with a low build height. The integrated duo foot allows for mounting on both NS 15 and NS 35 DIN rails.

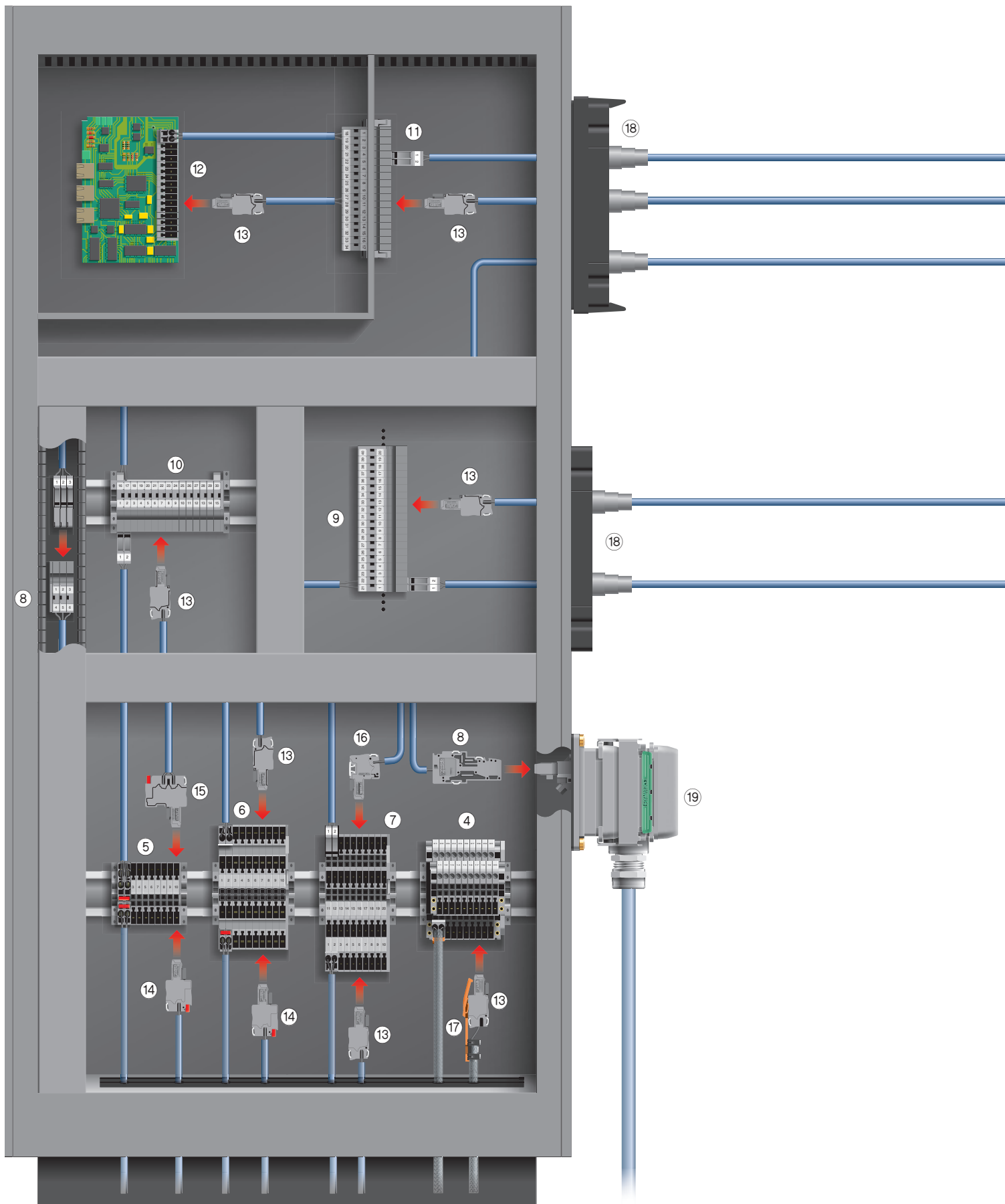


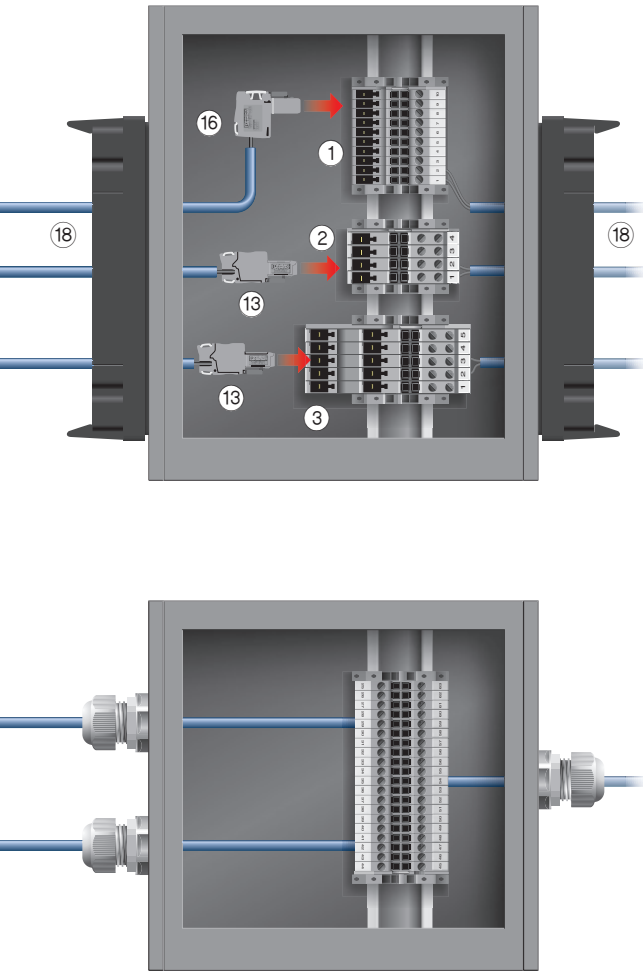
The COMBI base strip is a modular PCB connection. Universal plug-in solutions from the DIN rail through to the device can therefore be implemented with the same plug.

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

Cabling options with the COMBI plug-in system





- ① Feed-through terminal blocks with 1 connector outlet
- ② Multi-conductor terminal blocks with 1 connector outlet
- ③ Multi-conductor terminal blocks with 2 connector outlets
- ④ Double-level terminal blocks with 1 connector outlet per level
- ⑤ PIN/PIN feed-through terminal blocks
- ⑥ PIN/PIN multi-conductor terminal blocks
- ⑦ PIN/PIN double-level terminal blocks
- ⑧ Couplings for free-hanging connections
- ⑨ Couplings with engagement pin for direct mounting
- ⑩ Couplings for DIN rail mounting
- ⑪ Coupling for panel feed-through
- ⑫ Base strip for the PCB connection
- ⑬ Plug with conductor exit in plug-in direction
- ⑭ Bridgeable plug with conductor exit in plug-in direction
- ⑮ Bridgeable two-conductor plug with conductor exit in plug-in direction
- ⑯ Plug with conductor exit perpendicular to plug-in direction
- ⑰ Optional snap-on plug accessories, e.g., snap-lock fitting with shield connection
- ⑱ CES cable entry system in IP54/65 see page 210 onward
- ⑲ DUPLICON IP67 heavy plug-in connector see PLUSCON catalog

From the control cabinet to a complete system - it is impossible to imagine today's applications without plug-in solutions. It is here that the COMBI plug-in system offers users unlimited flexibility. From supplying the control cabinet and the power and control components, right up to the quick installation of distributed system parts, the COMBI plug-in system always delivers the perfect solution.

The advantages of this system are numerous. Plug-in components within the control cabinet can be both installed and uninstalled quickly and easily. The plug-in ring feeders guarantee the safe supply of power between the control cabinets. Free-hanging couplings are not only suitable for wiring in the smallest of spaces; they can

also be used to lengthen pre-assembled cables without any problems.

The COMBI base strips enable the plug-in wiring of electronic devices or components.

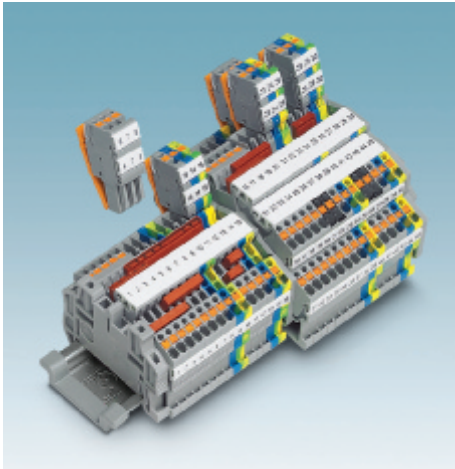
The CES cable entry systems allow users to route up to 40 pre-assembled plugs into the control cabinet while maintaining IP54/65 protection. In the case of increased requirements, such as a degree of protection of up to IP67 or connecting control cabinets in harsh industrial environments, the DUPLICON is the ideal connection component.

The flexible and varied possibilities offered by the COMBI system's standardized plug-in zone have won over some well-known companies. Rittal has opted for the COMBI system and has integrated the plug-in zone into the new RLine 60 device adapter.

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

COMBI plug-in push-in desk-design feed-through and double-level terminal blocks



The plug-in capable push-in COMBI terminal blocks are characterized by the standard push-in technology system features and those of the CLIPLINE complete systems, as well as the following features:

- Compact design also with 3.5 mm pitch
- Uniform, touch-proof plug-in zone
- For nominal currents up to 17.5 A
- For nominal voltages up to 500 V

PTS 1,5/S...

- Angled conductor entry for use in flat terminal boxes
- Two- and three-conductor terminal blocks with the same shape
- Four function shafts enable all potential distribution tasks to be carried out in a convenient manner

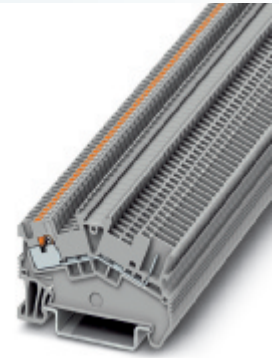
PTTBS 1,5/S...

- Two bridge shafts on both levels for all potential distribution tasks
- Two large-surface labeling options
- Potential bridging of levels using the **FBS 1,5/S-PV** vertical potential bridge

Terminal strip service

We produce fully pre-assembled terminal strips for fitting straight into the control cabinet or switch system. This simplifies installation, saves time, and cuts costs.

Notes:
1) The max. load current must not be exceeded by the total current of all connected conductors.
2) For derating curve, visit www.phoenixcontact.net/catalog



1.5 (1.5) mm², 17.5 A, feed-through terminal block, 2 connections



Dimensions		[mm]
Max. electrical data		
Rated voltage	[V]	500
Nominal current/cross section	[A]/[mm ²]	17.5 ² /1.5
Rated cross section	[mm ²]	1.5
Cross section range	AWG	26 - 14
Connection capacity		
One conductor	[mm ²]	0.14 - 1.5
Plug-in connection cross sections	[mm ²]	0.25 - 1.5
General data		
Stripping length	[mm]	8
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data				
Width	Length	Height NS 35/7,5		
3.5	50.7	38.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
17.5	500	0.14 - 1.5	26 - 14	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage	600	-	-	
Nominal current/cross section	15/-	-	-	
Rated cross section	-	-	-	
Cross section range	26 - 14	-	-	
Connection capacity		solid	stranded	ferrule
		without/with plastic sleeve		
One conductor	0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
Plug-in connection cross sections	0.25 - 1.5	-	0.34 - 1.5	0.34 - 1

Description	No. of pos.	Color
Terminal block, for mounting on NS 35...		gray
		blue
Terminal block, with equipotential bonder, for mounting on NS 35...		gray

Ordering data			
Type	I _{max}	Order No.	Pcs./Pkt.
PTS 1,5/S/1P		3214453	50
PTS 1,5/S/1P BU		3214466	50

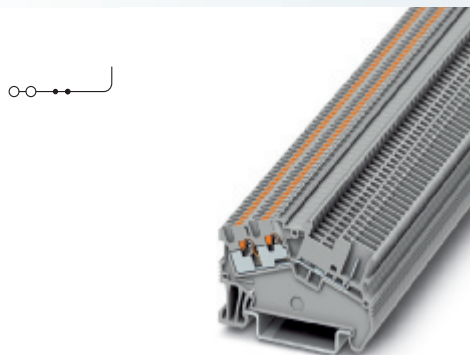
Cover, width 2.2 mm	gray
Plug-in bridge	
	2 red
	3 red
	4 red
	5 red
	10 red
	20 red

Accessories			
D-PTS 1,5/S		3214576	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
ATP-ST 4		3030721	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

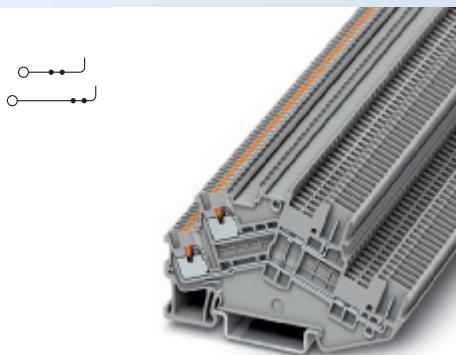
Vertical potential bridge, to connect the upper and lower level	black
Partition plate, 2 mm wide	gray
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	red
Keying star, with 4 keying branches, can be inserted in all basic terminal blocks	red
Screwdriver	
Center groove labeling	
Center and side groove labeling	

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)	
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)	

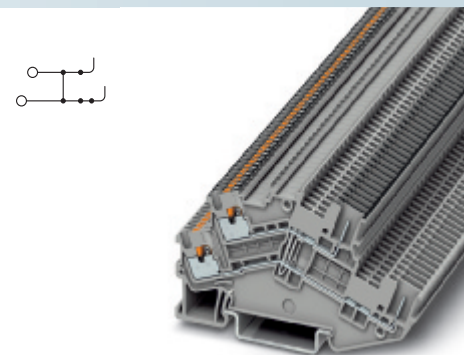
The modular terminal block system - CLIPLINE complete



1.5 (1.5) mm², 17.5 A, feed-through terminal block, 3 connections



1.5 (1.5) mm², 16 A, double-level terminal block



1.5 (1.5) mm², 16 A, double-level terminal block, internally connected levels



Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
17.5 ¹⁾	500	0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
17.5 ²⁾ /1.5	15/-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	78	55	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
16	500	0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
16 ²⁾ /1.5	15/-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	78	55	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
16 ¹⁾	500	0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
16 ²⁾ /1.5	15/-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTS 1,5/S-TWIN/1P		3214709	50
PTS 1,5/S-TWIN/1P BU		3214712	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTTBS 1,5/S/2P		3214495	50
PTTBS 1,5/S/2P BU		3214505	50
PTTBS 1,5/S/2P-PV		3214521	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTTBS 1,5/S/2P-PV		3214521	50

Accessories			
D-PTS 1,5/S		3214576	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
ATP-ST 4		3030721	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

Accessories			
D-PTTBS 1,5/S/2P		3214534	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
FBS 1,5/S-PV		3216263	10
ATP-STTB 4		3030747	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

Accessories			
D-PTTBS 1,5/S/2P		3214534	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
ATP-STTB 4		3030747	50
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

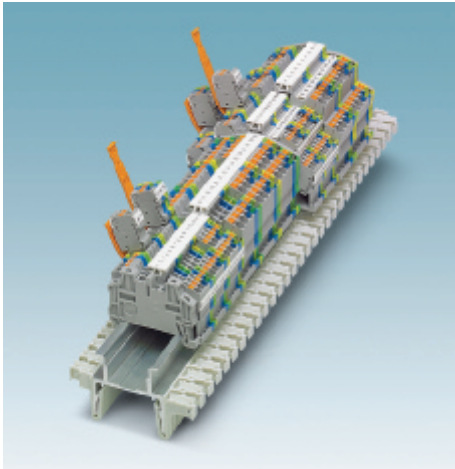
UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

UCT-TM 3,5 or ZB 3,5
(CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5
(CLIPLINE catalog, part 2)

Modular terminal blocks

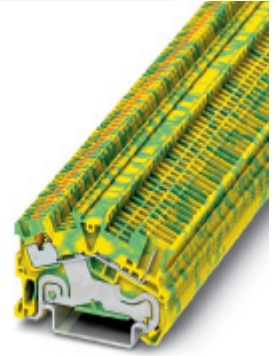
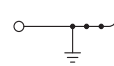
The modular terminal block system - CLIPLINE complete

COMBI plug-in push-in desk-design ground terminal blocks



- Same shape and pitch as the feed-through terminal blocks
- Contact is made free from mechanical and electrical errors by simply snapping onto the DIN rail
- All the requirements of IEC 60947-7-2 standard are met

Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.



1.5 (1.5) mm², ground terminal block, 2 connections



Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	-
Nominal current/cross section	[A]/[mm ²]	-
Rated cross section	[mm ²]	1.5
Cross section range	AWG	26 - 14
Connection capacity		
One conductor	[mm ²]	0.14 - 1.5
Plug-in connection cross sections	[mm ²]	0.25 - 1.5
General data		
Stripping length	[mm]	8
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 61984	UL/CUL	CSA	IEC/EN 60079-7
IEC			
		ferrule	
		without/with plastic sleeve	
	stranded	0.14 - 1.5	0.14 - 1
		0.34 - 1.5	0.34 - 1

Description	No. of pos.	Color
Ground terminal block, for mounting on NS 35...		green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTS 1,5/S/1P-PE	3214479	50

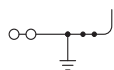
Cover, width 2.2 mm		gray
Plug-in bridge	2	red
	3	red
	4	red
	5	red
	10	red
	20	red
Partition plate, 2 mm wide		gray
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part		red
Keying star, with 4 keying branches, can be inserted in all basic terminal blocks		red
Screwdriver		

Accessories		
D-PTS 1,5/S	3214576	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-ST 4	3030721	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PC	3040588	50
SZF 0-0,4X2,5	1204504	10

Center groove labeling	
Center and side groove labeling	

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

The modular terminal block system - CLIPLINE complete



1.5 (1.5) mm², ground terminal block, 3 connections



1.5 (1.5) mm², double-level ground terminal block



Technical Data			
Width	Length	Height NS 35/7,5	
3.5	50.7	38.5	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	78	55	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	26 - 14	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8			
PA			
V0			

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTS 1,5/S-TWIN/1P-PE	3214725	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTBS 1,5/S/2P-PE	3214518	50

Accessories		
D-PTS 1,5/S	3214576	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-ST 4	3030721	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PC	3040588	50
SZF 0-0,4X2,5	1204504	10

Accessories		
D-PTBS 1,5/S/2P	3214534	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-STTB 4	3030747	50
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PC	3040588	50
SZF 0-0,4X2,5	1204504	10

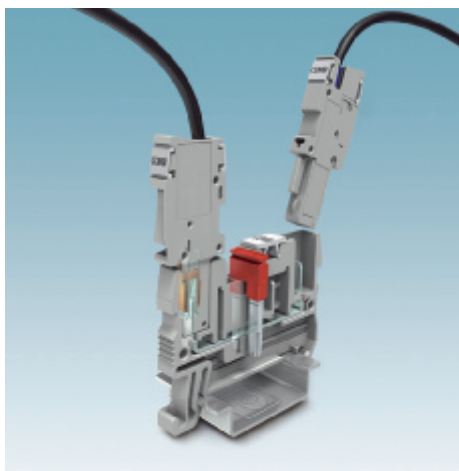
UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

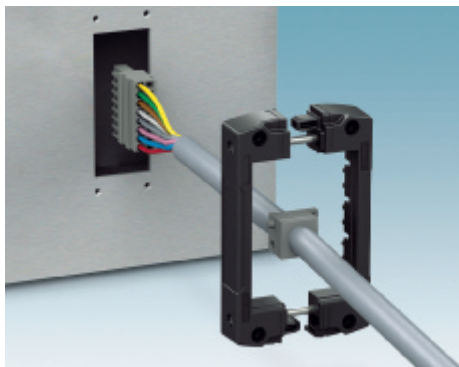
COMBI plug-in PIN/PIN feed-through, double-level, and ground terminal blocks



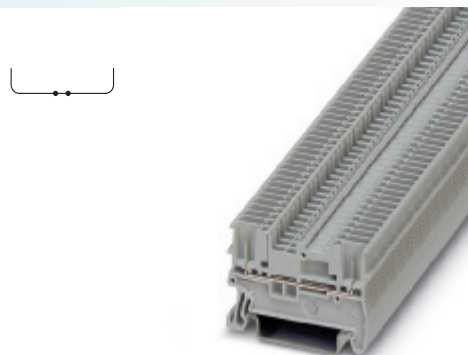
- For the PIN/PIN versions of the COMBI series, plugs can be used on both sides of the terminal blocks
- This makes the COMBI system even more flexible as the terminal blocks are used as the connection element for modules
- Connection with the standard COMBI plugs
- The extensive range of accessories, such as latching, strain relief, encoding, and shield connection can be used
- Ground terminal blocks with the same shape and pitch
- Contact is made free from mechanical and electrical errors by simply snapping onto the DIN rail
- All the requirements of IEC 60947-7-2 standard are met

Cable entry system

- Cable entry systems allow pre-assembled cables to be routed into the control cabinet in a straightforward and space-saving manner with IP54/65, see from page 210



Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.
For accessories, see CLIPLINE catalog, part 1.
¹⁾ The max. load current must not be exceeded by the total current of all connected conductors.
²⁾ For derating curve, visit www.phoenixcontact.net/catalog



1.5 (1.5) mm², 17.5 A, feed-through terminal block, 2 connections



Dimensions	
	[mm]
Max. electrical data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity of the usable plugs	
One conductor	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/7,5		
3.5	46	32		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
17.5 ²⁾	500	0.14 - 1.5	26 - 14	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage	500	-	-	-
Nominal current/cross section	17.5 ²⁾ /1.5	-	-	-
Rated cross section	1.5	-	-	-
Cross section range	26 - 14	-	-	-
Connection capacity of the usable plugs		solid	stranded	ferrule
		without/with plastic sleeve		
One conductor	0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
Plug-in connection cross sections	0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
General data				
Stripping length	8			
Insulating material	PA			
Inflammability class according to UL 94	V0			

Description	No. of pos.	Color
Terminal block, for mounting on NS 35...		gray
Terminal block, with equipotential bonder, for mounting on NS 35... ¹⁾		blue
Ground terminal block, for mounting on NS 35...		green-yellow

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PT 1,5/S/2P		3213784	50
PT 1,5/S/2P BU		3213797	50

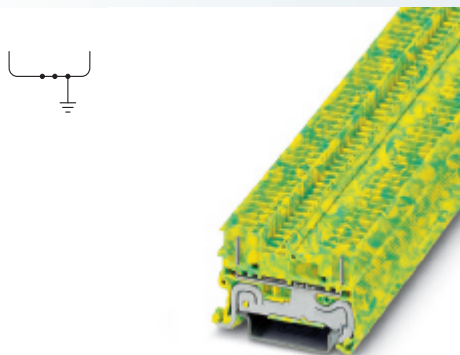
Cover, width 2.2 mm		gray
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	10	red
	20	red
Partition plate, 2 mm wide		gray
Keying star, with 4 keying branches, can be inserted in all basic terminal blocks		red
Screwdriver		

Accessories			
D-PT 1,5/S		3208142	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
ATP-ST 4		3030721	50
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

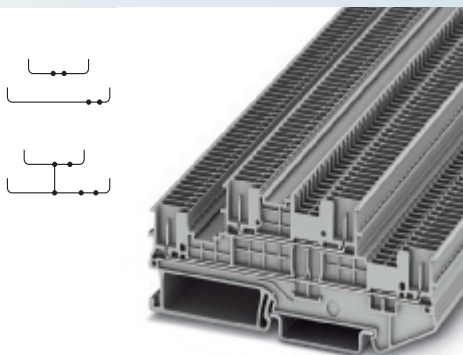
Center groove labeling	
Center and side groove labeling	

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)	
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)	

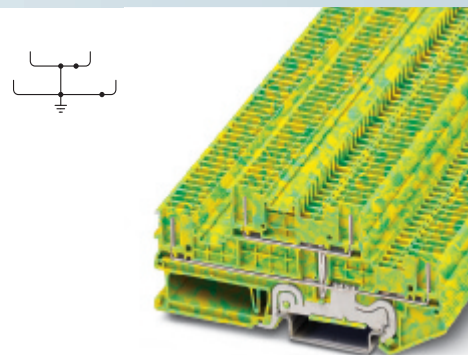
The modular terminal block system - CLIPLINE complete



1.5 (1.5) mm², ground terminal block, 2 connections



1.5 (1.5) mm², 16 A, double-level terminal block



1.5 (1.5) mm², double-level ground terminal block



Technical Data			
Width	Length	Height NS 35/7,5	
3.5	45.8	32	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
8	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	93.9	42.6	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	-	-	-
16 ² /1.5	-	-	-
1.5	-	-	-
26 - 14	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
12	PA	V0	

Technical Data			
Width	Length	Height NS 35/7,5	
3.5	93.9	42.6	
		max. Ø [mm ²]	AWG
		0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
1.5	-	-	-
26 - 14	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	0.14 - 1
0.25 - 1.5	-	0.34 - 1.5	0.34 - 1
12	PA	V0	

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 1,5/S/2P-PE	3213810	50

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PTTB 1,5/S/4P		3213865	50
PTTB 1,5/S/4P BU		3213878	50
PTTB 1,5/S/4P-PV		3213852	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
PTTB 1,5/S/4P-PE	3213881	50

Accessories		
D-PT 1,5/S	3208142	50
FBS 2-3,5	3213014	50
FBS 3-3,5	3213027	50
FBS 4-3,5	3213030	50
FBS 5-3,5	3213043	50
FBS 10-3,5	3213056	50
FBS 20-3,5	3213069	50
ATP-ST 4	3030721	50
PC	3040588	50
SZF 0-0,4X2,5	1204504	10

Accessories			
D-PTTB 1,5/S/4P		3213894	50
FBS 2-3,5	17.5 A	3213014	50
FBS 3-3,5	17.5 A	3213027	50
FBS 4-3,5	17.5 A	3213030	50
FBS 5-3,5	17.5 A	3213043	50
FBS 10-3,5	17.5 A	3213056	50
FBS 20-3,5	17.5 A	3213069	50
ATP-STTB 4		3030747	50
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

Accessories			
D-PTTB 1,5/S/4P		3213894	50
FBS 2-3,5		3213014	50
FBS 3-3,5		3213027	50
FBS 4-3,5		3213030	50
FBS 5-3,5		3213043	50
FBS 10-3,5		3213056	50
FBS 20-3,5		3213069	50
ATP-STTB 4		3030747	50
PC		3040588	50
SZF 0-0,4X2,5		1204504	10

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

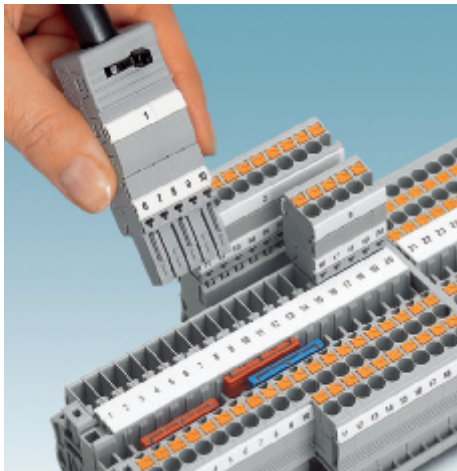
UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

UCT-TM 3,5 or ZB 3,5 (CLIPLINE catalog, part 2)
UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

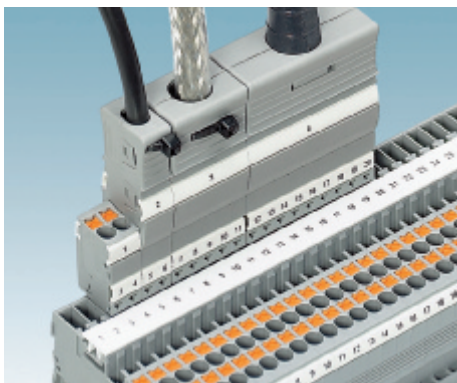
COMBI plugs with push-in connection



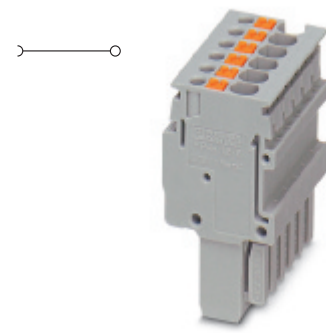
- Extensive, optional snap-on accessories available
- Practical coding facility
- Large labeling option

Cable housings

- Cable housing can be snapped onto the PP-H ... plugs, see figure below



Notes:
For more cable housings, see CLIPLINE catalog, part 1.
1) For derating curve, visit www.phoenixcontact.net/catalog



1.5 (1.5) mm², 17.5 A, plug, connection in plug-in direction



Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data			
Width	Length	Height	Height when plugged in
3.5 x No. of pos.	16.5	31.3	19.5
I _{max.} [A]	U _{max.} [V]	max. Ø [mm ²]	AWG
17.5 ¹⁾	500	0.14 - 1.5	26 - 14
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
Rated voltage	600	-	-
Nominal current/cross section	17.5 ¹⁾ /1.5	15/-	-
Rated cross section	1.5	-	-
Cross section range	26 - 14	26 - 14	-
Connection capacity		ferrule	
	solid	stranded	without/with plastic sleeve
One conductor	0.14 - 1.5	0.14 - 1.5	0.14 - 1.5 0.14 - 1
Plug-in connection cross sections	0.25 - 1.5	-	0.34 - 1.5 0.34 - 1
Stripping length	8		
Insulating material	PA		
Inflammability class according to UL 94	V0		

Description	No. of pos.	Width	Color
COMBI plug, with a push-in connection			
	1	3.5 mm	gray
	2	7 mm	gray
	3	10.5 mm	gray
	4	14 mm	gray
	5	17.5 mm	gray
	6	21 mm	gray
	7	24.5 mm	gray
	8	28 mm	gray
	9	31.5 mm	gray
	10	35 mm	gray
	11	38.5 mm	gray
	12	42 mm	gray
	13	45.5 mm	gray
	14	49 mm	gray
	15	52.5 mm	gray
	1	3.5 mm	blue
	1	3.5 mm	green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PP-H 1,5/S/1	3212484	50
PP-H 1,5/S/2	3212510	50
PP-H 1,5/S/3	3212523	50
PP-H 1,5/S/4	3212536	50
PP-H 1,5/S/5	3212549	50
PP-H 1,5/S/6	3212552	25
PP-H 1,5/S/7	3212565	25
PP-H 1,5/S/8	3212578	25
PP-H 1,5/S/9	3212581	25
PP-H 1,5/S/10	3212594	25
PP-H 1,5/S/11	3212604	10
PP-H 1,5/S/12	3212617	10
PP-H 1,5/S/13	3212620	10
PP-H 1,5/S/14	3212633	10
PP-H 1,5/S/15	3212646	10
PP-H 1,5/S/1 BU	3212497	50
PP-H 1,5/S/1 GNYE	3212507	50

Test plug , consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	red
Latching and strain relief , for all plugs with conductor exit at top, 2-pos.	orange
Latching , for plugs, 1-pos.	orange
2-pos.	orange
Strain relief , for plug and receptacle, 2-pos.	black
Cable housing , for COMBI plugs PP-H 1.5	gray
3-pos.	
4-pos.	gray
5-pos.	gray
6-pos.	gray
7-pos.	gray
Screwdriver	

Accessories		
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PRZ 1,5/S	3212905	50
PR 1,5/S	3212882	50
PR 1,5/S/2	3212895	50
PZ 1,5/S/2	3212918	50
PH 1,5/S/3	3212756	50
PH 1,5/S/4	3212769	50
PH 1,5/S/5	3212772	50
PH 1,5/S/6	3212785	25
PH 1,5/S/7	3212798	25
SZF 1-0,6X3,5	1204517	10

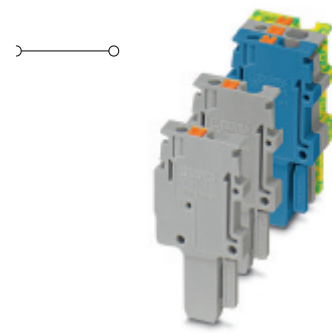
Lateral groove labeling

UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

Self-assembly COMBI plugs with a push-in connection

- The push-in COMBI plugs for self-assembly provide solutions that users can implement themselves
 - The plug is assembled directly on site by snapping together single-position plug elements. See below for an example of how these go together
- ① PP-H 1,5/S/1-L
 - ② PP-H 1,5/S/1-M and PP-H 1,5/S/1-M BU
 - ③ PP-H 1,5/S/1-R GNYE

Notes:
For more cable housings, see CLIPLINE catalog, part 1.
1) For derating curve, visit www.phoenixcontact.net/catalog



1.5 (1.5) mm², 17.5 A, plug, connection in plug-in direction



Dimensions	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

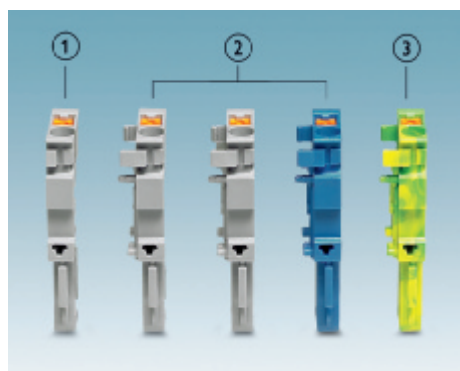
Technical Data			
Width	Length	Height	Height when plugged in
3.5 x No. of pos.	16.5	31.3	19.5
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
17.5 ¹⁾	500	0.14 - 1.5	26 - 14
IEC 61984	UL/CUL	CSA	IEC/EN 60079-7
IEC	UL/CUL	CSA	IEC/EN 60079-7
Rated voltage	600	-	-
Nominal current/cross section	17.5 ¹⁾ /1.5	-	-
Rated cross section	1.5	-	-
Cross section range	26 - 14	-	-
Connection capacity	solid	stranded	ferrule
One conductor	0.14 - 1.5	0.14 - 1.5	0.14 - 1.5
Plug-in connection cross sections	0.25 - 1.5	-	0.34 - 1.5
General data			
Stripping length	8		
Insulating material	PA		
Inflammability class according to UL 94	V0		

Description	No. of pos.	Width	Color
COMBI plug , with a push-in connection, non-bridgeable, left element	1	3.5 mm	gray
	1	3.5 mm	blue
	1	3.5 mm	green-yellow
COMBI plug , with a push-in connection, not bridgeable, middle element	1	3.5 mm	gray
	1	3.5 mm	blue
	1	3.5 mm	green-yellow
COMBI plug , with a push-in connection, not bridgeable, right element	1	3.5 mm	gray
	1	3.5 mm	blue
	1	3.5 mm	green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PP-H 1,5/S/1-L	3212659	50
PP-H 1,5/S/1-L BU	3212662	50
PP-H 1,5/S/1-L GNYE	3212675	50
PP-H 1,5/S/1-M	3212688	50
PP-H 1,5/S/1-M BU	3212691	50
PP-H 1,5/S/1-M GNYE	3212701	50
PP-H 1,5/S/1-R	3212714	50
PP-H 1,5/S/1-R BU	3212727	50
PP-H 1,5/S/1-R GNYE	3212730	50

Test plug , consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	red
Latching and strain relief , for all plugs with conductor exit at top, 2-pos.	orange
Latching , for plugs, 1-pos.	orange
Strain relief , for plug and receptacle, 2-pos.	black
Cable housing , for COMBI plugs PP-H 1.5	gray
3-pos.	gray
4-pos.	gray
5-pos.	gray
6-pos.	gray
7-pos.	gray
8-pos.	gray
9-pos.	gray
10-pos.	gray
Screwdriver	

Accessories		
Type	Order No.	Pcs. / Pkt.
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PRZ 1,5/S	3212905	50
PR 1,5/S	3212882	50
PR 1,5/S/2	3212895	50
PZ 1,5/S/2	3212918	50
PH 1,5/S/3	3212756	50
PH 1,5/S/4	3212769	50
PH 1,5/S/5	3212772	50
PH 1,5/S/6	3212785	25
PH 1,5/S/7	3212798	25
PH 1,5/S/8	3212808	25
PH 1,5/S/9	3212811	25
PH 1,5/S/10	3212824	25
SZF 1-0,6X3,5	1204517	10



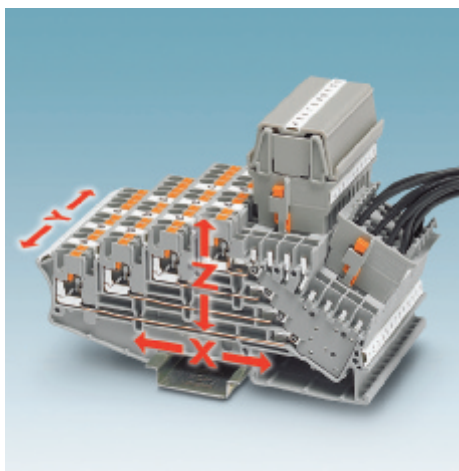
Lateral groove labeling

UCT-TMF 3,5 or ZBF 3,5 (CLIPLINE catalog, part 2)

Modular terminal blocks

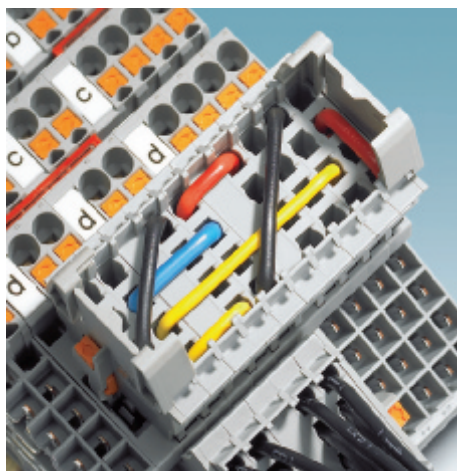
The modular terminal block system - CLIPLINE complete

COMBI plug-in push-in four-level terminal blocks

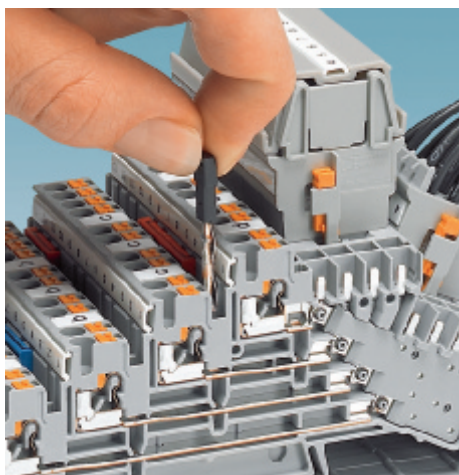


The plug-in four-level terminal blocks offer the following advantages when space is at a premium:

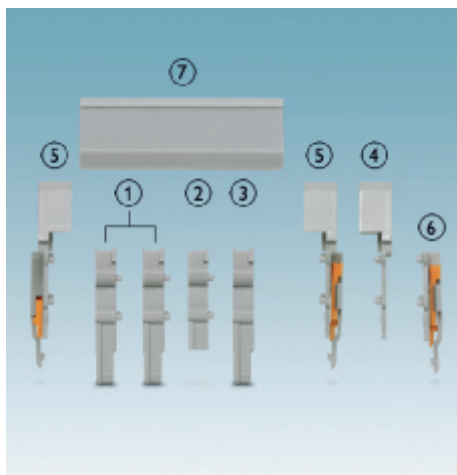
- Quick and easy signal distribution within controllers and power and process technology systems
- Compact, three-dimensional marshalling distributors can be set up



- The four-level terminal blocks are equipped with two slots and increase system modularity by adding a further jumpering level. They enable the use of:
- Jumper plugs for free assembly that can be used for horizontal, vertical, and diagonal signal wiring
 - Plugs for free assembly, e.g., for the functional and wiring test
 - An additional plug outlet for signal wiring running to the field



- The FBS-PV PT 2,5-4L plug-in vertical bridge enables potential to be distributed easily between the levels of a terminal



- ① 4-pos. plug with CP-H 2,5-4L-Z engagement pin
- ② DP-CP-H 2,5-4L spacer plate
- ③ CP-H 2,5-4L 4-pos. plug
- ④ D-CP-H 2,5-4L cover profile carrier
- ⑤ DFS-CP-H 2,5-4L cover profile carrier with self-locking flange cover
- ⑥ DFS-CP 2,5-4L self-locking flange cover
- ⑦ AP-CP-H cover profile

Notes:

For more plug-in bridges, visit www.phoenixcontact.net/catalog.

The PT 2,5-PE/3L/2P version with two slots and PE function at the lower level will be available as of the 3rd quarter of 2012.

¹⁾ For derating curve, visit www.phoenixcontact.net/catalog

Dimensions

[mm]

Max. electrical data

Rated data

Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG

Connection capacity

One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]

General data

Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Description	No. of pos.	Color
Terminal block , for mounting on NS 35...		gray
Plug housing , for accommodating 4 socket contacts		gray
Plug housing with engagement pin , for accommodating 4 socket contacts		gray

Cover , width 2.2 mm		gray
Plug-in bridge		

	2	red
	3	red
	4	red
	5	red
	10	red
	20	red

Vertical potential bridge, to connect the upper and lower level

black

Self-locking flange, can be labeled with UC-TM

gray

Module socket contact, 0.5 - 1 mm²

Module socket contact, 1.5 - 2.5 mm²

Spacer plate

gray

Cover profile, 1 m, can be labeled with UC-TM ...

gray

Cover profile carrier

gray

Cover profile carrier, with self-locking flange cover

gray

Self-locking flange cover

gray

Test adapter, 4 mm test socket hole

gray

Test plug, consisting of: **metal part** for 2.3 mm Ø socket hole and

red

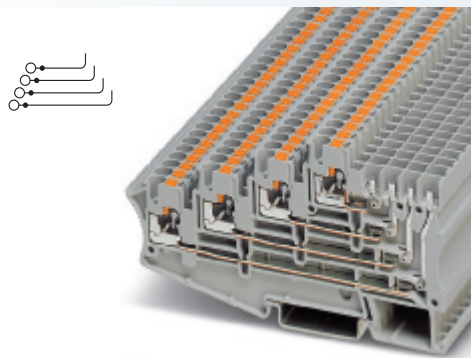
Modular test plug, for the individual assembly of test plug strips

red

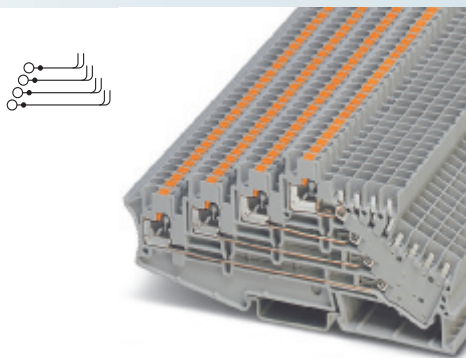
Screwdriver

Lateral groove labeling

The modular terminal block system - CLIPLINE complete



2.5 (4) mm², 10 A, four-level terminal block, one slot



2.5 (4) mm², 10 A, four-level terminal block, two slots



Plug housing, for accommodating four socket contacts

Technical Data			
Width	Length	Height NS 35/7,5	
5.2	105.6	59	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
10 ¹⁾	250	0.14 - 4	26 - 12
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
250	-	-	-
10 ¹⁾ /1.5	-	-	-
2.5	-	-	-
26 - 12	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 4	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5 0.5
0.34 - 4	-	0.34 - 2.5	0.34 - 2.5
12			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
5.2	125	59	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
10 ¹⁾	250	0.14 - 4	26 - 12
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
250	-	-	-
10 ¹⁾ /1.5	-	-	-
2.5	-	-	-
26 - 12	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 4	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5 0.5
0.34 - 4	-	0.34 - 2.5	0.34 - 2.5
12			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
5.2	31.6	-	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
-	-	-	-
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
-	-	-	-
-	-	-	-
12			
PA			
-			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PT 2,5-4L/1P		3012300	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PT 2,5-4L/2P		3012310	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
CP-H 2,5-4L	3012313	50
CP-H 2,5-4L-Z	3012314	50

Accessories			
D-PT 2,5-4L/1P		Order No.	Pcs. / Pkt.
FBS 2-5	24 A	3030161	50
FBS 3-5	24 A	3030174	50
FBS 4-5	24 A	3030187	50
FBS 5-5	24 A	3030190	50
FBS 10-5	24 A	3030213	10
FBS 20-5	24 A	3030226	10
FBS-PV PT 2,5-4L		3012318	50
PT 2,5-4L/1P-FS		3012302	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-5		3030983	10
SZF 1-0,6X3,5		1204517	10

Accessories			
D-PT 2,5-4L/2P		Order No.	Pcs. / Pkt.
FBS 2-5	24 A	3030161	50
FBS 3-5	24 A	3030174	50
FBS 4-5	24 A	3030187	50
FBS 5-5	24 A	3030190	50
FBS 10-5	24 A	3030213	10
FBS 20-5	24 A	3030226	10
FBS-PV PT 2,5-4L		3012318	50
PT 2,5-4L/2P-FS		3012312	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-5		3030983	10
SZF 1-0,6X3,5		1204517	10

Accessories		
Type	Order No.	Pcs. / Pkt.
STG-MTN 0,5-1,0	3190438	100
STG-MTN 1,5-2,5	3190506	100
DP-CP-H 2,5-4L	3012319	50
AP-CP-H	3012315	10
D-CP-H 2,5-4L	3012320	50
DFS-CP-H 2,5-4L	3012317	50
DFS-CP 2,5-4L	3012321	50

UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

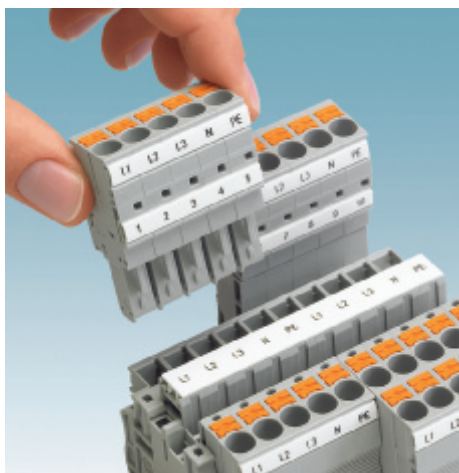
UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

UC-TMF 5, UCT-TMF 5 or ZBF 5 (catalog CLIPLINE part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

COMBI plug-in push-in feed-through, multiple conductor, and ground terminal blocks



The plug-in capable push-in COMBI terminal blocks are characterized by the standard push-in technology system features and those of the CLIPLINE complete systems, as well as the following features:

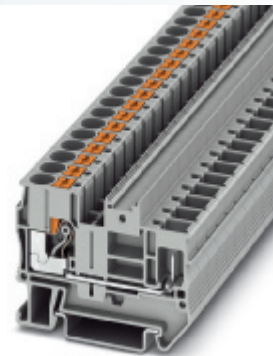
- Compact, space-saving design
- Uniform, touch-proof plug-in zone
- Large labeling option
- Compatible with push-in standard terminal blocks
- For nominal currents up to 41 A
- For nominal voltages up to 1000 V
- Quick and easy potential distribution with the double function shaft
- Reducing bridges enable terminal blocks with different cross sections to be easily connected, e.g., a PT 6/1P to a PT 2,5/1P
- You can find flexible options for reduction bridging on page 25

Terminal strip service

We produce fully pre-assembled terminal strips for fitting straight into the control cabinet or switch system. This simplifies installation, saves time, and cuts costs.



Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.
1) The max. load current must not be exceeded by the total current of all connected conductors.
2) For derating curve, visit www.phoenixcontact.net/catalog
3) The reducing bridge table should be followed, see page 25.



6 (10) mm², 41 A, feed-through terminal block, 2 connections

Dimensions	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	57.7	43.5	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
41 ²)	1000	0.5 - 10	20 - 8
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ²)/6	-	-	-
6	-	-	-
20 - 8	-	-	-
Connection capacity	solid	stranded	ferrule without/with plastic sleeve
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6
			0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
General data			
12			
PA			
V0			

Description	No. of pos.	Color
Terminal block , for mounting on NS 35...		gray blue
Ground terminal block , for mounting on NS 35...		green-yellow

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PT 6/1P		3061758	50
PT 6/1P BU		3061761	50

Cover, width 2.2 mm		gray
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	10	red

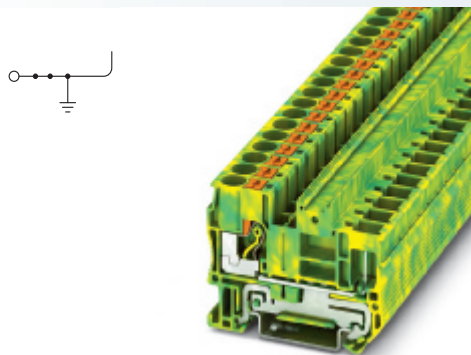
Accessories			
D-PT 6		3212044	50
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
RB ST 6-(2,5/4)		3030860	10
RB ST 6-1,5/S		3213250	10
ATP-ST 6		3024481	50
PC		3040588	50
PAI-4-N GY		3032871	10
PS-8		3031005	10
SZF 2-0,8X4,0		1204520	10

Reducing bridge³⁾		
	2	red
	2	red
Partition plate, 2 mm wide		gray
Keying star , with 4 keying branches, can be inserted in all basic terminal blocks		red
Test adapter , 4 mm test socket hole		gray
Modular test plug , for the individual assembly of test plug strips		red
Screwdriver		

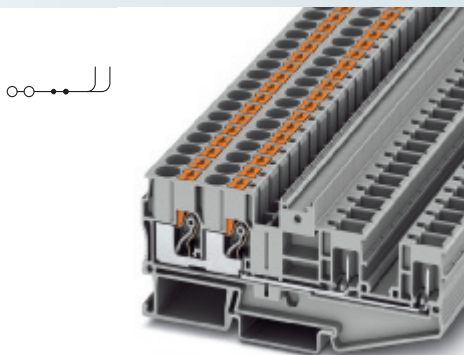
Center groove labeling
Center and side groove labeling

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

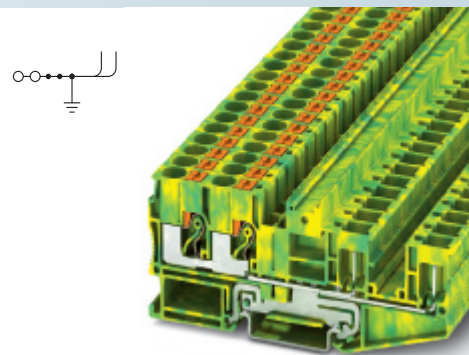
The modular terminal block system - CLIPLINE complete



6 (10) mm², ground terminal block,
2 connections



6 (10) mm², 41 A, feed-through terminal block,
4 connections



6 (10) mm², ground terminal block,
4 connections

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	57.7	43.5		
		max. Ø [mm ²]	AWG	
		0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
-	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6	0.5 - 1.5
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	99.8	43.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
41 ¹⁾	1000	0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
1000	-	-	-	
41 ²⁾ /6	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6	0.5 - 1.5
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	99.8	43.5		
		max. Ø [mm ²]	AWG	
		0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
-	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6	0.5 - 1.5
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 6/1P-PE	3061774	50

Ordering data				
Type	I _{max}	Order No.	Pcs. / Pkt.	
PT 6-QUATTRO/2P		3061826	50	
PT 6-QUATTRO/2P BU		3061839	50	

Ordering data		
Type	Order No.	Pcs. / Pkt.
PT 6-QUATTRO/2P-PE	3061842	50

Accessories		
D-PT 6	3212044	50
FBS 2-8	3030284	10
FBS 3-8	3030297	10
FBS 4-8	3030307	10
FBS 5-8	3030310	10
FBS 10-8	3030323	10
ATP-ST 6	3024481	50
PC	3040588	50
PAI-4-N GY	3032871	10
PS-8	3031005	10
SZF 2-0,8X4,0	1204520	10

Accessories				
D-PT 6-QUATTRO/2P		3061855	50	
FBS 2-8	41 A	3030284	10	
FBS 3-8	41 A	3030297	10	
FBS 4-8	41 A	3030307	10	
FBS 5-8	41 A	3030310	10	
FBS 10-8	41 A	3030323	10	
RB ST 6-(2,5/4)		3030860	10	
RB ST 6-1,5/S		3213250	10	
ATP-QTTCB		3206238	50	
PC		3040588	50	
PAI-4-N GY		3032871	10	
PS-8		3031005	10	
SZF 2-0,8X4,0		1204520	10	

Accessories			
D-PT 6-QUATTRO/2P		3061855	50
FBS 2-8		3030284	10
FBS 3-8		3030297	10
FBS 4-8		3030307	10
FBS 5-8		3030310	10
FBS 10-8		3030323	10
ATP-QTTCB		3206238	50
PC		3040588	50
PAI-4-N GY		3032871	10
PS-8		3031005	10
SZF 2-0,8X4,0		1204520	10

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

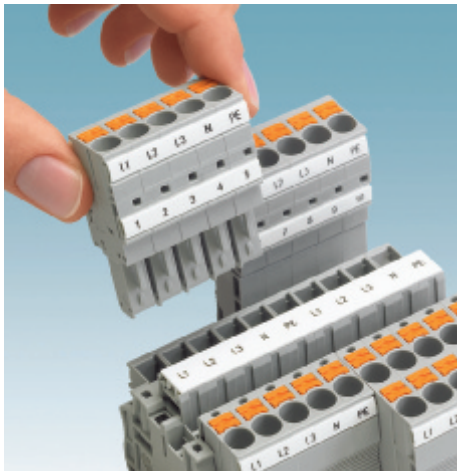
UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

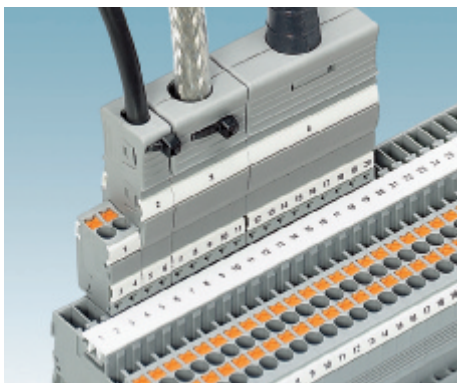
COMBI plugs with push-in connection



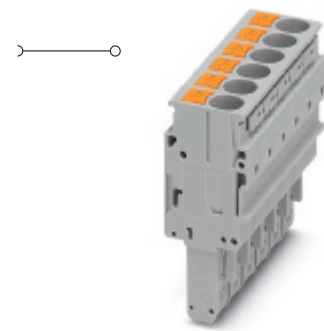
- Extensive, optional snap-on accessories available
- Additional test connection with 2.3 mm diameter
- Practical coding facility
- Large labeling option
- A second marking groove on the plug offers the possibility of plug or group marking

Cable Housings

- Cable housing can be snapped onto the PP-H ... plugs, see figure below



Notes:
For accessories for cable housing, see www.phoenixcontact.net/catalog
1) For derating curve, visit www.phoenixcontact.net/catalog



6 (10) mm², 41 A, plug, connection in plug-in direction

Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data			
Width	Length	Height	
8.2 x No. of pos.	21	49.3	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
41 ¹⁾	1000	0.5 - 10	20 - 8
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾ /6	-	-	-
6	-	-	-
20 - 8	-	-	-
Connection capacity		ferrule without/with plastic sleeve	
solid	stranded	0.5 - 6	0.5 - 6
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 1.5
1 - 10	-	1 - 6	1 - 6
Stripping length		12	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Description	No. of pos.	Width	Color
COMBI plug, with a push-in connection			
	1	8.2 mm	gray
	2	16.4 mm	gray
	3	24.6 mm	gray
	4	32.8 mm	gray
	5	41 mm	gray
	6	49.2 mm	gray
	7	57.4 mm	gray
	8	65.6 mm	gray
	9	73.8 mm	gray
	10	82 mm	gray
	1	8.2 mm	blue
	1	8.2 mm	green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
PP-H 6/ 1	3061541	50
PP-H 6/ 2	3061570	50
PP-H 6/ 3	3061583	50
PP-H 6/ 4	3061596	50
PP-H 6/ 5	3061606	50
PP-H 6/ 6	3061619	25
PP-H 6/ 7	3061622	25
PP-H 6/ 8	3061635	25
PP-H 6/ 9	3061648	25
PP-H 6/10	3061651	25
PP-H 6/ 1 BU	3061554	50
PP-H 6/ 1 GNYE	3061567	50

Cable housing, for PP-H 6... COMBI plugs	
2-pos.	gray
3-pos.	gray
4-pos.	gray
5-pos.	gray
6-pos.	gray
7-pos.	gray
Bend protection sleeve, for 9 - 15 mm cable diameter, suitable for PH 6/2 - PH 6/10	black
Test plug, consisting of: metal part for 2.3 mm Ø socket hole and	
insulating sleeve for MPS metal part	red
Latching and strain relief, for all plugs with conductor exit at top, 2-pos.	orange
Latching, for plugs, 1-pos.	orange
2-pos.	orange
Strain relief, for plugs, 2-pos.	black
Screwdriver	
Lateral groove labeling	

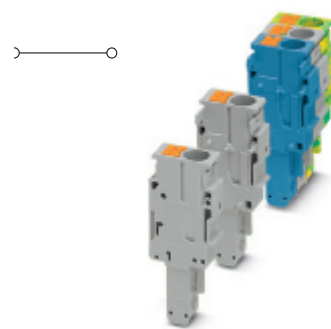
Accessories		
PH 6/2	3000680	25
PH 6/3	3000681	25
PH 6/4	3000682	25
PH 6/5	3000683	25
PH 6/6	3000684	10
PH 6/7	3000685	10
CPH 9-15	3000768	25
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PRZ	3040614	50
PR	3040559	50
PR/2	3040630	50
PZ/2	3040627	50
SZF 2-0,8X4,0	1204520	10
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)		

Self-assembly COMBI plugs with a push-in connection

- The COMBI plugs for self-assembly provide solutions that users can implement themselves
- The plug is assembled directly on site by snapping together single-position plug elements. See below for an example of how these go together

- ① PP-H 6/1-L
- ② PP-H 6/1-M and PP-H 6/1-M BU
- ③ PP-H 6/1-R GNYE

Notes:
For accessories for cable housing, see www.phoenixcontact.net/catalog
For more cable housings, see CLIPLINE catalog, part 1.
1) For derating curve, visit www.phoenixcontact.net/catalog



6 (10) mm², 41 A, plug, connection in plug-in direction

Dimensions	[mm]
Max. electrical data	
Rated data	
Rated voltage [V]	1000
Nominal current/cross section [A]/[mm ²]	41 ¹⁾ /6
Rated cross section [mm ²]	6
Cross section range AWG	20 - 8
Connection capacity	
One conductor [mm ²]	0.5 - 10
Two stranded conductors with a TWIN ferrule [mm ²]	0.5 - 6
Plug-in connection cross sections [mm ²]	0.5 - 6, 0.5 - 10, 1 - 6
General data	
Stripping length [mm]	12
Insulating material	PA
Inflammability class according to UL 94	V0

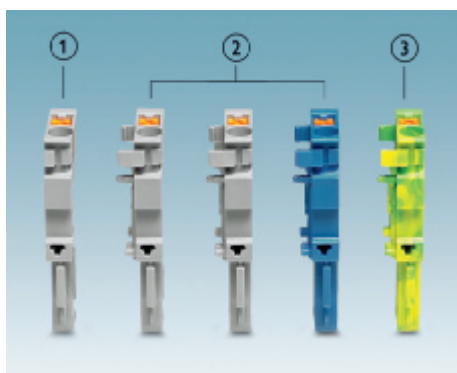
Technical Data			
Width	Length	Height	
8.2 x No. of pos.	21	49.3	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
41 ¹⁾	1000	0.5 - 10	20 - 8
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾ /6	-	-	-
6	-	-	-
20 - 8	-	-	-
Connection capacity	solid	stranded	ferrule without/with plastic sleeve
One conductor [mm ²]	0.5 - 10	0.5 - 6	0.5 - 6, 0.5 - 10, 1 - 6
Two stranded conductors with a TWIN ferrule [mm ²]	0.5 - 6	0.5 - 6	0.5 - 6, 0.5 - 10, 1 - 6
Plug-in connection cross sections [mm ²]	0.5 - 10	-	0.5 - 6, 0.5 - 10, 1 - 6

Description	No. of pos.	Width	Color
COMBI plug , with a push-in connection, non-bridgeable, left element	1	8.2 mm	gray
	1	8.2 mm	gray
	1	8.2 mm	gray
COMBI plug , with a push-in connection, not bridgeable, middle element	1	8.2 mm	gray
	1	8.2 mm	gray
	1	8.2 mm	gray
COMBI plug , with a push-in connection, not bridgeable, right element	1	8.2 mm	gray
	1	8.2 mm	gray
	1	8.2 mm	gray

Ordering data		
Type	Order No.	Pcs. / Pkt.
PP-H 6/ 1-L	3061664	50
PP-H 6/ 1-L BU	3061677	50
PP-H 6/ 1-L GNYE	3061680	50
PP-H 6/ 1-M	3061693	50
PP-H 6/ 1-M BU	3061703	50
PP-H 6/ 1-M GNYE	3061716	50
PP-H 6/ 1-R	3061729	50
PP-H 6/ 1-R BU	3061732	50
PP-H 6/ 1-R GNYE	3061745	50

Cable housing , for PP-H 6... COMBI plugs	
2-pos.	gray
3-pos.	gray
4-pos.	gray
5-pos.	gray
Bend protection sleeve , for 9 – 15 mm cable diameter, suitable for PH 6/2 - PH 6/10	black
Test plug , consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part	red
Latching and strain relief , for all plugs with conductor exit at top, 2-pos.	orange
Latching , for plugs, 1-pos.	orange
2-pos.	orange
Strain relief , for plugs, 2-pos.	black
Screwdriver	
Lateral groove labeling	

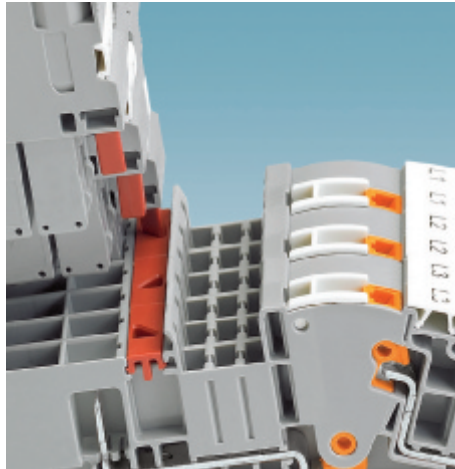
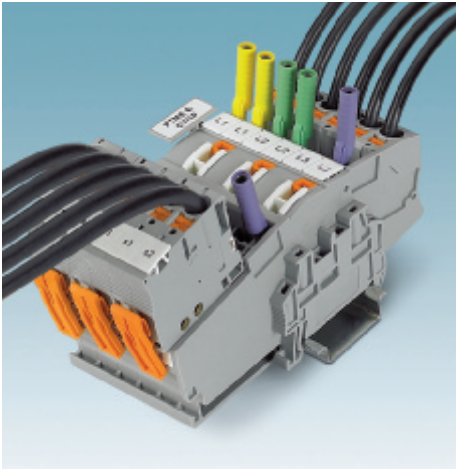
Accessories		
Type	Order No.	Pcs. / Pkt.
PH 6/2	3000680	25
PH 6/3	3000681	25
PH 6/4	3000682	25
PH 6/5	3000683	25
CPH 9-15	3000768	25
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PRZ	3040614	50
PR	3040559	50
PR/2	3040630	50
PZ/2	3040627	50
SZF 2-0,8X4,0	1204520	10
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)		



Modular terminal blocks

The modular terminal block system - CLIPLINE complete

COMBI plug-in push-in current transformer disconnect terminal block with automatic short-circuit function

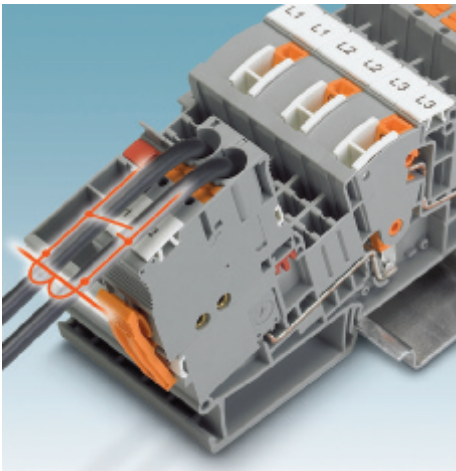


Safe and convenient

- The terminal block with patented short-circuit plug is particularly convenient and safe. If the plug is removed, an advanced short-circuit occurs automatically
- Connected current transformers are automatically protected against damage

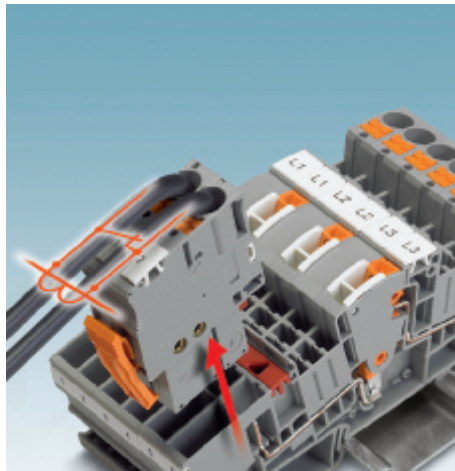
Easy and safe keying

- The short-circuit plugs are available in a 2 and 3-pos. version
- Both plug versions can be reliably protected against polarity reversal using a snap-in keying profile
- Strain relief and plug latching can be snapped on as an option



Function:

- Plug inserted - no short circuit, measuring circuit in operation



Function:

- Plug removed - automatic, leading short circuit of current transformer

Notes:

¹⁾ The coding set can be used to code up to 30 plugs.

Dimensions

[mm]

Max. electrical data

Rated data

Rated voltage [V]
Nominal current/cross section [A]/[mm²]
Rated cross section [mm²]
Cross section range AWG

Connection capacity

One conductor [mm²]
Two stranded conductors with a TWIN ferrule [mm²]
Plug-in connection cross sections [mm²]

General data

Stripping length [mm]
Insulating material
Inflammability class according to UL 94

Description	No. of pos.	Color
Measuring transducer disconnect terminal block , for mounting on NS 35		gray
Feed-through terminal block , for mounting on NS 35...		gray
Ground terminal block , for mounting on NS 15		green-yellow

COMBI plug , with integrated short-circuit function, 2-pos.		gray
3-pos.		gray
Cover , width 2.2 mm		gray
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	10	red

Switching lock , plug-in		white
Connection bridge , for connecting two test disconnect terminal blocks		orange
3-pos.		orange
Test adapter , for 4-mm-Ø safety test plug, snapped into bridge shaft		orange

yellow
green
violet
black
blue
red
gray
brown

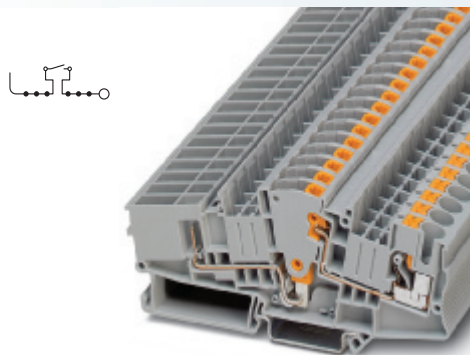
Coding set , for 2-pos. plugs ¹⁾	red
for 3-pos. plugs	red

Screwdriver

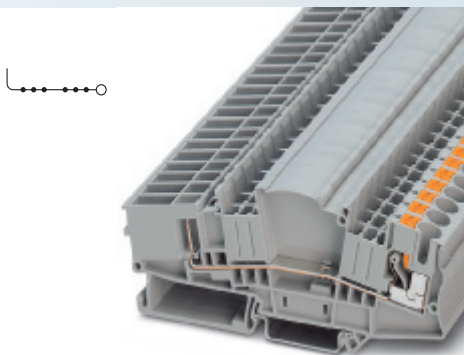
Lateral groove labeling

Center and side groove labeling

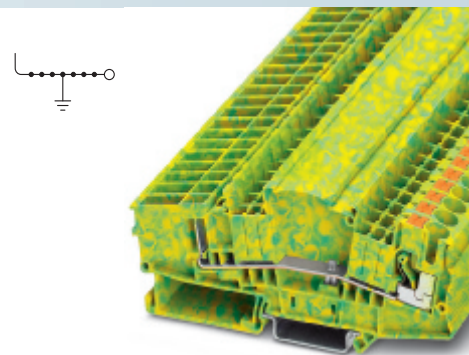
The modular terminal block system - CLIPLINE complete



6 (10) mm², 30 A, test disconnect terminal block, for short-circuit plug



6 (10) mm², 30 A, feed-through terminal block, for short-circuit plug



6 (10) mm², ground terminal block, same shape, for short-circuit plug

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	114.9	49.6		
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG	
30	500	0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
500	-	-	-	
30/6	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5	
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	114.9	49.6		
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG	
30	500	0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
500	-	-	-	
30/6	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5	
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	114.9	49.6		
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG	
30	500	0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
-	-	-	-	
-	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6 0.5 - 1.5	
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTME 6-CT/1P		3212300	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTMED 6-CT/1P		3212301	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
PTMED 6-CT/1P-PE		3212302	50

Accessories			
PPCT 6/2		3212304	10
PPCT 6/3		3212305	10
D-PTME 6-CT/1P		3212303	10
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
S-ME 6		3034439	10
C-ME 6/2		3034442	10
C-ME 6/3		3034390	50
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
PAI-4-FIX GY		3032790	10
PAI-4-FIX BN		3032787	10
PC-CT 6/2		3212308	1
PC-CT 6/3		3212309	1
SZF 2-0,8X4,0		1204520	10

Accessories			
PPCT 6/2		3212304	10
PPCT 6/3		3212305	10
D-PTME 6-CT/1P		3212303	10
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
PAI-4-FIX GY		3032790	10
PAI-4-FIX BN		3032787	10
PC-CT 6/2		3212308	1
PC-CT 6/3		3212309	1
SZF 2-0,8X4,0		1204520	10

Accessories			
PPCT 6/2		3212304	10
PPCT 6/3		3212305	10
D-PTME 6-CT/1P		3212303	10
FBS 2-8		3030284	10
FBS 3-8		3030297	10
FBS 4-8		3030307	10
FBS 5-8		3030310	10
FBS 10-8		3030323	10
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
PAI-4-FIX GY		3032790	10
PAI-4-FIX BN		3032787	10
PC-CT 6/2		3212308	1
PC-CT 6/3		3212309	1
SZF 2-0,8X4,0		1204520	10

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

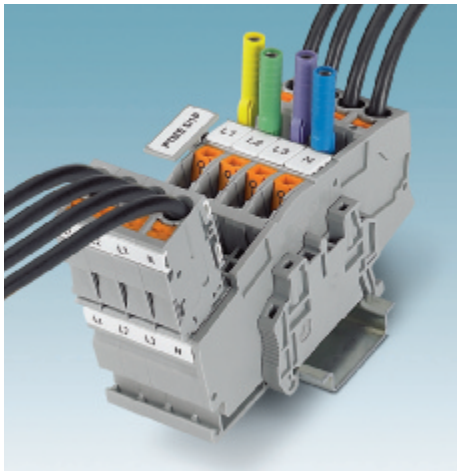
UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8
(CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8
(CLIPLINE catalog, part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

COMBI plug-in push-in test disconnect terminal block

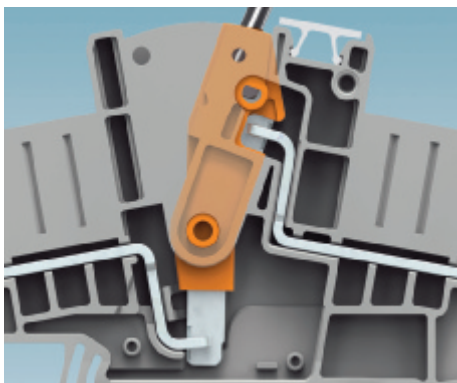


The plug-in test disconnect terminal blocks offer all the advantages of the COMBI modular terminal block system and also offer the following features:

- Screwless longitudinal isolating switch safely latches in the relevant switch position
- Switching states can be clearly identified by means of printed symbols
- Switching jumpers can be positioned on both sides of the disconnect point in the triple function shaft and safely latched into place
- The COMBI system offers maximum protection for users, as both the basic terminal blocks and the plugs are touch-proof. In addition to safety aspects, this provides even greater flexibility for configuration: the supply can be led via the terminal blocks or the plugs
- Thanks to the straightforward, custom coding option, wiring reliability is increased and incorrect connections are avoided
- Strain relief can be snapped on
- Latching fixes plugs to basic terminal blocks

Switching jumpers

- SB-ME ... switching jumpers can be positioned and latched on both sides of



- the disconnect point in the bridge shaft
- Reliably snapped into the end positions
- Contact made via screw terminal points



6 (10) mm², 30 A, test disconnect terminal block

Notes:
For pre-assembled jumpers, see www.phoenixcontact.net/catalog
1) For derating curve, visit www.phoenixcontact.net/catalog

Dimensions	
	[mm]
Max. electrical data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Description	No. of pos.	Color
Terminal block, for mounting on NS 35...		gray

Cover, width 2.2 mm	Color
Switching jumper, plug-in	gray

Plug-in bridge	No. of pos.	Color
	2	red
	3	red
	4	red
	5	red
	10	red

Switching lock, plug-in	white
Connection bridge, for connecting two test disconnect terminal blocks	orange
3-pos.	orange
Test adapter, for 4-mm-Ø safety test plug, snapped into bridge shaft	orange

	yellow
	green
	violet
	black
	blue
	red
	gray
	brown
	red

Keying star, with 4 keying branches, can be inserted in all basic terminal blocks	gray
Partition plate, with storage option for switching jumpers	gray
Screwdriver	

Lateral groove labeling	
Center and side groove labeling	

Technical Data				
Width	Length	Height NS 35/7,5		
8.2	99.4	49.6		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
30 ¹⁾	500	0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage				
500	-	-	-	
30 ¹⁾ /6				
Rated cross section				
6	-	-	-	
Cross section range				
20 - 8	-	-	-	
Connection capacity		ferrule		
solid	stranded	without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6	
			0.5 - 1.5	
1 - 10	-	1 - 6	1 - 6	
12				
PA				
V0				

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
PTME 6/1P		3212306	50

Accessories			
D-PTME 6/1P		Order No.	Pcs. / Pkt.
		3212307	10
SB-ME 2-8	30 A	3034468	10
SB-ME 3-8	30 A	3032800	10
SB-ME 4-8	30 A	3034484	10
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
S-ME 6		3034439	10
C-ME 6/2		3034442	10
C-ME 6/3		3034390	50
PAI-4-FIX OG		3034455	10
PAI-4-FIX YE		3032745	10
PAI-4-FIX GN		3032758	10
PAI-4-FIX VT		3032761	10
PAI-4-FIX BK		3032774	10
PAI-4-FIX BU		3032729	10
PAI-4-FIX RD		3032732	10
PAI-4-FIX GY		3032790	10
PAI-4-FIX BN		3032787	10
PC		3040588	50
CARRIER 35-8		3034387	10
SZF 2-0,8X4,0		1204520	10

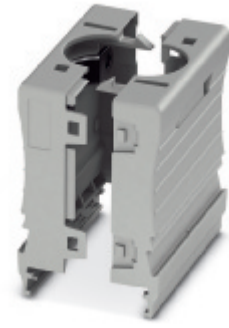
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

COMBI plugs with push-in connection and cable housing

Notes:
 For accessories for cable housing, see www.phoenixcontact.net/catalog
 1) For derating curve, visit www.phoenixcontact.net/catalog



6 (10) mm², 41 A, plug, connection in plug-in direction



Cable housing

Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Plug-in connection cross sections	[mm ²]
General data	
Stripping length	[mm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height		
8.2 x No. of pos.	21	49.3		
I _{max.} [A]	U _{max.} [V]	max. Ø [mm ²]	AWG	
41¹⁾	1000	0.5 - 10	20 - 8	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
1000	-	-	-	
41 ¹⁾ /6	-	-	-	
6	-	-	-	
20 - 8	-	-	-	
Connection capacity				
solid	stranded	ferrule without/with plastic sleeve		
0.5 - 10	0.5 - 6	0.5 - 6	0.5 - 6	
1 - 10	-	1 - 6	1 - 6	
General data				
Stripping length	[mm]	12		
Insulating material		PA		
Inflammability class according to UL 94		V0		

Technical Data				
Width	Length	Height		
49.2 x No. of pos.	21	52.3		
I _{max.} [A]	U _{max.} [V]	max. Ø [mm ²]	AWG	
-	-	-	-	
IEC 61984				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Connection capacity				
solid	stranded	ferrule without/with plastic sleeve		
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
General data				
Stripping length	[mm]	-		
Insulating material		-		
Inflammability class according to UL 94		-		

Description	No. of pos.	Width	Color
COMBI plug, with a push-in connection			
	1	8.2 mm	gray
	2	16.4 mm	gray
	3	24.6 mm	gray
	4	32.8 mm	gray
	5	41 mm	gray
	6	49.2 mm	gray
	7	57.4 mm	gray
	8	65.6 mm	gray
	9	73.8 mm	gray
	10	82 mm	gray
	1	8.2 mm	blue
	1	8.2 mm	green-yellow
Cable housing, for PP-H 6... COMBI plugs			
	2	16.4 mm	gray
	3	24.6 mm	gray
	4	32.8 mm	gray
	5	41 mm	gray
	6	49.2 mm	gray
	7	57.4 mm	gray

Ordering data		
Type	Order No.	Pcs. / Pkt.
PP-H 6/ 1	3061541	50
PP-H 6/ 2	3061570	50
PP-H 6/ 3	3061583	50
PP-H 6/ 4	3061596	50
PP-H 6/ 5	3061606	50
PP-H 6/ 6	3061619	25
PP-H 6/ 7	3061622	25
PP-H 6/ 8	3061635	25
PP-H 6/ 9	3061648	25
PP-H 6/10	3061651	25
PP-H 6/ 1 BU	3061554	50
PP-H 6/ 1 GNYE	3061567	50

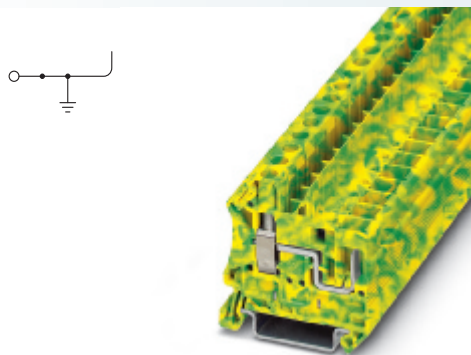
Ordering data		
Type	Order No.	Pcs. / Pkt.
PH 6/2	3000680	25
PH 6/3	3000681	25
PH 6/4	3000682	25
PH 6/5	3000683	25
PH 6/6	3000684	10
PH 6/7	3000685	10

Test plug, consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part		Color
Latching and strain relief, for all plugs with conductor exit at top, 2-pos.		orange
Latching, for plugs, 1-pos.		orange
Latching, for plugs, 2-pos.		orange
Strain relief, for plugs, 2-pos.		black
Bend protection sleeve, for 9 – 15 mm cable diameter, suitable for PH 6/2 - PH 6/10		black
Screwdriver		
SZF 2-0,8X4,0		1204520 10
Lateral groove labeling		
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)		

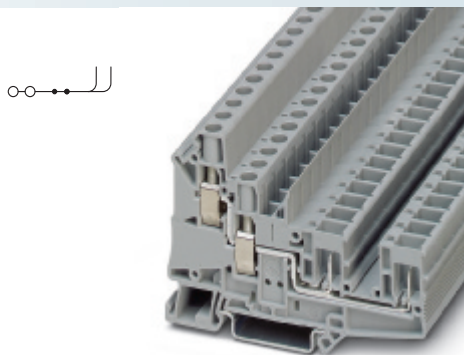
Accessories		
Type	Order No.	Pcs. / Pkt.
MPS-MT	0201744	10
MPS-IH RD	0201676	10
PRZ	3040614	50
PR	3040559	50
PR/2	3040630	50
PZ/2	3040627	50
SZF 2-0,8X4,0	1204520	10
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)		

Accessories		
Type	Order No.	Pcs. / Pkt.
PH 6/2	3000680	25
PH 6/3	3000681	25
PH 6/4	3000682	25
PH 6/5	3000683	25
PH 6/6	3000684	10
PH 6/7	3000685	10
CPH 9-15	3000768	25
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)		

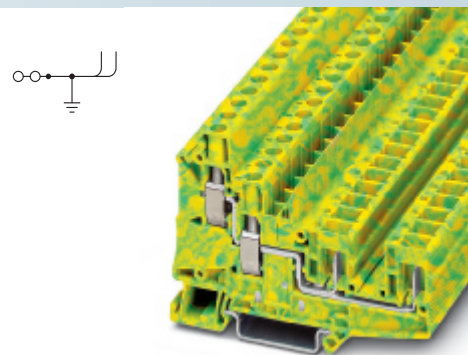
The modular terminal block system - CLIPLINE complete



10 (10) mm², ground terminal block, 2 connections



10 (10) mm², 41 A, feed-through terminal block, 4 connections



10 (10) mm², ground terminal block, 4 connections

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	49.1	47.5	
		max. Ø [mm ²]	AWG
		0.2 - 10	24 - 8
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
6	-	-	-
24 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 10	0.2 - 10	0.25 - 6	0.25 - 6
0.2 - 2.5	0.2 - 2.5	0.25 - 1.5	-
			0.5 - 4
10			
M4			
1.5 - 1.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	86.5	60	
		max. Ø [mm ²]	AWG
		0.2 - 10	24 - 8
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾	-	-	-
6	-	-	-
24 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 10	0.2 - 10	0.25 - 6	0.25 - 6
0.2 - 2.5	0.2 - 2.5	0.25 - 1.5	-
			0.5 - 4
10			
M4			
1.5 - 1.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	86.5	60	
		max. Ø [mm ²]	AWG
		0.2 - 10	24 - 8
IEC 61984			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
6	-	-	-
24 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 10	0.2 - 10	0.25 - 6	0.25 - 6
0.2 - 2.5	0.2 - 2.5	0.25 - 1.5	-
			0.5 - 4
10			
M4			
1.5 - 1.8			
PA			
V0			

Ordering data		
Type	Order No.	Pcs. / Pkt.
UT 6/1P-PE	3060555	50

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
UT 6-QUATTRO/2P		3060568	50
UT 6-QUATTRO/2P BU		3060571	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
UT 6-QUATTRO/2P-PE	3060584	50

Accessories		
D-UT 2,5/1P	Order No.	Pcs. / Pkt.
FBS 2-8	3030284	10
FBS 3-8	3030297	10
FBS 4-8	3030307	10
FBS 5-8	3030310	10
FBS 10-8	3030323	10
ATP-UT	3047167	50
UT 4/1P-F	3060458	50
PAI-4-N GY	3032871	10
PS-8	3031005	10
PC	3040588	50
WS UT 6	3047345	10
SF-SL 0,8X4,0-100 S-VDE	1212588	10

Accessories			
D-UT 6-QUATTRO/2P	I _{max}	Order No.	Pcs. / Pkt.
FBS 2-8	41 A	3030284	10
FBS 3-8	41 A	3030297	10
FBS 4-8	41 A	3030307	10
FBS 5-8	41 A	3030310	10
FBS 10-8	41 A	3030323	10
ATP-QTTCB		3206238	50
UT 6-QUATTRO/2P-F		3060843	50
PAI-4-N GY		3032871	10
PS-8		3031005	10
PC		3040588	50
WS UT 6		3047345	10
SF-SL 0,8X4,0-100 S-VDE		1212588	10

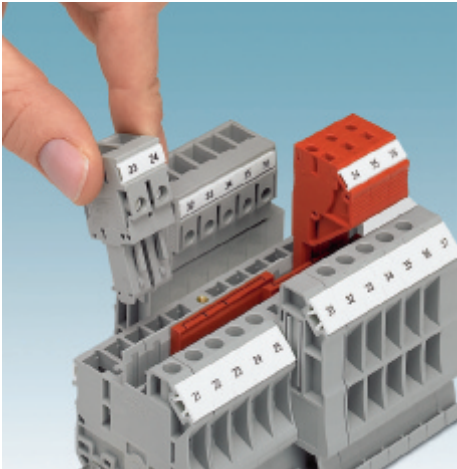
Accessories		
D-UT 6-QUATTRO/2P	Order No.	Pcs. / Pkt.
FBS 2-8	3030284	10
FBS 3-8	3030297	10
FBS 4-8	3030307	10
FBS 5-8	3030310	10
FBS 10-8	3030323	10
ATP-QTTCB	3206238	50
UT 6-QUATTRO/2P-F	3060843	50
PAI-4-N GY	3032871	10
PS-8	3031005	10
PC	3040588	50
WS UT 6	3047345	10
SF-SL 0,8X4,0-100 S-VDE	1212588	10

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)
UC-TMF 8, UCT-TMF 8 or ZBF 8 (CLIPLINE catalog, part 2)

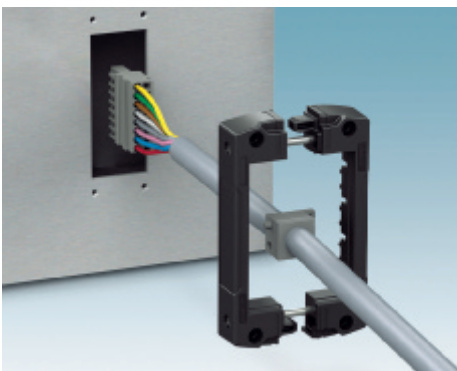
COMBI plugs with UT screw connection



- Just like the basic terminal blocks, the plugs also offer the right connection technology for every application
- Extensive, optional snap-on accessories available
- Practical coding facility
- Large labeling option
- The screw plugs can be combined with COMBI terminal blocks featuring all connection technologies
- For nominal currents up to 41 A
- For nominal voltages up to 1000 V

Cable entry system

The CES cable entry system enables the space-saving installation of pre-assembled cables with IP54/65 protection in the control cabinet, see figure below and from page 210.



Notes:
1) For derating curve, visit www.phoenixcontact.net/catalog



10 (6) mm², 41 A, plug, connection in plug-in direction, 1 connection

Dimensions		[mm]	
Max. electrical data			
Rated data			
Rated voltage	[V]	1000	-
Nominal current/cross section	[A]/[mm ²]	41 ¹⁾ /6	-
Rated cross section	[mm ²]	6	-
Cross section range	AWG	24 - 8	-
Connection capacity			
One conductor	[mm ²]	0.2 - 6	0.2 - 10
Two conductors (of the same type)	[mm ²]	0.2 - 2.5	0.2 - 2.5
Two stranded conductors with a TWIN ferrule	[mm ²]		
General data			
Stripping length	[mm]	10	
Screw thread		M4	
Tightening torque	[Nm]	1.5 - 1.8	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Technical Data			
Width	Length	Height	
8.2 x No. of pos.	21	42.7	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
41 ¹⁾	1000	0.2 - 10	24 - 8
IEC 61984		IEC/EN 60079-7	
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾ /6	-	-	-
6	-	-	-
24 - 8	-	-	-
Connection capacity		ferrule	
solid	stranded	without/with plastic sleeve	
0.2 - 6	0.2 - 10	0.25 - 6	0.25 - 6
0.2 - 2.5	0.2 - 2.5	0.25 - 1.5	-
			0.5 - 4
General data			
Stripping length	[mm]	10	
Screw thread		M4	
Tightening torque	[Nm]	1.5 - 1.8	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Description	No. of pos.	Width	Color
COMBI plug, with a screw connection			
	1	8.2 mm	gray
	2	16.4 mm	gray
	3	24.6 mm	gray
	4	32.8 mm	gray
	5	41 mm	gray
	6	49.2 mm	gray
	7	57.4 mm	gray
	8	65.6 mm	gray
	9	73.8 mm	gray
	10	82 mm	gray
	1	8.2 mm	blue
	1	8.2 mm	green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
UP 6/ 1	3060610	25
UP 6/ 2	3060623	25
UP 6/ 3	3060636	25
UP 6/ 4	3060649	25
UP 6/ 5	3060652	25
UP 6/ 6	3060665	25
UP 6/ 7	3060678	25
UP 6/ 8	3060681	25
UP 6/ 9	3060694	25
UP 6/10	3060704	25
UP 6/ 1 BU	3060717	25
UP 6/ 1 GNYE	3060720	25

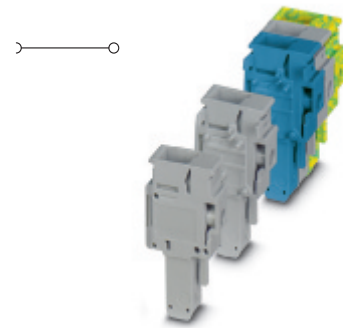
Screw flange cover, for UP 6 COMBI plugs	gray
Strain relief, for plugs, 2-pos.	black
Latching, for plugs, 1-pos.	orange
Latching and strain relief, for all plugs with conductor exit at top, 2-pos.	orange
Screwdriver	SF-SL 0,6X3,5-100 S-VDE
Lateral groove labeling	UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)

Accessories		
Type	Order No.	Pcs. / Pkt.
DF-UP 6	3060856	50
PZ/2	3040627	50
PR	3040559	50
PR/2	3040630	50
PRZ	3040614	50
SF-SL 0,6X3,5-100 S-VDE	1212587	10
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)		

Self-assembly COMBI plugs with UT screw connection

- The COMBI plugs with screw connection for self-assembly provide solutions for every task that users can implement themselves
 - The plug is assembled directly on site by snapping together single-position plug elements. See below for an example of how these go together
- ① DF-SP-H 2,5
 - ② UP 6/1-L
 - ③ UP 6/1-M and UP 6/1-M BU
 - ④ UP 6/1-R GNYE

Notes:
 1) For derating curve, visit www.phoenixcontact.net/catalog



10 (6) mm², 41 A, plug, connection in plug-in direction, 1 connection

Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two conductors (of the same type)	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
General data	
Stripping length	[mm]
Screw thread	
Tightening torque	[Nm]
Insulating material	
Inflammability class according to UL 94	

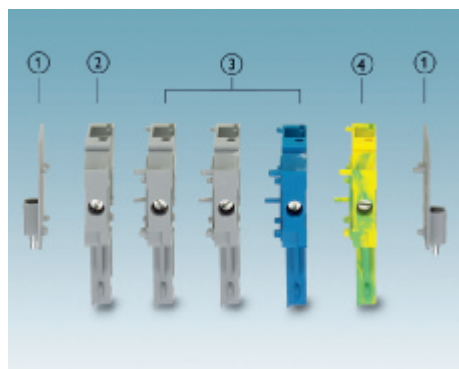
Technical Data			
Width	Length	Height	
8.2 x No. of pos.	21	42.7	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
41 ¹⁾	1000	0.2 - 10	24 - 8
IEC 61984	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
41 ¹⁾ /6	-	-	-
6	-	-	-
24 - 8	-	-	-
Connection capacity		ferrule	
		without/with plastic sleeve	
solid	stranded	0.2 - 6	0.25 - 6
0.2 - 6	0.2 - 10	0.25 - 6	0.25 - 6
0.2 - 2.5	0.2 - 2.5	0.25 - 1.5	-
			0.5 - 4
10			
M4			
1.5 - 1.8			
PA			
V0			

Description	No. of pos.	Width	Color
COMBI plug, with a screw connection, left element			
	1	8.2 mm	gray
	1	8.2 mm	blue
	1	8.2 mm	green-yellow
COMBI plug, with a screw connection, center element			
	1	8.2 mm	gray
	1	8.2 mm	blue
	1	8.2 mm	green-yellow
COMBI plug, with a screw connection, right element			
	1	8.2 mm	gray
	1	8.2 mm	blue
	1	8.2 mm	green-yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
UP 6/ 1-L	3060733	25
UP 6/ 1-L BU	3060746	25
UP 6/ 1-L GNYE	3060759	25
UP 6/ 1-M	3060762	25
UP 6/ 1-M BU	3060775	25
UP 6/ 1-M GNYE	3060788	25
UP 6/ 1-R	3060791	25
UP 6/ 1-R BU	3060801	25
UP 6/ 1-R GNYE	3060814	25

Screw flange cover, for UP 6 COMBI plugs	gray
Strain relief, for plugs, 2-pos.	black
Latching, for plugs, 1-pos. 2-pos.	orange
Latching and strain relief, for all plugs with conductor exit at top, 2-pos.	orange
Screwdriver	
SF-SL 0,6X3,5-100 S-VDE	1212587
Lateral groove labeling	
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)	

Accessories		
Type	Order No.	Pcs. / Pkt.
DF-UP 6	3060856	50
PZ/2	3040627	50
PR	3040559	50
PR/2	3040630	50
PRZ	3040614	50
SF-SL 0,6X3,5-100 S-VDE	1212587	10
UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)		



Modular terminal blocks

The modular terminal block system - CLIPLINE complete

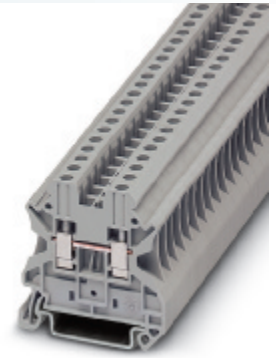
UT screw connection - 1000 V feed-through, multiple conductor, and double-level terminal blocks

- The UT 4... HV screw terminal blocks series has been specially designed for 1000 V applications and is characterized by the system features of the CLIPLINE complete system and the following features:
- As well as saving space, the compact design allows the device to be conveniently wired in tight spaces
 - The large connection space enables rigid and stranded conductors to be connected without a ferrule, even if greater than the nominal cross section
 - The cable entry funnel enables conductors to be used with ferrules and plastic collars within the nominal cross section
 - The multiple-conductor connection offers maximum flexibility and wiring density
 - Optimum guidance of screwdriver through closed screw shafts
 - For corresponding **torque screwdrivers**, see CLIPLINE catalog, part 2

Offset levels

- Offset levels provide:
- Unobstructed access to the lower connection level if fully wired
 - Better view of the lower labeling signs and conductor entry funnel

Notes:
1) The max. load current must not be exceeded by the total current of all connected conductors.
2) For installation notes on using accessories for Ex e applications, see CLIPLINE catalog, part 1.



6 (6) mm², 41 A, feed-through terminal block, 2 connections



KEMA 04ATEX2048 U/IECEX KEM 06.0027U

Dimensions		[mm]	
Max. electrical data			
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
41	1000	0.14 - 6	26 - 10
IEC 60947-7-1			
Rated data			
Rated voltage	[V]	1000	600
Nominal current/cross section	[A]/[mm ²]	32/4	30/-
Rated cross section	[mm ²]	4	-
Cross section range	AWG	26 - 10	26 - 10
Connection capacity			
One conductor	[mm ²]	0.14 - 6	0.14 - 6
Two conductors (of the same type)	[mm ²]	0.14 - 1.5	0.14 - 1.5
Two stranded conductors with a TWIN ferrule	[mm ²]		0.14 - 1.5
General data			
Stripping length	[mm]	9	
Screw thread		M3	
Tightening torque	[Nm]	0.6 - 0.8	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	47.7	47.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
41	1000	0.14 - 6	26 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
			without/with plastic sleeve
solid	stranded		ferrule
			without/with plastic sleeve
			0.5 - 2.5

Description	No. of pos.	Color
Terminal block , for mounting on NS 35...		gray blue red

Cover , width 2.2 mm		gray
Spacer plate , compensates for level offsets, width 2.5 mm		gray
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	10	red
	20	red

Vertical potential bridge, to connect the upper and lower level

		black
Partition plate , 2 mm wide		gray
Test adapter , 4 mm test socket hole		gray
Test plug , consisting of: metal part for 2.3 mm Ø socket hole and insulating sleeve for MPS metal part		red
Modular test plug , for the individual assembly of test plug strips		red

Warning sign for UT series

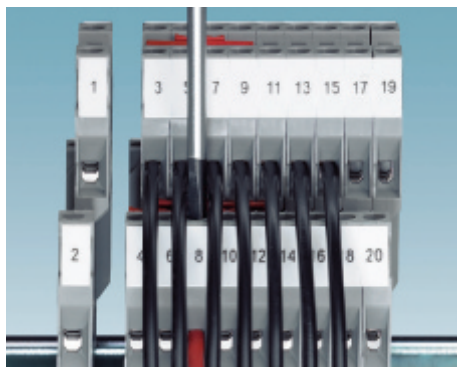
Screwdriver

Lateral groove labeling

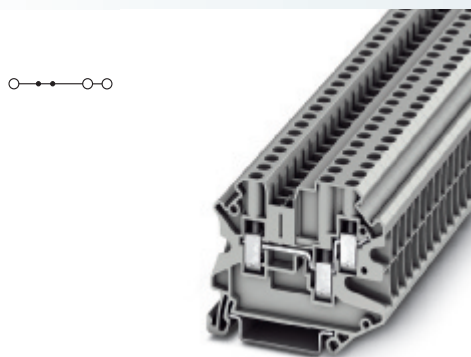
Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UT 4		3044102	50
UT 4 BU		3044115	50
UT 4 RD		3045127	50

Accessories ²⁾			
D-UT 2,5/10		3047028	50
FBS 2-6	32 A	3030336	50
FBS 3-6	32 A	3030242	50
FBS 4-6	32 A	3030255	50
FBS 5-6	32 A	3030349	50
FBS 10-6	32 A	3030271	10
FBS 20-6	32 A	3030365	10
ATP-UT		3047167	50
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-6		3030996	10
WS UT 4		3047332	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

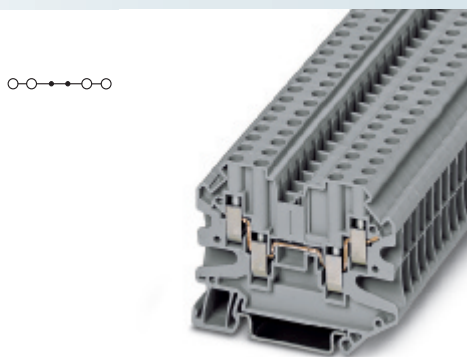
UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)



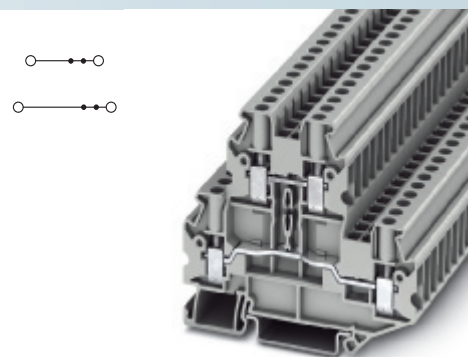
The modular terminal block system - CLIPLINE complete



6 (6) mm², 41 A, feed-through terminal block,
3 connections



6 (6) mm², 37 A, feed-through terminal block,
4 connections



6 (6) mm², 36 A, double-level terminal block,
4 connections

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	57.8	50	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
41 ¹⁾	1000	0.14 - 6	26 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
32 ¹⁾ /4	-	-	-
4	-	-	-
26 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-
			0.5 - 1
9			
M3			
0.6 - 0.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	65.4	50	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
37 ¹⁾	1000	0.14 - 6	26 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
32 ¹⁾ /4	-	-	-
4	-	-	-
26 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-
			0.5 - 1
9			
M3			
0.6 - 0.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	75.6	65	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
36	1000	0.14 - 6	26 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
30/4	-	-	-
4	-	-	-
26 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-
			0.5 - 2.5
9			
M3			
0.6 - 0.8			
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UT 4-TWIN HV		3000608	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UT 4-QUATTRO HV		3048823	50
UT 4-QUATTRO HV BU		3048836	50
UT 4-QUATTRO HV RD		3048849	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UTTB 4 HV		3000610	50

Accessories ²⁾			
Type	I_{max}	Order No.	Pcs. / Pkt.
D-UT 4-TWIN HV		3000710	50
FBS 2-6	32 A	3030336	50
FBS 3-6	32 A	3030242	50
FBS 4-6	32 A	3030255	50
FBS 5-6	32 A	3030349	50
FBS 10-6	32 A	3030271	10
FBS 20-6	32 A	3030365	10
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-6		3030996	10
WS UT 4		3047332	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

Accessories ²⁾			
Type	I_{max}	Order No.	Pcs. / Pkt.
D-UT 4-QUATTRO HV		3048852	50
FBS 2-6	32 A	3030336	50
FBS 3-6	32 A	3030242	50
FBS 4-6	32 A	3030255	50
FBS 5-6	32 A	3030349	50
FBS 10-6	32 A	3030271	10
FBS 20-6	32 A	3030365	10
ATP-UT-QUATTRO		3047196	50
PAI-4-N GY		3032871	10
MPS-MT		0201744	10
MPS-IH RD		0201676	10
PS-6		3030996	10
WS UT 4		3047332	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

Accessories ²⁾			
Type	I_{max}	Order No.	Pcs. / Pkt.
D-UTTB 4 HV		3000709	50
DP-UTTB 2,5/4		3047303	50
FBS 2-6	30 A	3030336	50
FBS 3-6	30 A	3030242	50
FBS 4-6	30 A	3030255	50
FBS 5-6	30 A	3030349	50
FBS 10-6	30 A	3030271	10
FBS 20-6	30 A	3030365	10
FBS-PV UT		3047358	50
ATP-UTTB 2,5/4		3047316	50
PS-6		3030996	10
WS UT 4		3047332	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

UC-TM 6, UCT-TM 6 or ZB 6
(catalog CLIPLINE part 2)

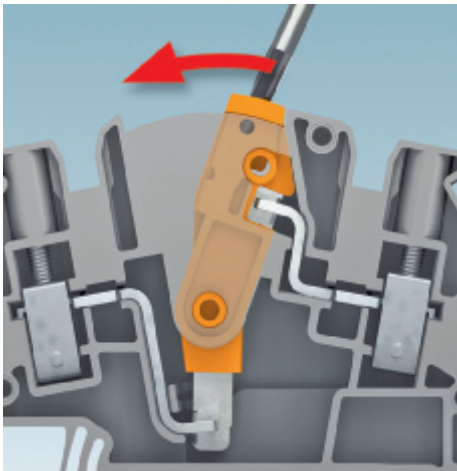
UC-TM 6, UCT-TM 6 or ZB 6
(catalog CLIPLINE part 2)

UC-TM 6, UCT-TM 6 or ZB 6
(catalog CLIPLINE part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

UT screw connection - test disconnect, feed-through, and ground terminal blocks

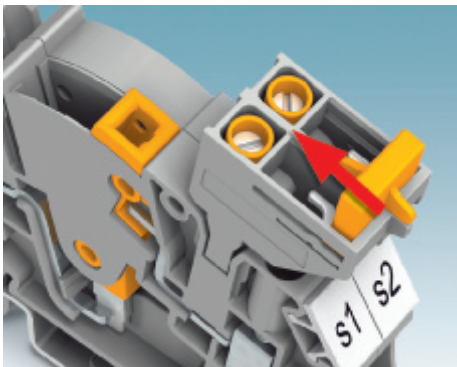


The latest generation of test disconnect terminal blocks with screw connection technology offer the following features:

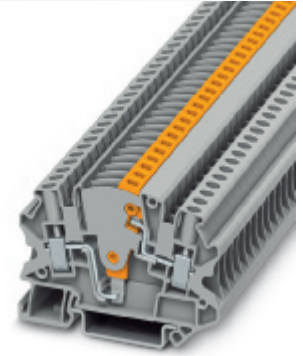
- Compact design
- Easy operation
- Two function shafts
- Flexible and comprehensive accessories
- Feed-through and ground terminal blocks with the same shape are available
- Reliable contacting and latching of the longitudinal isolating switch in the relevant switching state
- Clear selection thanks to printed switching symbols
- Unintentional switching prevented by means of optional switching lock
- Two or three switches can be actuated at the same time using a connection bridge

Switching jumpers

- SB-ME ... switching jumpers can be positioned and latched on both sides of the disconnect point in the bridge shaft
- Reliably snapped into the end positions
- Contact made via screw terminal points



Notes:
For current carrying capacity of DIN rails, see CLIPLINE catalog, part 1.
For more plug-in bridges, see CLIPLINE catalog, part 1.
For more test adapters, see CLIPLINE catalog, part 1.



6 (6) mm², 28 A, test disconnect terminal block, 2 connections



Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	500
Nominal current/cross section	[A]/[mm ²]	28/4
Rated cross section	[mm ²]	4
Cross section range	AWG	26 - 10
Connection capacity		
One conductor	[mm ²]	0.14 - 6
Two conductors (of the same type)	[mm ²]	0.14 - 1.5
Two stranded conductors with a TWIN ferrule	[mm ²]	0.14 - 1.5
General data		
Stripping length	[mm]	9
Screw thread		M3
Tightening torque	[Nm]	0.6 - 0.8
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data				
Width	Length	Height NS 35/7,5		
6.2	66	49.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
28	500	0.14 - 6	26 - 10	
IEC 60947-7-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
500	600	-	-	
28/4	25/-	-	-	
4	-	-	-	
26 - 10	26 - 10	-	-	
solid		stranded		ferrule
		without/with plastic sleeve		
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4	
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-	
		0.5 - 2.5		

Description	No. of pos.	Color
Measuring transducer disconnect terminal block , for mounting on NS 35		gray
With test socket screws		gray
With test socket screws		blue
Feed-through terminal block , for mounting on NS 35...		gray
Ground terminal block , for mounting on NS 15		green-yellow

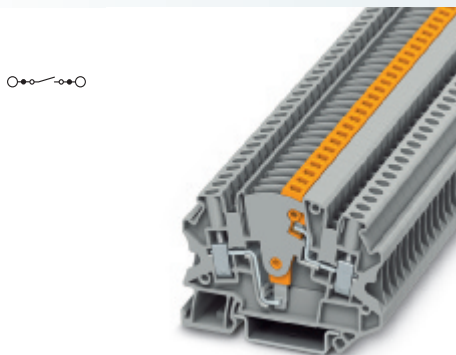
Ordering data			
Type	I _{max}	Order No.	Pcs./Pkt.
UTME 4		3047452	50

Cover , width 2.2 mm		gray
Switching jumper , plug-in		
	2	gray/orange
	3	gray/orange
	4	gray/orange
Plug-in bridge		
	2	red
	3	red
	4	red
	5	red
	20	red
Switching lock , plug-in		white
Connection bridge , for connecting two test disconnect terminal blocks		orange
3-pos.		orange
Test adapter , for 4 mm Ø safety test plugs, latches into the bridge shaft		orange
		yellow
		green
		violet
		black
Modular test plug , for the individual assembly of test plug strips		red
Screwdriver		
Lateral groove labeling		

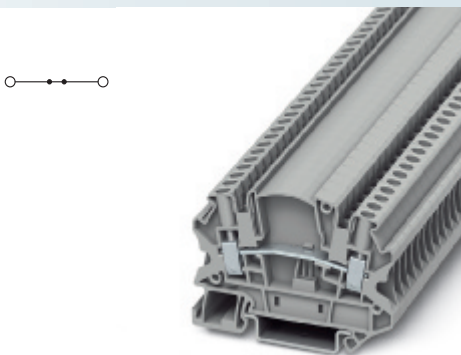
Accessories			
Type	I _{max}	Order No.	Pcs./Pkt.
D-UTME 4		3047491	10
SB-ME 2-6	25 A	3035755	10
SB-ME 3-6	25 A	3035756	10
SB-ME 4-6	25 A	3035757	10
FBS 2-6	32 A	3030336	50
FBS 3-6	32 A	3030242	50
FBS 4-6	32 A	3030255	50
FBS 5-6	32 A	3030349	50
FBS 20-6	32 A	3030365	10
S-ME 4		3035758	10
C-ME 4/2		3035759	10
C-ME 4/3		3035760	10
PAI-4-FIX-5/6 OG		3035974	10
PAI-4-FIX-5/6 YE		3035977	10
PAI-4-FIX-5/6 GN		3035978	10
PAI-4-FIX-5/6 VT		3035979	10
PAI-4-FIX-5/6 BK		3035980	10
PS-6		3030996	10
SZF 1-0,6X3,5		1204517	10

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)

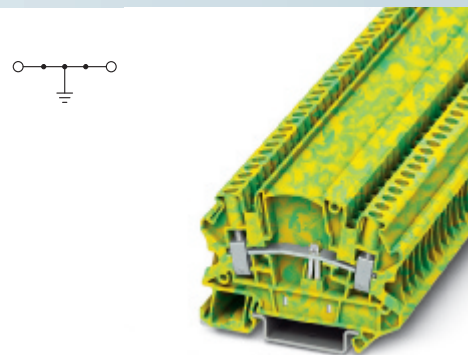
The modular terminal block system - CLIPLINE complete



6 (6) mm², 28 A, test disconnect terminal block, 2 connections, with test socket screws



6 (6) mm², 28 A, feed-through terminal block, same shape, 2 connections



6 (6) mm², ground terminal block, same shape, 2 connections



Technical Data			
Width	Length	Height NS 35/7,5	
6.2	66	49.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
28	500	0.14 - 6	26 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	-	-	-
28/4	-	-	-
4	-	-	-
26 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-
			0.5 - 2.5
9	M3	0.6 - 0.8	
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	66	47.7	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
28	500	0.14 - 6	26 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	600	-	-
28/4	25/-	-	-
4	-	-	-
26 - 10	26 - 10	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-
			0.5 - 2.5
9	M3	0.6 - 0.8	
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	66	47.7	
		max. Ø [mm ²]	AWG
		0.14 - 6	26 - 10
IEC 60947-7-2			
IEC	UL/CUL	CSA	IEC/EN 60079-7
-	-	-	-
-	-	-	-
4	-	-	-
26 - 10	26 - 10	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.14 - 6	0.14 - 6	0.14 - 4	0.14 - 4
0.14 - 1.5	0.14 - 1.5	0.14 - 1.5	-
			0.5 - 2.5
9	M3	0.6 - 0.8	
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UTME 4-P/P		3047453	50
UTME 4-P/P BU		3047454	50

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UTMED 4		3047465	50

Ordering data			
Type	Order No.	Pcs. / Pkt.	
UTMED 4-PE	3047478	50	

Accessories			
D-UTME 4		3047491	10
SB-ME 2-6	25 A	3035755	10
SB-ME 3-6	25 A	3035756	10
SB-ME 4-6	25 A	3035757	10
FBS 2-6	32 A	3030336	50
FBS 3-6	32 A	3030242	50
FBS 4-6	32 A	3030255	50
FBS 5-6	32 A	3030349	50
FBS 20-6	32 A	3030365	10
S-ME 4		3035758	10
C-ME 4/2		3035759	10
C-ME 4/3		3035760	10
PAI-4-FIX-5/6 OG		3035974	10
PAI-4-FIX-5/6 YE		3035977	10
PAI-4-FIX-5/6 GN		3035978	10
PAI-4-FIX-5/6 VT		3035979	10
PAI-4-FIX-5/6 BK		3035980	10
PS-6		3030996	10
SZF 1-0,6X3,5		1204517	10

Accessories			
D-UTME 4		3047491	10
SB-ME 2-6	25 A	3035755	10
SB-ME 3-6	25 A	3035756	10
SB-ME 4-6	25 A	3035757	10
FBS 2-6	32 A	3030336	50
FBS 3-6	32 A	3030242	50
FBS 4-6	32 A	3030255	50
FBS 5-6	32 A	3030349	50
FBS 20-6	32 A	3030365	10
PAI-4-FIX-5/6 OG		3035974	10
PAI-4-FIX-5/6 YE		3035977	10
PAI-4-FIX-5/6 GN		3035978	10
PAI-4-FIX-5/6 VT		3035979	10
PAI-4-FIX-5/6 BK		3035980	10
PS-6		3030996	10
SZF 1-0,6X3,5		1204517	10

Accessories			
D-UTME 4		3047491	10
SB-ME 2-6		3035755	10
SB-ME 3-6		3035756	10
SB-ME 4-6		3035757	10
FBS 2-6		3030336	50
FBS 3-6		3030242	50
FBS 4-6		3030255	50
FBS 5-6		3030349	50
FBS 20-6		3030365	10
PAI-4-FIX-5/6 OG		3035974	10
PAI-4-FIX-5/6 YE		3035977	10
PAI-4-FIX-5/6 GN		3035978	10
PAI-4-FIX-5/6 VT		3035979	10
PAI-4-FIX-5/6 BK		3035980	10
PS-6		3030996	10
SZF 1-0,6X3,5		1204517	10

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)

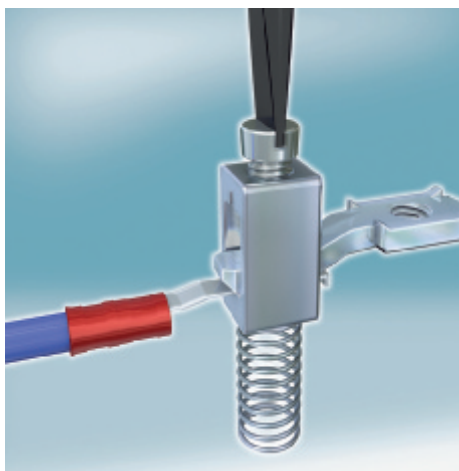
UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

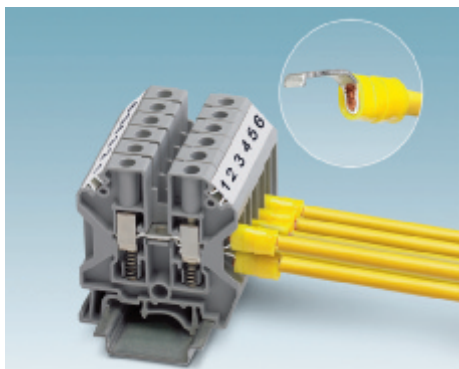
USST spring-supported screw connection, disconnect, knife disconnect, and test disconnect terminal blocks



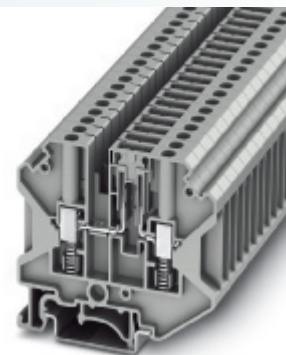
- The modular terminal blocks USST ... were developed especially for use in the energy supply sector
- When combined with the hook-type cable lugs, the spring-assisted screw terminal blocks ideally satisfy the technical requirements of EATS 50-18
- Universal foot for mounting on NS 32 and or NS 35 DIN rails
- The bridge bar isolator switching jumpers ISSBI ... enable switchable cross connections with IS-K The screw functions as a current-carrying switching element
- Large labeling option of every terminal point
- Standardized disconnect zone
- Various function plugs are available for use in the disconnect terminal blocks

Space-saving conductor connection

The flat-ribbon cable lugs with C-BCI ... SO hooks enable vertical crimping (see figure below), which means that conductors in the nominal cross-section can be wired without loss of pitch in a way that saves space. Further information about flat-ribbon cable lugs with hooks can be found at www.phoenixcontact.net/catalog.



Notes:
For corresponding flat-ribbon cable lugs with C-BCI ... hooks, please refer to the CLIPLINE catalog, part 2 or go to www.phoenixcontact.net/catalog
For corresponding function plugs, please refer to the CLIPLINE catalog, part 2, from page 396 or go to www.phoenixcontact.net/catalog
For more test sockets, visit www.phoenixcontact.net/catalog
For more short-circuit plugs, visit www.phoenixcontact.net/catalog
1) U_{max} 300 V
2) When the switching jumper is used, U_{max} is reduced to 400 V.



4 (6) mm², 20 A, disconnect terminal block, 2 connections

Dimensions	[mm]
Dimensions	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V] 500
Nominal current/cross section	[A]/[mm ²] 20/4
Rated cross section	[mm ²] 4
Cross section range	AWG 24 - 10
Connection capacity	
One conductor	[mm ²] 0.2 - 6
Two conductors (of the same type)	[mm ²] 0.2 - 1.5
Two stranded conductors with a TWIN ferrule	[mm ²] 0.2 - 1.5
General data	
Stripping length	[mm] 10
Screw thread	M3
Disconnect slide: thread/torque	-(/Nm) -/
Tightening torque	[Nm] 0,6 - 0,8
Insulating material	PA
Inflammability class according to UL 94	V0

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	63.4	57.3	
Width	Length	Height NS 32	
6.2	63.4	62.3	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
20	500	0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
Rated voltage	-	-	-
Nominal current/cross section	-	-	-
Rated cross section	-	-	-
Cross section range	-	-	-
Connection capacity		ferrule	
	solid	stranded	without/with plastic sleeve
One conductor	0.2 - 6	0.2 - 4	0.25 - 4 0.25 - 2.5
Two conductors (of the same type)	0.2 - 1.5	0.2 - 1.5	0.25 - 1.5 -
Two stranded conductors with a TWIN ferrule			0.5 - 2.5
General data			
Stripping length	[mm] 10		
Screw thread	M3		
Disconnect slide: thread/torque	-(/Nm) -/		
Tightening torque	[Nm] 0,6 - 0,8		
Insulating material	PA		
Inflammability class according to UL 94	V0		

Description	No. of pos.	Color
Terminal block, for mounting on NS 35...		gray
With test socket screws ¹⁾		gray

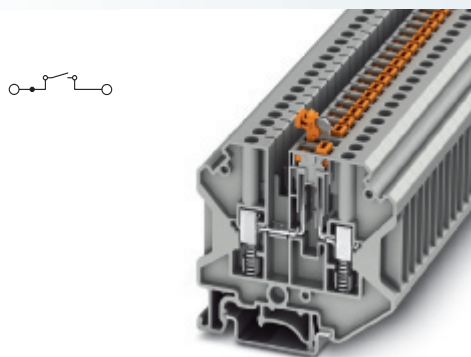
Cover, width 2.2 mm		gray
Partition plate, 2 mm wide		gray
Switching jumper, complete		
	2	orange
	3	orange
	4	orange
Fixed bridge, isolated	10	silver
Isolator bridge bar, 10-pos.	10	silver
Isolator bridge bar, divisible, with 10 screws, for switchable branches with IS-K...	10	silver
Bridge bar isolator, as distance piece for isolator bridge bar		gray
Separating disk, for separation of neighboring bridges, can be fitted later, no loss of pitch		gray
Test socket		silver
Test socket, insulated, can be used only with FBI and ISSBI		silver
Short-circuit plug, for short circuiting neighboring terminal blocks, fully insulated, 2-pos., I_{max} 20 A		black
Screwdriver		
Screwdriver, for disconnect slide and test socket		

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
USST 4-TG		3070301	50
USST 4-TG P/P		3070303	50

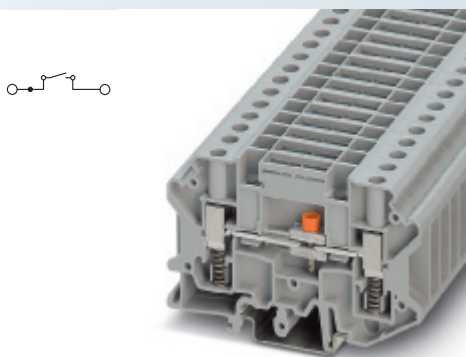
Accessories			
D-USST 4-MT		3070304	50
TPNS-UK		0706647	50
FBI 10- 6	38 A	0203250	10
ISSBI 10- 6	30 A	0301505	10
IS-K 4		1302338	100
TS-USST 4/10		3070383	50
PSB 3/10/4		0601292	10
PSBJ 3/13/4		0201304	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10
SZG 0,6X3,5 VDE		1205121	10

Lateral groove labeling	UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)
-------------------------	---

The modular terminal block system - CLIPLINE complete



4 (6) mm², 20 A, knife disconnect terminal block, 2 connections



6 (10) mm², 30 A, test disconnect terminal block, 2 connections

Technical Data			
Width	Length	Height NS 35/7,5	
6.2	63.4	57.3	
Width	Length	Height NS 32	
6.2	63.4	62.3	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
20	500	0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	-	-	-
20/4	-	-	-
4	-	-	-
24 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 2.5
0.2 - 1.5	0.2 - 1.5	0.25 - 1.5	-
			0.5 - 2.5
10			
M3			
-/-			
0.6 - 0.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	82	52	
Width	Length	Height NS 32	
8.2	82	57	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
57	500 ²⁾	0.2 - 10	24 - 8
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500 ²⁾	-	-	-
41/6	-	-	-
6	-	-	-
24 - 8	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 10	0.2 - 6	0.25 - 6	0.25 - 6
0.2 - 2.5	0.2 - 2.5	0.25 - 1.5	-
			0.5 - 4
12			
M4			
M3/0.6 - 0.8			
1.5 - 1.8			
PA			
V0			

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
USST 4-MT		3070300	50
USST 4-MT P/P		3070302	50

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
USST 6-T/SB		3070310	50

Accessories			
D-USST 4-MT		3070304	50
TPNS-UK		0706647	50
FBI 10- 6	38 A	0203250	10
ISSBI 10- 6	30 A	0301505	10
IS-K 4		1302338	100
TS-USST 4/10		3070383	50
PSB 3/10/4		0601292	10
PSBJ 3/13/4		0201304	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10
SZG 0,6X3,5 VDE		1205121	10

Accessories			
D-USST 6-T		3070367	50
ATP-URTK/SP		0311139	10
SB-TB 6-T 2-8	32 A	3075842	10
SB-TB 6-T 3-8	32 A	3075843	10
SB-TB 6-T 4-8	32 A	3075844	10
SCBI 10-8,15	30 A	3245134	10
SCBI 10-8,15 ISO	24 A	3000417	10
TPS 3/20/5		3246586	10
KSS 8		0311540	10
SZS 1,0X4,0 VDE		1205066	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (CLIPLINE catalog, part 2)

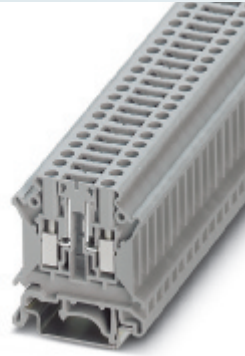
Modular terminal blocks

The modular terminal block system - CLIPLINE complete

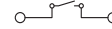
UK screw connection - disconnect, knife disconnect, and fuse terminal blocks

- Compact, space-saving design
- Universal disconnect zone

Notes:
For corresponding function plugs, see www.phoenixcontact.net/catalog .
1) If the fuse is faulty, the downstream circuit is not off load.
2) Observe max. load current.
3) Observe max. load current, depending on the power dissipation of the components. Max. 0.5 W with single arrangement.
4) Current and voltage are determined by the plug used.
5) The current is determined by the fuse used, the voltage by the light indicator. Observe max. power dissipation.



4 (6) mm², 16 A, disconnect terminal block, 2 connections



4 (6) mm², 16 A, knife disconnect terminal block, 2 connections

Dimensions	[mm]
Dimensions	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity	
One conductor	[mm ²]
Two conductors (of the same type)	[mm ²]
Two stranded conductors with a TWIN ferrule	[mm ²]
Max. cross section with insertion bridge	[mm ²]
General data	
Stripping length	[mm]
Screw thread	
Tightening torque	[Nm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/7,5		
6.2	42.5	47		
Width	Length	Height NS 32		
6.2	42.5	52		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
16 ⁴⁾	500 ⁴⁾	0.2 - 6	24 - 10	
IEC 60947-7-1	UL/CUL	CSA	IEC/EN 60079-7	
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage	-	-	-	
Nominal current/cross section	16 ⁴⁾ /1.5	-	-	
Rated cross section	4	-	-	
Cross section range	24 - 10	-	-	
Connection capacity	solid	stranded	ferrule without/with plastic sleeve	
One conductor	0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 2.5
Two conductors (of the same type)	0.2 - 1.5	0.2 - 1.5	0.25 - 1.5	-
Two stranded conductors with a TWIN ferrule	4	4	0.5 - 2.5	
Max. cross section with insertion bridge	4	4	-	
Stripping length	8			
Screw thread	M3			
Tightening torque	0.6 - 0.8			
Insulating material	PA			
Inflammability class according to UL 94	V0			

Technical Data				
Width	Length	Height NS 35/7,5		
6.2	42.5	48.7		
Width	Length	Height NS 32		
6.2	42.5	53.6		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
16	500	0.2 - 6	24 - 10	
IEC 60947-7-1	UL/CUL	CSA	IEC/EN 60079-7	
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated voltage	-	-	-	
Nominal current/cross section	16/1.5	-	-	
Rated cross section	4	-	-	
Cross section range	24 - 10	-	-	
Connection capacity	solid	stranded	ferrule without/with plastic sleeve	
One conductor	0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 2.5
Two conductors (of the same type)	0.2 - 1.5	0.2 - 1.5	0.25 - 1.5	-
Two stranded conductors with a TWIN ferrule	4	4	0.5 - 2.5	
Max. cross section with insertion bridge	4	4	-	
Stripping length	8			
Screw thread	M3			
Tightening torque	0.6 - 0.8			
Insulating material	PA			
Inflammability class according to UL 94	V0			

Description	No. of pos.	Color
Disconnect terminal block, for mounting on NS 35 DIN rail		gray
Knife disconnect terminal block, for mounting on NS 35...		gray
Feed-through terminal block, for mounting on NS 35...		gray
Fuse terminal block, for mounting on NS 35..., for 5 x 20 cartridge fuse inserts		black
With LED for 12 - 30 V AC/DC, 0.7 - 1.95 mA ¹⁾		black
With LED for 30 - 60 V AC/DC, 0.9 - 1.8 mA ¹⁾		black
With light indicator for 110 - 250 V AC/DC, 0.1 - 0.5 mA ¹⁾		black
Lever-type disconnect terminal block, same shape as UK 5-HESI N		black/orange
		gray/orange

Ordering data				
Type	I _{max}	Order No.	Pcs./Pkt.	
UK 5 N-TG		3000604	50	
UK 5 N-MT		3000563	50	

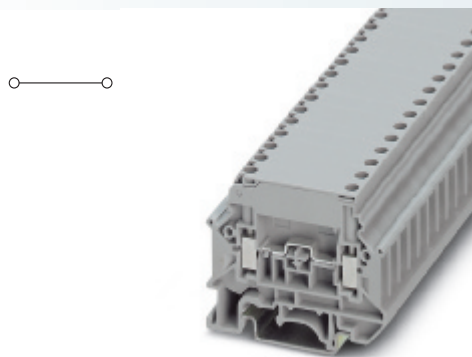
Ordering data				
Type	I _{max}	Order No.	Pcs./Pkt.	
UK 5 N-TG		3000604	50	
UK 5 N-MT		3000563	50	

Accessories		
Cover, width 1.8 mm	gray	
Insertion bridge, insulated		
	2	gray
	3	gray
	10	gray
Isolating plug ²⁾		orange
Feed-through connector ²⁾		gray
Component plug, labeled with ZBF 5 or UC-TMF 5 ³⁾		gray
Fuse plug, width 5.2 mm		black
Screwdriver		
Lateral groove labeling		

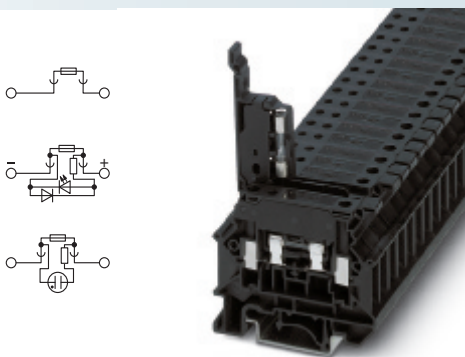
Accessories				
D-UK 4/10		3003020	50	
EB 2-6	16 A	0201155	100	
EB 3-6	16 A	0201142	100	
EB 10-6	16 A	0201139	10	
P-DI		3036783	50	
P-FIX		3038956	50	
P-CO		3036796	10	
P-FU 5X20-5		3209235	10	
SF-SL 0,6X3,5-100 S-VDE		1212587	10	
UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)				

Accessories				
D-UK 4/10		3003020	50	
EB 2-6	16 A	0201155	100	
EB 3-6	16 A	0201142	100	
EB 10-6	16 A	0201139	10	
SF-SL 0,6X3,5-100 S-VDE		1212587	10	
UC-TM 6, UCT-TM 6 or ZB 6 (catalog CLIPLINE part 2)				

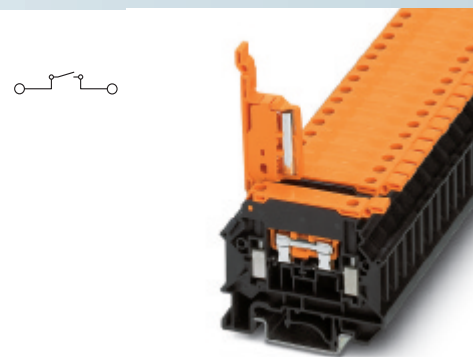
The modular terminal block system - CLIPLINE complete



4 (6) mm², 32 A, feed-through terminal block, same shape, 2 connections



4 (6) mm², 6.3 A, lever-type fuse terminal block, for 5 x 20 mm G fuses, 2 connections



4 (6) mm², 16 A, lever-type disconnect terminal block, same shape, 2 connections

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	58	48	
Width	Length	Height NS 32	
8.2	58	52.9	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
32	800	0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
800	-	-	-
32/4	-	-	-
4	-	-	-
24 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 2.5
0.2 - 1.5	0.2 - 1.5	0.25 - 1.5	-
4	4	0.5 - 2.5	
8			
M3			
0.6 - 0.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	58	48	
Width	Length	Height NS 32	
8.2	58	52.9	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
6.3 ⁵⁾	500 ⁵⁾	0.2 - 6	24 - 10
IEC 60947-7-3			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500 ⁵⁾	-	-	-
6.3 ⁵⁾ /1.5	-	-	-
4	-	-	-
24 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 2.5
0.2 - 1.5	0.2 - 1.5	0.25 - 1.5	-
4	4	0.5 - 2.5	
8			
M3			
0.6 - 0.8			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/7,5	
8.2	58	48	
Width	Length	Height NS 32	
8.2	58	52.9	
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG
16	500	0.2 - 6	24 - 10
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
500	-	-	-
16/1.5	-	-	-
4	-	-	-
24 - 10	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
0.2 - 6	0.2 - 4	0.25 - 4	0.25 - 2.5
0.2 - 1.5	0.2 - 1.5	0.25 - 1.5	-
4	4	0.5 - 2.5	
8			
M3			
0.6 - 0.8			
PA			
V0			

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
UK 5-MTD		3000562	50

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
UK 5-HESI N		3000539	50
UK 5-HESILED 24 N		3000540	50
UK 5-HESILED 60 N		3000541	50
UK 5-HESILA 250 N		3000542	50

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
UK 5-HEDI N		3000564	50
UK 5-HEDI N GY		3000752	50

Accessories			
D-UK 5-HESI N		3000543	50
EBS 2- 8	30 A	3118151	100
EBS 3- 8	30 A	3118148	100
EBS 10- 8	30 A	3118135	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

Accessories			
D-UK 5-HESI N		3000543	50
EBS 2- 8	14 A	3118151	100
EBS 3- 8	14 A	3118148	100
EBS 10- 8	14 A	3118135	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

Accessories			
D-UK 5-HESI N		3000543	50
EBS 2- 8	14 A	3118151	100
EBS 3- 8	14 A	3118148	100
EBS 10- 8	14 A	3118135	10
SF-SL 0,6X3,5-100 S-VDE		1212587	10

UC-TM 8, UCT-TM 8 or ZB 8 (catalog CLIPLINE part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (catalog CLIPLINE part 2)

UC-TM 8, UCT-TM 8 or ZB 8 (catalog CLIPLINE part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

UK screw connection - lever-type fuse terminal block for photovoltaics, 1500 V

Fuse terminal block

- Terminal block for protecting PV lines
- Particularly suitable for protecting monocrystalline and polycrystalline modules
- Suitable for standard 10.3 x 85 mm fuse inserts with gPV characteristic
- Dielectric strength up to 1500 V DC
- Generous labeling options for the unique identification of lines

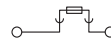
Fuses

- Special fuses with ultra-rapid PV characteristic (gPV)
- Use in PV lines with a nominal voltage of up to 1500 V DC
- Safe shutdown even in the event of short-circuit currents that are just above the nominal current

Diode terminal blocks

- For diode terminal blocks for protecting PV lines, see page 17

Notes:
The rated voltage is 1250 V and the maximum operating voltage is 1500 V.
Higher ambient temperatures are an additional strain on fuse inserts. In applications of this kind, the shift of the rated current should be taken into consideration accordingly.
For tools for stripping and crimping solar cables and plugs, see CLIPLINE catalog, part 2.
¹⁾ The current and voltage are determined by the fuse.
²⁾ Maximum operating voltage 1500 V.



25 (25) mm², 32 A, 1500 V, lever-type fuse terminal block

Dimensions		[mm]
Max. electrical data		
Rated data		
Rated voltage	[V]	1250 ²⁾
Nominal current/cross section	[A]/[mm ²]	32 ¹⁾ /16
Rated cross section	[mm ²]	25
Cross section range	AWG	18 - 3
Connection capacity		
One conductor	[mm ²]	1.5 - 25
Two conductors (of the same type)	[mm ²]	1.5 - 4
Two stranded conductors with a TWIN ferrule	[mm ²]	0.75 - 10
General data		
Fuse type/dimensions	-/[mm]	gG/gPV/10.3 x 85
Stripping length	[mm]	11
Screw thread		M5
Tightening torque	[Nm]	2.5 - 2.5
Insulating material		PA

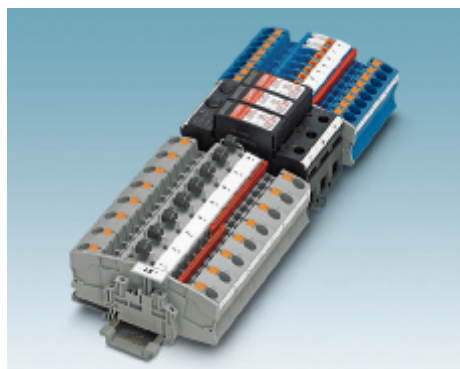
Technical Data				
Width	Length	Height NS 35/7,5		
23	130	65.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
32 ¹⁾	1250 ²⁾	0.75 - 25	18 - 3	
IEC 60269-1/-2				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
Rated data		Connection capacity		
Rated voltage	[V]	ferrule		
Nominal current/cross section	[A]/[mm ²]	without/with plastic sleeve		
Rated cross section	[mm ²]	1.5 - 16	1.5 - 16	
Cross section range	AWG	1.5 - 4	-	
Connection capacity		1.5 - 10		
One conductor	[mm ²]	1.5 - 25		
Two conductors (of the same type)	[mm ²]	0.75 - 25		
Two stranded conductors with a TWIN ferrule	[mm ²]	0.75 - 10		
General data				
Fuse type/dimensions	-/[mm]	gG/gPV/10.3 x 85		
Stripping length	[mm]	11		
Screw thread		M5		
Tightening torque	[Nm]	2.5 - 2.5		
Insulating material		PA		

Description	Color
Fuse terminal block, for mounting on NS 35..., for 10 x 85 mm cartridge fuse inserts	black
Midget fuse, 10.3 x 85 mm, 1500 V, nominal current: 2 A	
Nominal current: 4 A	
Nominal current: 6 A	
Nominal current: 8 A	
Nominal current: 10 A	
Nominal current: 12 A	
Nominal current: 16 A	
Midget fuse, 10.3 x 85 mm, 1200 V, nominal current: 20 A	
Nominal current: 25 A	

Partition plate, 2 mm wide	gray
Screwdriver	
Center groove labeling	

Ordering data		
Type	Order No.	Pcs. / Pkt.
UK 10,3-HESI 1500V	3062760	5

Accessories		
TPN-UK	3003062	10
SF-SL 0,6X3,5-100 S-VDE	1212587	10
EML (16,5X5)R (CLIPLINE catalog, part 2)		





Fuse insert, 10.3 x 85 mm, 2 - 16 A, 1500 V



Fuse insert, 10.3 x 85 mm, 20 - 25 A, 1200 V

Technical Data			
Width	Length	Height NS 35/7,5	
10	30	-	
	$U_{max.}$ [V]	max. Ø [mm ²]	AWG
	1500	-	-
IEC 60269-6			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1500	-	-	-
2	-	-	-
-	-	-	-
-	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Technical Data			
Width	Length	Height NS 35/7,5	
10	30	-	
	$U_{max.}$ [V]	max. Ø [mm ²]	AWG
	1200	-	-
IEC 60269-6			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1200	-	-	-
20	-	-	-
-	-	-	-
-	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Ordering data		
Type	Order No.	Pcs. / Pkt.
FUSE 10,3X85 2A PV	3062766	10
FUSE 10,3X85 4A PV	3062767	10
FUSE 10,3X85 6A PV	3062768	10
FUSE 10,3X85 8A PV	3062769	10
FUSE 10,3X85 10A PV	3062770	10
FUSE 10,3X85 12A PV	3062771	10
FUSE 10,3X85 16A PV	3062772	10

Ordering data		
Type	Order No.	Pcs. / Pkt.
FUSE 10,3X85 20A PV	3062773	10
FUSE 10,3X85 25A PV	3062774	10

Accessories	

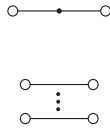
Accessories	

Modular terminal blocks

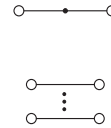
The modular terminal block system - CLIPLINE complete

UKH screw connection - high-current terminal block bases for direct mounting

- Terminal blocks and bases for up to 415 A with a space-saving design for direct mounting
- The fully isolated pick-off terminal block (optional use) permits a voltage pick-off up to a nominal voltage of 1000 V (10 mm²)



70 (70) mm², 150 A, terminal block bases, for direct mounting



70 (95) mm², 192 A, terminal block bases, for direct mounting

Notes:
1) See CLIPLINE catalog, part 1.

Dimensions		[mm]
Max. electrical data		
Rated voltage	[V]	1000
Nominal current/cross section	[A]/[mm ²]	150/50
Rated cross section	[mm ²]	50
Cross section range	AWG	6 - 2/0
Connection capacity		
One conductor	[mm ²]	16 - 70
Two conductors (of the same type)	[mm ²]	10 - 16
Max. cross section with insertion bridge	[mm ²]	10 - 16
General data		
Stripping length	[mm]	24
Screw thread		M6
Tightening torque	[Nm]	6 - 8
Insulating material		PA
Inflammability class according to UL 94		V0

Technical Data			
Width	Length	Height	
60	75.5	76	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
150	1000	16 - 70	6 - 2/0
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
150/50	-	-	-
50	-	-	-
6 - 2/0	-	-	-
Connection capacity			
	solid	stranded	ferrule without/with plastic sleeve
One conductor	16 - 70	25 - 70	25 - 50 25 - 50
Two conductors (of the same type)	10 - 16	10 - 16	10 - 16 -
Max. cross section with insertion bridge			
General data			
Stripping length	[mm]	24	
Screw thread		M6	
Tightening torque	[Nm]	6 - 8	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Technical Data			
Width	Length	Height	
60.9	70.5	80	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
192	1000	16 - 95	4 - 3/0
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
192/70	-	-	-
70	-	-	-
4 - 3/0	-	-	-
Connection capacity			
	solid	stranded	ferrule without/with plastic sleeve
One conductor	16 - 95	25 - 70	16 - 70 16 - 70
Two conductors (of the same type)	16 - 25	16 - 25	16 - 25 -
Max. cross section with insertion bridge			
General data			
Stripping length	[mm]	24	
Screw thread		M8	
Tightening torque	[Nm]	8 - 10	
Insulating material		PA	
Inflammability class according to UL 94		V0	

Description	No. of pos.	Color
Terminal block , for direct mounting		gray
Terminal block base , for direct mounting, with three gray feed-through terminal blocks		gray
Terminal block base , for direct mounting, four feed-through terminal blocks, 3 x gray, 1 x blue		gray/blue
Terminal block base , for direct mounting, four feed-through terminal blocks, 3 x gray, 1 x black-yellow		gray/black-yellow
Terminal block base , for direct mounting, five feed-through terminal blocks, 3 x gray, 1 x blue, 1 x black-yellow		gray/blue/black-yellow

Ordering data				
Type	I_{max}	Order No.	Pcs. / Pkt.	
UKH 50-F		3247019	10	
UKH 50-3L-F		3076638	3	
UKH 50-3L/N-F		3076639	2	
UKH 50-3L/FE-F		3076640	3	
UKH 50-3L/N/FE-F		3076641	2	

Ordering data				
Type	I_{max}	Order No.	Pcs. / Pkt.	
UKH 70-F		3247051	10	
UKH 70-3L-F		3076484	4	
UKH 70-3L/N-F		3076523	3	
UKH 70-3L/FE-F		3076565	3	
UKH 70-3L/N/FE-F		3076604	2	

Accessories		
Pick-off terminal block , for snapping into the lateral guide	gray	
Fixed bridge , for cross connections in the terminal center, screw heads with insulating collar, first remove partition plate		
	2	silver
	3	silver
Insertion bridge , fully insulated, is laid into terminal sleeve and snapped into the terminal housing		
	2	gray
	3	gray
Insertion profile , levels out the prism-shaped sleeve when using flat-ribbon conductors ¹⁾		silver
Screwdriver		
Allen wrench , fully insulated, safety tool in accordance with EN 60900, length: 150 mm, handle width: 110 mm		

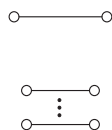
Accessories			
AGK 10-UKH 50		3001763	10
FBI 2-20	150 A	0201346	10
FBI 3-20	150 A	0201317	10
UKH 50 EP		3009228	10
SZS 1,2X8,0 VDE		1205082	10

Accessories			
AGK 10-UKH 50		3001763	10
FBI 2-20 N	192 A	3213195	10
FBI 3-20 N	192 A	3213205	10
UKH 50 EP		3009228	10
VDE-ISS 6		1201934	1

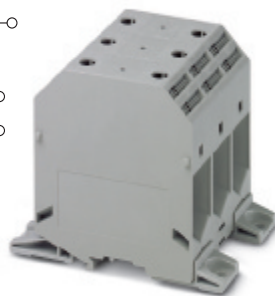
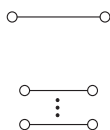
Center groove labeling

UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)

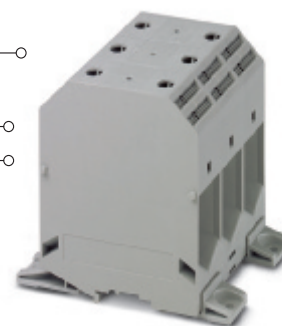
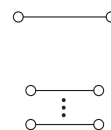
UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)



95 (95) mm², 232 A, terminal block bases, for direct mounting



150 (150) mm², 309 A, terminal block bases, for direct mounting



240 (240) mm², 415 A, terminal block bases, for direct mounting

Technical Data			
Width	Length	Height	
75	83	90	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
232	1000	25 - 95	3 - 3/0
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
232/95	-	-	-
95	-	-	-
3 - 3/0	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
25 - 95	35 - 95	35 - 95	35 - 95
25 - 35	25 - 35	16 - 35	-
95	70	-	-
33	M8	15 - 20	PA
V0			

Technical Data			
Width	Length	Height	
93	100	111	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
309	1000	35 - 150	2 - 300 kcmil
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
309/150	-	-	-
150	-	-	-
2 - 300 kcmil	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
35 - 150	50 - 150	50 - 150	50 - 150
25 - 50	35 - 50	25 - 50	-
150	120	-	-
40	M10	25 - 30	PA
V0			

Technical Data			
Width	Length	Height	
108	100	124	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
415	1000	70 - 240	2/0 - 500 kcmil
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
415/240	-	-	-
240	-	-	-
2/0 - 500 kcmil	-	-	-
solid	stranded	ferrule without/with plastic sleeve	
70 - 240	70 - 240	70 - 185	70 - 185
35 - 95	50 - 95	35 - 50	-
240	185	-	-
40	M10	25 - 30	PA
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UKH 95-F		3247022	10
UKH 95-3L-F		3076497	4
UKH 95-3L/N-F		3076536	2
UKH 95-3L/FE-F		3076578	2
UKH 95-3L/N/FE-F		3076617	2

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UKH 150-F		3247035	10
UKH 150-3L-F		3076507	4
UKH 150-3L/N-F		3076549	2
UKH 150-3L/FE-F		3076581	2
UKH 150-3L/N/FE-F		3076620	2

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
UKH 240-F		3247048	10
UKH 240-3L-F		3076510	4
UKH 240-3L/N-F		3076552	2
UKH 240-3L/FE-F		3076594	2
UKH 240-3L/N/FE-F		3076633	2

Accessories			
Part No.	Order No.	Pcs. / Pkt.	Notes
AGK 10-UKH 95	3003541	10	
EB 2-25/UKH	232 A 0201362	10	
EB 3-25/UKH	232 A 0201375	10	
UKH 95 EP	3009231	10	
VDE-ISS 6	1201934	1	

Accessories			
Part No.	Order No.	Pcs. / Pkt.	Notes
AGK 10-UKH 150/240	3003554	10	
EB 2-31/UKH	300 A 0201388	10	
EB 3-31/UKH	300 A 0201391	10	
UKH 150/240 EP	3009244	10	
VDE-ISS 8	1201947	1	

Accessories			
Part No.	Order No.	Pcs. / Pkt.	Notes
AGK 10-UKH 150/240	3003554	10	
EB 2-36/UKH	382 A 0201401	10	
EB 3-36/UKH	382 A 0201414	10	
UKH 150/240 EP	3009244	10	
VDE-ISS 8	1201947	1	

UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)

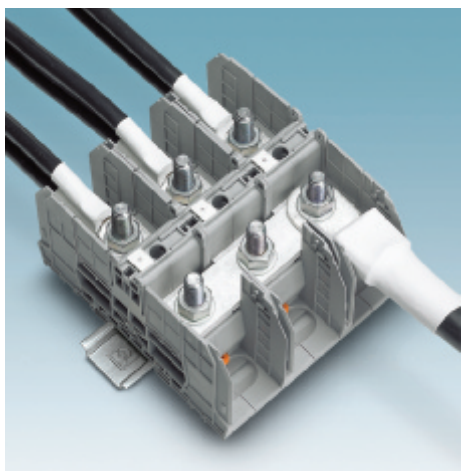
UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)

UC-TM 10, UCT-TM 10 or ZB 10 (CLIPLINE catalog, part 2)

Modular terminal blocks

The modular terminal block system - CLIPLINE complete

RBO bolt connection terminal blocks, open, for ring and fork-type cable lugs



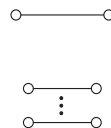
- Optional snap-on finger protection
- Compact connection with ring and fork-type cable lugs
- Potential distribution with connection rails
- The covering hoods for the RBO 10, RBO 12, and RBO 16 bolt terminal blocks can be sealed to protect against unauthorized opening. The lugs that can be snapped on for this purpose are supplied as standard with the covering hoods
- The RBO 10, RBO 12, and RBO 16 have a 4 mm test connection at the center of the terminal block

Mounting options

- Mounting either on standard mounting rails or directly in switch boxes, see figure below



Notes:
For corresponding test plugs, see the following page.



70 (70) mm², 192 A, feed-through terminal block, for DIN rail and direct mounting



Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity, DIN 46234	
Cable lugs, DIN 46234	[mm ²]
Connection bolt/hole diameter/width	[mm]
Connection capacity, DIN 46235	
Cable lugs, DIN 46235	[mm ²]
Connection bolt/hole diameter/width	[mm]
Connection capacity, DIN 46237	
Cable lugs, DIN 46237	[mm ²]
Connection bolt/hole diameter/width	[mm]
	blue
	yellow
General data	
Bolt thread	
Tightening torque	[Nm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/15		
29	140	74.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
192	1000	2.5 - 70	12 - 2/0	
IEC 60947-7-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
1000	600	600	-	
192/70	175/-	175/-	-	
70	-	-	-	
12 - 2/0	-	-	-	

Description	No. of pos.	Color
Bolt connection terminal block , for direct mounting or mounting on NS 35/15		gray
		blue
		black/yellow
Block, 3-pos., (3 x gray)		gray
Block, 4-pos., (3 x gray, 1 x blue)		gray/blue
Block, 4-pos., (3 x gray, 1 x black-yellow)		gray/black-yellow
Block, 5-pos., (3 x gray, 1 x blue, 1 x black-yellow)		gray/blue/black-yellow

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
RBO 8		3213137	10
RBO 8 BU		3213136	10
RBO 8-FE		3213139	10
RBO 8-3L		3076206	2
RBO 8-3L/N		3076248	2
RBO 8-3L/FE		3076124	2
RBO 8-3L/N/FE		3076280	2

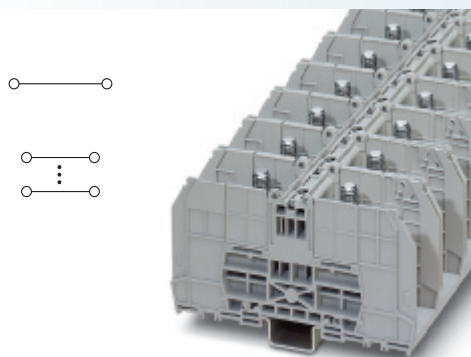
Accessories		
Connection rail , for cross connection of high-current connector	2	silver
	3	silver
Covering hood , as retrofit snap-on shock protection for cable lug connection		gray
		blue
		black/yellow
Aluminum end bracket , for screwing on, for end support of 50 - 300 mm ² terminal blocks, can be labeled with ZB 10, for mounting on NS 35...		silver
Terminal strip marker , adjustable height, for end clamp CLIPFIX ..., can be labeled with EML (20x8) label or directly with B-STIFT or X-PEN		gray

Type	I _{max}	Order No.	Pcs. / Pkt.
RBO 8-VS 2	192 A	3213179	10
RBO 8-VS 3	192 A	3213182	10
HC-RBO 8		3247967	10
HC-RBO 8 BU		3247969	10
HC-RBO 8-FE		3247968	10
E/AL-NS 35		1201662	10

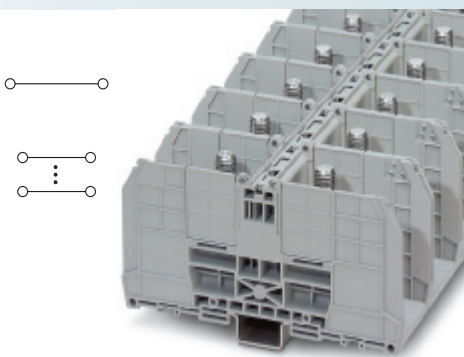
Center groove labeling

UC-TM 12, UCT-TM 12 or ZB 12 (CLIPLINE catalog, part 2)
--

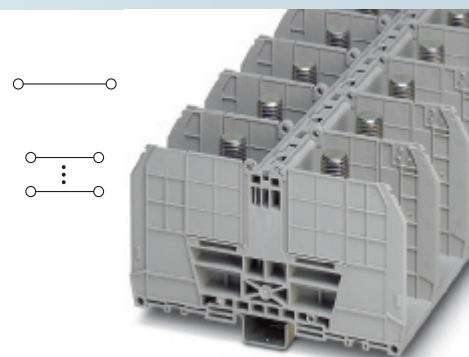
The modular terminal block system - CLIPLINE complete



150 (150) mm², 309 A, feed-through terminal block, for DIN rail and direct mounting



240 (240) mm², 415 A, feed-through terminal block, for DIN rail and direct mounting



300 (300) mm², 520 A, feed-through terminal block, for DIN rail and direct mounting

Technical Data			
Width	Length	Height NS 35/15	
41	144	84.5	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
309	1000	6 - 150	10 - 300
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
309/150	-	-	-
150	-	-	-
10 - 300	-	-	-
6 - 150			
10/10.5/30			
16 - 150			
10/10.5/34			
6 - 6			
10/10.5/18			
6.00 mm ²			
M10			
10 - 20			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/15	
49	164	90.8	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
415	1000	10 - 240	8 - 500
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
415/240	-	-	-
240	-	-	-
8 - 500	-	-	-
10 - 240			
12/13/38			
25 - 240			
12/13/42			
-			
-/-/-			
M12			
14 - 30			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/15	
54.8	164	99.3	
I_{max} [A]	U_{max} [V]	max. Ø [mm ²]	AWG
520	1000	25 - 300	4 - 600
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1000	-	-	-
520/300	-	-	-
300	-	-	-
4 - 600	-	-	-
25 - 240			
16/17/38			
50 - 300			
16/17/48			
-			
-/-/-			
M16			
25 - 35			
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 10		3244614	10
RBO 10 BU		3244616	10
RBO 10-FE		3244615	10
RBO 10-3L		3076219	2
RBO 10-3L/N		3076251	2
RBO 10-3L/FE		3076137	2
RBO 10-3L/N/FE		3076293	2

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 12		3244627	10
RBO 12 BU		3244629	10
RBO 12-FE		3244628	10
RBO 12-3L		3076222	1
RBO 12-3L/N		3076264	1
RBO 12-3L/FE		3076140	1
RBO 12-3L/N/FE		3076303	1

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 16		3244630	5
RBO 16 BU		3244632	5
RBO 16-FE		3244631	5
RBO 16-3L		3076235	1
RBO 16-3L/N		3076277	1
RBO 16-3L/FE		3076153	1
RBO 16-3L/N/FE		3076316	1

Accessories			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 10-VS 2	309 A	3244643	50
RBO 10-VS 3	309 A	3244656	50
HC-RBO 10		3247970	6
HC-RBO 10 BU		3247972	6
HC-RBO 10-FE		3247971	6
E/AL-NS 35		1201662	10
KLM 3-L		0814788	100

Accessories			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 12-VS 2	415 A	3244669	50
RBO 12-VS 3	415 A	3244672	50
HC-RBO 12		3247983	6
HC-RBO 12 BU		3247985	6
HC-RBO 12-FE		3247984	6
E/AL-NS 35		1201662	10
KLM 3-L		0814788	100

Accessories			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 16-VS 2	520 A	3244685	50
RBO 16-VS 3	520 A	3244698	50
HC-RBO 16		3247996	6
HC-RBO 16 BU		3247998	6
HC-RBO 16-FE		3247997	6
E/AL-NS 35		1201662	10
KLM 3-L		0814788	100

UC-TM 12, UCT-TM 12 or ZB 12
(CLIPLINE catalog, part 2)

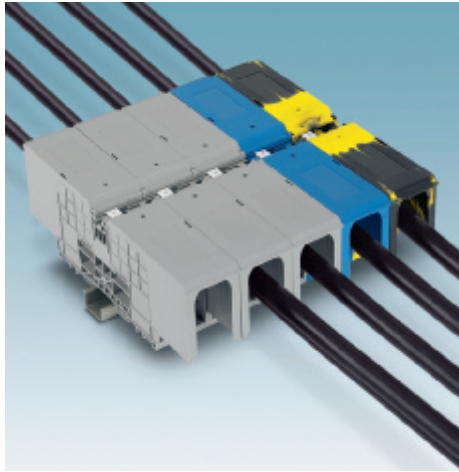
UC-TM 12, UCT-TM 12 or ZB 12
(CLIPLINE catalog, part 2)

UC-TM 12, UCT-TM 12 or ZB 12
(CLIPLINE catalog, part 2)

Modular terminal blocks

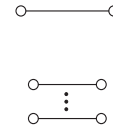
The modular terminal block system - CLIPLINE complete

RBO bolt connection terminal blocks with covering hoods, for ring and fork-type cable lugs



- With protective covers
- Compact connection with ring and fork-type cable lugs
- Potential distribution with connection rails
- The covering hoods for the RBO 10, RBO 12, and RBO 16 bolt terminal blocks can be sealed to prevent unauthorized opening. The lugs that can be snapped on for this purpose are supplied as standard
- The RBO 10, RBO 12, and RBO 16 have a 4 mm test connection at the center of the terminal block

Notes:
1) Cable lug must be insulated with shrink sleeve.



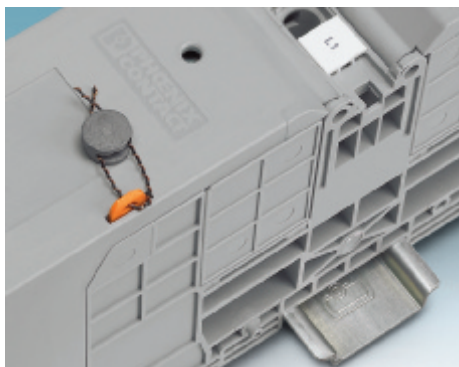
70 (70) mm², 192 A, feed-through terminal block, for DIN rail and direct mounting

Dimensions	
	[mm]
Max. electrical data	
Rated data	
Rated voltage	[V]
Nominal current/cross section	[A]/[mm ²]
Rated cross section	[mm ²]
Cross section range	AWG
Connection capacity, DIN 46234	
Cable lugs, DIN 46234	[mm ²]
Connection bolt/hole diameter/width	[mm]
Connection capacity, DIN 46235	
Cable lugs DIN 46235	[mm ²]
Connection bolt/hole diameter/width	[mm]
Connection capacity, DIN 46237	
Cable lugs DIN 46237	[mm ²]
Connection bolt/hole diameter/width	[mm]
	blue
	yellow
General data	
Bolt thread	
Tightening torque	[Nm]
Insulating material	
Inflammability class according to UL 94	

Technical Data				
Width	Length	Height NS 35/15		
29	185	74.5		
I _{max} [A]	U _{max} [V]	max. Ø [mm ²]	AWG	
192	1500 ¹⁾	2.5 - 70	12 - 2/0	
IEC 60947-7-1				
IEC	UL/CUL	CSA	IEC/EN 60079-7	
1500 ¹⁾	-	-	-	
192/70	-	-	-	
70	-	-	-	
12 - 2/0	-	-	-	

Description	No. of pos.	Color
Bolt connection terminal blocks, with covering hood, for direct mounting or mounting on NS 35/15		gray
		blue
		black/yellow
Block, 3-pos., (3 x gray)		gray
Block, 4-pos., (3 x gray, 1 x blue)		gray/blue
Block, 4-pos., (3 x gray, 1 x black-yellow)		gray/black-yellow
Block, 5-pos., (3 x gray, 1 x blue, 1 x black-yellow)		gray/blue/black-yellow

Ordering data			
Type	I _{max}	Order No.	Pcs. / Pkt.
RBO 8-HC		3247973	10
RBO 8-HC BU		3247974	10
RBO 8-FE-HC		3247975	10
RBO 8-3L-HC		3076044	2
RBO 8-3L/N-HC		3076086	2
RBO 8-3L/FE-HC		3076125	2
RBO 8-3L/N/FE-HC		3076167	2

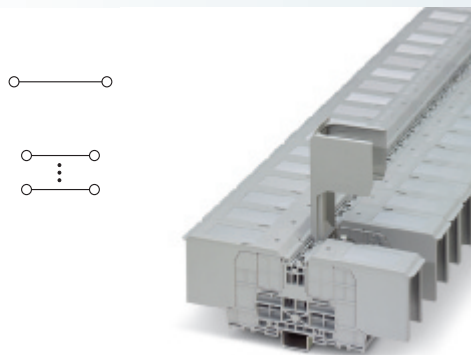


Accessories		
Connection rail, for cross connection of high-current connectors		
	2	silver
	3	silver
Aluminum end bracket, for screwing on, for end support of 50 - 300 mm² terminal blocks, can be labeled with ZB 10, for mounting on NS 35...		silver
Terminal strip marker, adjustable height, for end clamp CLIPFIX ..., can be labeled with EML (20x8) label or directly with B-STIFT or X-PEN		gray
Test plug, consisting of: Metal part for 4 mm Ø socket hole		
Insulating sleeve for PS metal part		red
Center groove labeling		

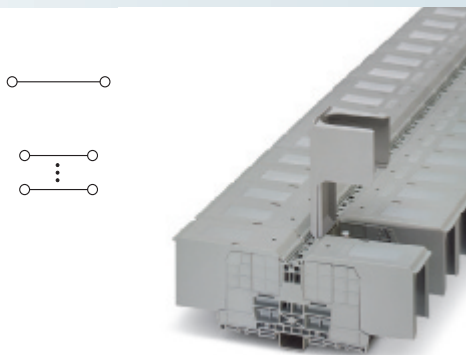
RBO 8-VS 2	192 A	3213179	10
RBO 8-VS 3	192 A	3213182	10
E/AL-NS 35		1201662	10

UC-TM 12, UCT-TM 12 or ZB 12 (CLIPLINE catalog, part 2)

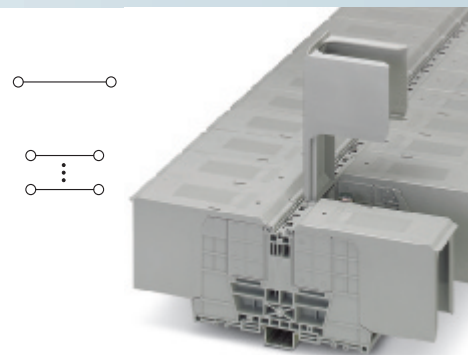
The modular terminal block system - CLIPLINE complete



150 (150) mm², 309 A, feed-through terminal block, for DIN rail and direct mounting



240 (240) mm², 415 A, feed-through terminal block, for DIN rail and direct mounting



300 (300) mm², 520 A, feed-through terminal block, for DIN rail and direct mounting

Technical Data			
Width	Length	Height NS 35/15	
41	235	84.5	
I_{max} [A]	U_{max} [V]	max. \varnothing [mm ²]	AWG
309	1500 ¹⁾	6 - 150	10 - 300
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1500 ¹⁾	-	-	-
309/150	-	-	-
150	-	-	-
10 - 300	-	-	-
6 - 150			
10/10.5/30			
16 - 150			
10/10.5/34			
6 - 6			
10/10.5/18			
6.00 mm ²			
M10			
10 - 20			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/15	
49	265	90.8	
I_{max} [A]	U_{max} [V]	max. \varnothing [mm ²]	AWG
415	1500 ¹⁾	10 - 240	8 - 500
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1500 ¹⁾	-	-	-
415/240	-	-	-
240	-	-	-
8 - 500	-	-	-
10 - 240			
12/13/38			
25 - 240			
12/13/42			
-			
-/-/-			
M12			
14 - 30			
PA			
V0			

Technical Data			
Width	Length	Height NS 35/15	
54.8	283.5	99.3	
I_{max} [A]	U_{max} [V]	max. \varnothing [mm ²]	AWG
520	1500 ¹⁾	25 - 300	4 - 600
IEC 60947-7-1			
IEC	UL/CUL	CSA	IEC/EN 60079-7
1500 ¹⁾	-	-	-
520/300	-	-	-
300	-	-	-
4 - 600	-	-	-
25 - 240			
16/17/38			
50 - 300			
16/17/48			
-			
-/-/-			
M16			
25 - 35			
PA			
V0			

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 10-HC		3247976	10
RBO 10-HC BU		3247977	10
RBO 10-FE-HC		3247978	10
RBO 10-3L-HC		3076057	2
RBO 10-3L/N-HC		3076099	2
RBO 10-3L/FE-HC		3076138	2
RBO 10-3L/N/FE-HC		3076170	2

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 12-HC		3247986	10
RBO 12-HC BU		3247987	10
RBO 12-FE-HC		3247988	10
RBO 12-3L-HC		3076060	1
RBO 12-3L/N-HC		3076109	1
RBO 12-3L/FE-HC		3076141	1
RBO 12-3L/N/FE-HC		3076183	1

Ordering data			
Type	I_{max}	Order No.	Pcs. / Pkt.
RBO 16-HC		3247989	5
RBO 16-HC BU		3247990	5
RBO 16-FE-HC		3247991	5
RBO 16-3L-HC		3076073	1
RBO 16-3L/N-HC		3076112	1
RBO 16-3L/FE-HC		3076154	1
RBO 16-3L/N/FE-HC		3076196	1

Accessories			
Type		Order No.	Pcs. / Pkt.
RBO 10-VS 2	309 A	3244643	50
RBO 10-VS 3	309 A	3244656	50
E/AL-NS 35		1201662	10
KLM 3-L		0814788	100
PS-MT		0311647	10
PS-IH RD		0311579	10

Accessories			
Type		Order No.	Pcs. / Pkt.
RBO 12-VS 2	415 A	3244669	50
RBO 12-VS 3	415 A	3244672	50
E/AL-NS 35		1201662	10
KLM 3-L		0814788	100
PS-MT		0311647	10
PS-IH RD		0311579	10

Accessories			
Type		Order No.	Pcs. / Pkt.
RBO 16-VS 2	520 A	3244685	50
RBO 16-VS 3	520 A	3244698	50
E/AL-NS 35		1201662	10
KLM 3-L		0814788	100
PS-MT		0311647	10
PS-IH RD		0311579	10

UC-TM 12, UCT-TM 12 or ZB 12 (CLIPLINE catalog, part 2)

UC-TM 12, UCT-TM 12 or ZB 12 (CLIPLINE catalog, part 2)

UC-TM 12, UCT-TM 12 or ZB 12 (CLIPLINE catalog, part 2)

Marking systems



Printer
BLUEMARK CLED page 74



Thermal transfer printer for material off the roll
THERMOMARK ROLL X1 page 76



Thermal transfer printer sets
MARKING BOX THERMOMARK ... page 77
page 78



Device marking for other manufacturers
UCT-EM... page 80



Device markers for Axioline systems from Phoenix Contact
EMT (35X28)R... page 98



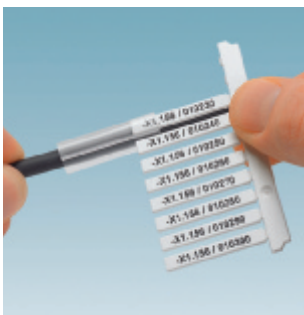
Stick-on device marking, for high-temperature applications
EML-HT ... page 100



Stick-on device marking for rough or structured surfaces
EML-HA... page 102



System marking, stick-on warning labels
PML-W... page 104



UniCard conductor marking for marking collars
UCT-WMT... page 110



Conductor marking for assembly with cable binders
WMTB HF page 113
Conductor marking carrier for assembly with cable binders
WM-CARRIER/B page 114



CRIMPFOX crimping pliers
CRIMPFOX ... page 120



VDE screwdriver set
SF... page 122
T-handle screwdriver
SF... page 123

Tools



Mounting material



Protective sleeves

WG-S... page 125
 WP-PA... page 126
 WP-SPIRAL... page 134
 WP-STEEL... page 138



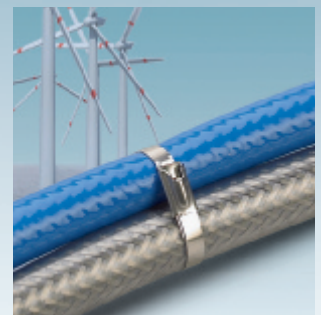
Screw connections

WP-G... page 128
 WP-GA... page 130
 WP-GR... page 132
 WP-G BRASS... page 140



Plastic cable binders

WT... page 146



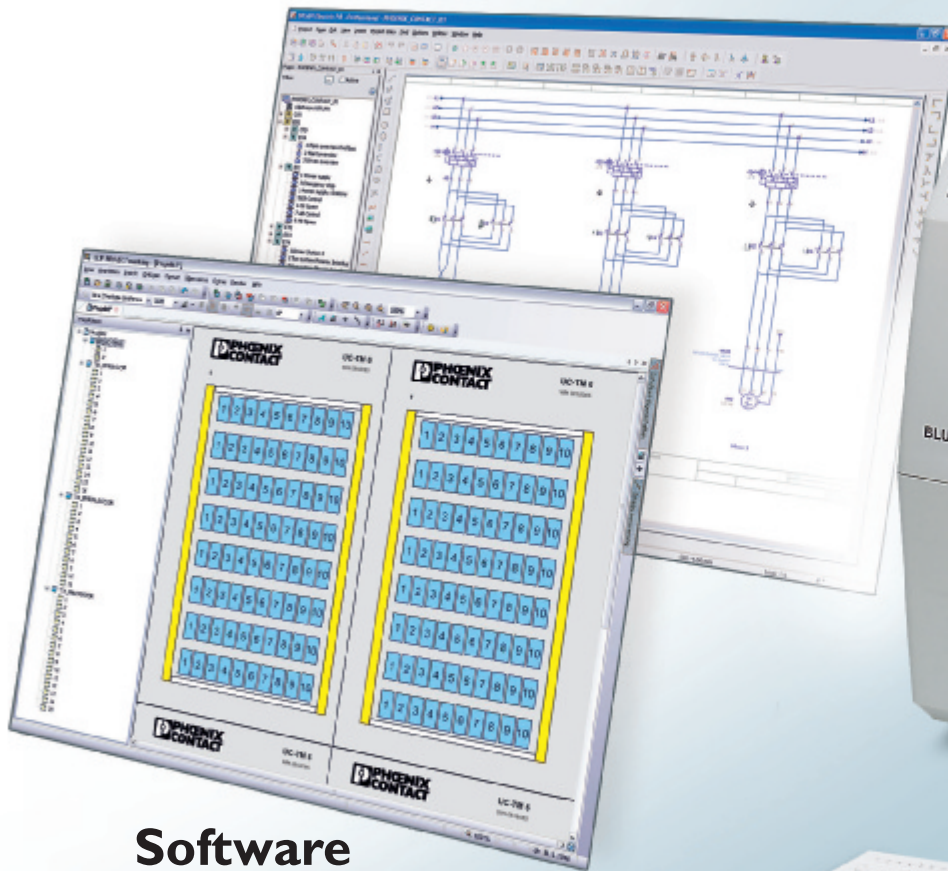
Stainless steel cable binders

WT-STEEL... page 152

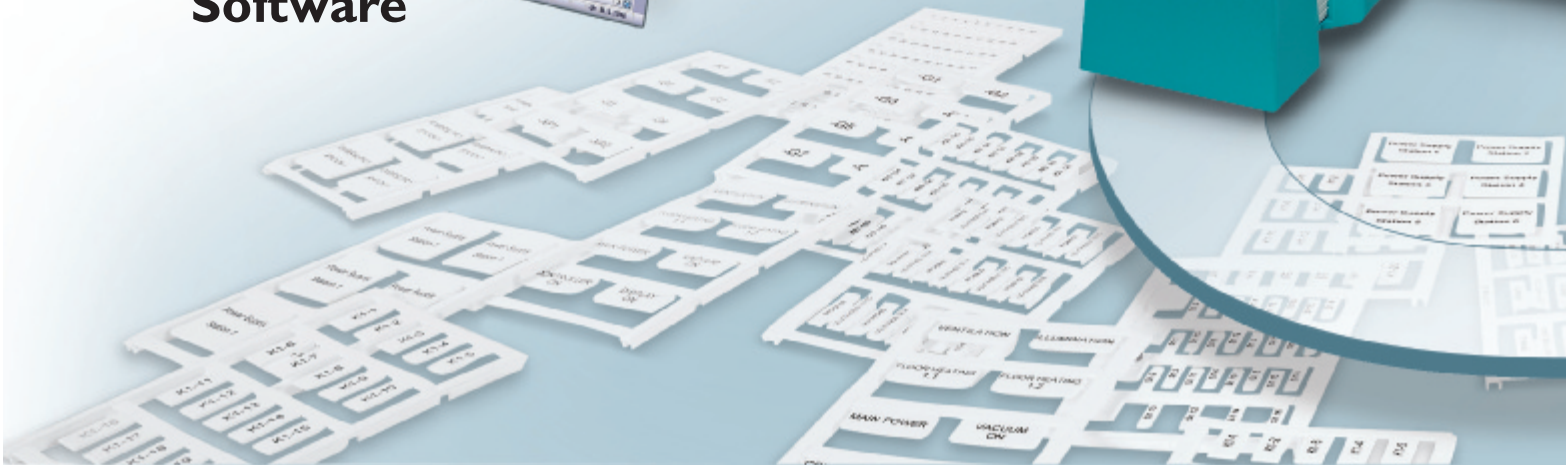
MARKING system

MARKING system is the intelligent solution for quick and easy labeling of terminals, conductors, cables, and devices. The labeling data is transferred from the CLIP PROJECT planning and marking software to the printers with just the click of a mouse. Whether your printing system involves a BLUEMARK CLED with UV LED technology, a thermal transfer printer or a plotter, a wide range of marking material is available.

Printer

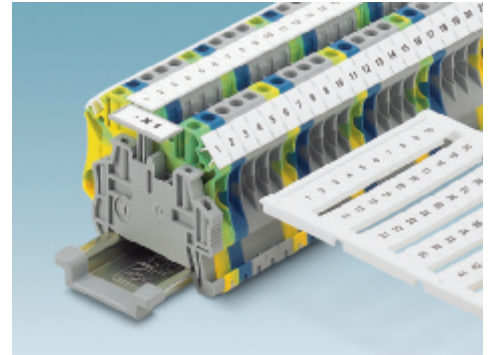


Software



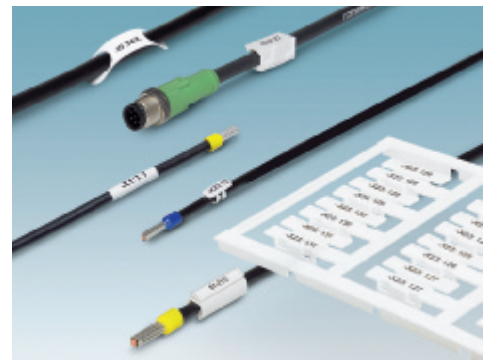
Terminal marking

Terminal block markers are available with or without labeling, in UniCard and UniSheet format, and in the form of rolls or normal sheets. Our labeling service also enables terminal markers to be labeled according to customer specifications.



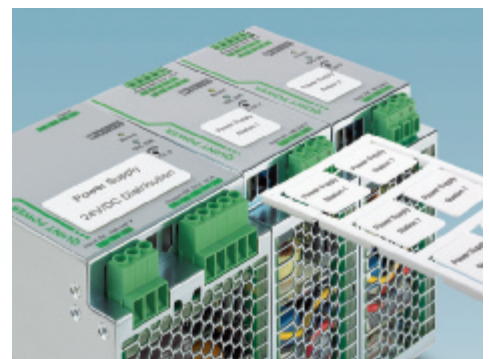
Conductor and cable marking

Conductors and cables can be labeled in numerous different ways. The markers can either be slid on, clipped or glued into place, or attached with cable binders. They are available unprinted or can be ordered from our labeling service printed to meet customer specifications.



Device marking

Various device markers are available for the optimum and individual labeling of control cabinets, switchgear, and their components. Our labeling service also enables markers to be labeled according to customer specifications.



Material

BLUEMARK CLED



MARKING system

The new BLUEMARK CLED makes labeling standardized UniCard material for terminal blocks, conductors, and device marking as easy as printing on paper. The printer receives labeling data directly from your CAE system via the CLIP PROJECT central planning and marking software.



Simple operation

- Order-specific printing, thanks to large replaceable magazine for up to 40 marker sheets
- Printing can be rotated by 180° as required, thanks to automatic material detection
- The front feed enables individual sheets to be labeled regardless of how the magazine is assembled



Easy operation

- Thanks to large color touch screen
- Direct entry of data and commands
- Clear symbols and plain text messages
- Ready to print as soon as device is switched on
- Language selection via touch screen menu



CLED – compact UV LED printing technology

Printing fluid is exposed to UV light which is the basis of our quick-dry printing concept. This light is generated with high intensity using 24 LEDs on a surface of 1 cm².

- Excellent printing quality
- No drying time
- High wipe and abrasion resistance
- Excellent resistance to chemicals
- Environmentally friendly, as solvent-free system



UV LED technology

Dimensions

General data	[mm]
Temperature range	[°C]
Print technology	
Volume	
Pressure capacity	
Interfaces	
Power supply	[V]
Weight	[kg]
Operating systems	
Power consumption	[W]

Description

Printer with solvent-free LED UV technology, including CLIP PROJECT advanced software, collection container for 20 sheets, CD with multilingual user manual, English/German user manual, driver and firmware, European and US power cable, USB cable

Set, consisting of: 1 x BLUEMARK CLED, Order No. 5147999, 1 x MARKING NOTEBOOK, CLIP-PROJECT PROFESSIONAL

With German operating system and German keyboard

With English operating system and English keyboard

Accommodating box, in conjunction with the BLUEMARK CLED-MAG 40, for accommodating 90 UC or UCT sheets

Fluid cartridge, replacement, 20 ml printing fluid, black

Replaceable magazine

For accommodating 20 UC or UCT sheets

For accommodating 40 UC or UCT sheets

Compartment

For accommodating 20 UC or UCT sheets

Transport case, with aluminum edges, for printer and accessories



Printers



Printing set for mats



Accomodating box

Technical Data		
Width	Length	Height
480	500	330
5 ... 35		
UV LED technology		
20 ml		
Approximately 10,000 markers/h (UC-TMF 4 with 2 characters/marker)		
10/100 Mbps Ethernet/USB 2.0		
100 ... 240/50 Hz ... 60 Hz		
16		
MS Windows XP, MS Windows Vista, MS Windows 7 (32/64-bit)		
74		

Technical Data		
Width	Length	Height
480	500	330
5 ... 35		
UV LED technology		
20 ml		
Approximately 10,000 markers/h (UC-TMF 4 with 2 characters/marker)		
10/100 Mbps Ethernet		
100 ... 240/50 Hz ... 60 Hz		
16		
MS Windows XP, MS Windows Vista, MS Windows 7 (32/64-bit)		
74		

Technical Data		
Width	Length	Height
400	470	160
-		
-		
-		
-		
-		
-		
-		
-		

Ordering data		
Type	Order No.	Pcs. / Pkt.
BLUEMARK CLED	5147999	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
BLUEMARK CLED SET	5147400	1
BLUEMARK CLED SET EN	5147401	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
BLUEMARK CLED-BASE	5146669	1

Accessories		
Type	Order No.	Pcs. / Pkt.
BLUEMARK CLED-FLUID-CARTR.	5146662	1
BLUEMARK CLED-MAG 20	5146655	1
BLUEMARK CLED-MAG 40	5146668	1
BLUEMARK CLED-STACKER 20	5146656	1
BLUEMARK CLED CASE	5146725	1

Accessories		
Type	Order No.	Pcs. / Pkt.
BLUEMARK CLED-FLUID-CARTR.	5146662	1
BLUEMARK CLED-MAG 20	5146655	1
BLUEMARK CLED-MAG 40	5146668	1
BLUEMARK CLED-STACKER 20	5146656	1
BLUEMARK CLED CASE	5146725	1

Accessories		
Type	Order No.	Pcs. / Pkt.

The MARKING system

THERMOMARK ROLL X1, thermal transfer printer for material off the roll



Thermo transfer for rolls



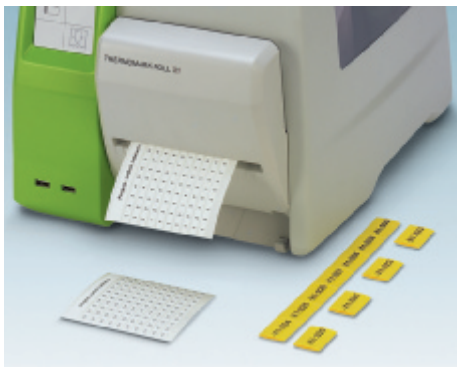
Printers

The THERMOMARK ROLL X1 rounds off the range of thermal transfer printers in style. This printer is suitable for labeling large quantities and offers the following features:

- Processing of all roll materials for terminal block, conductor, cable, and device marking, especially from large rolls
- Also accommodates large rolls; inside the printer housing, the label rolls are protected against environmental influences such as dust and dirt
- For all labels and shrink sleeves
- Maintenance-free operation with tried-and-tested thermal transfer printing technology
- High-quality, fast labeling
- Easy operating concept based on straightforward touch screen entry
- USB and Ethernet connections
- Easy to control with the CLIP PROJECT software

Cutting to length or perforating is easy

- Continuous media can be cut or perforated with a high degree of positioning accuracy (see figure below)



Dimensions		
		[mm]
General data		
Temperature range	[°C]	5 ... 40
Print resolution	[dpi]	300 dpi
Max. print width	[mm]	104
Max. printing length	[mm]	1000
Interfaces		10/100 Mbps Ethernet/USB 2.0
Power supply	[V]	100 ... 240/50 Hz ... 60 Hz
Weight	[kg]	5
Operating systems		MS Windows XP, MS Windows Vista, MS Windows 7 (32/64-bit)

Technical Data		
Width	Length	Height
264	412	245

Description	Color
Thermal transfer printer for material off the roll , including European power cable, US power cable, USB cable, DVD with CLIP PROJECT ADVANCED, CD with multilingual user manual/driver/firmware, A5 printed English/German user manual, one roll of EML (20x8) labels containing 1000 labels, one ink ribbon (50 meters)	gray

Ordering data		
Type	Order No.	Pcs. / Pkt.
THERMOMARK ROLL X1	5146723	1

Cutter , can be retrofitted, for precise cutting of continuous media into required lengths		
Perforation device , can be retrofitted, for perforating and cutting continuous media		

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK ROLL X1 CUTTER	5146765	1
THERMOMARK ROLL X1 CUTTER/P	5146766	1
THERMOMARK-RIBBON 110	5145384	1
THERMOMARK-RIBBON 110 BU	0829544	1
THERMOMARK-RIBBON 110 GN	0829542	1
THERMOMARK-RIBBON 110 RD	0829543	1

Ink ribbon , length: 300 m, width: 110 mm	black	
	blue	
	green	
	red	

Ink ribbon, specifically for high-temperature labels, EML-HT...

THERMOMARK-RIBBON 110-EML-HT	0800342	1
-------------------------------------	---------	---

Ink ribbon, specifically for WMS... shrink sleeves, length: 300 m, width: 110 mm

THERMOMARK-RIBBON 110-WMSU	0801358	1
THERMOMARK-RIBBON 110-WMSU WH	0801359	1

Ink ribbon, specifically for WMS... shrink sleeves, length: 300 m, width: 64 mm

THERMOMARK-RIBBON 64-WMSU	0801360	1
THERMOMARK-RIBBON 64-WMSU WH	0801361	1

Ink ribbon, specifically for cable markers for assembly with cable binders, WMTB HF..., length: 300 m, width: 110 mm

THERMOMARK-RIBBON 110-WMTB HF	5148007	1
--------------------------------------	---------	---

Transport case

THERMOMARK ROLL X1-CASE	5146724	1
--------------------------------	---------	---

Thermal transfer printer sets



Thermal transfer for sheets and cards



Thermo transfer for rolls



Printing set, complete

MARKING BOX is the complete labeling system for all terminal block, conductor, cable, and device marking applications. It is available for various country-specific keyboard and operating systems.

- Includes the THERMOMARK CARD printer for all materials in the UniCard (UCT) and UniSheet (US) formats
- Includes the THERMOMARK ROLL printer for all labels and shrink sleeves supplied in rolls
- Includes a powerful notebook with pre-installed CLIP PROJECT configuration and marking software, as well as the printer drivers required to enable quick startup without any need for installation and setup work. Plug and print. Simply connect the devices via USB and you're ready to print
- The compact and rugged THERMOMARK printers are optimally suited to mobile use on site

Description	Type	Order No.	Pcs. / Pkt.
Set, consisting of: 1 x THERMOMARK CARD, Order No. 5146464, 1 x THERMOMARK ROLL, Order No. 5146477, 1 x MARKING NOTEBOOK, CLIP-PROJECT PROFESSIONAL			
German operating system and keyboard	MARKING BOX	5147100	1
German operating system and Swiss keyboard	MARKING BOX DE CH	0801749	1
English operating system and US international keyboard	MARKING BOX EN	5147101	1
English operating system and Belgian keyboard	MARKING BOX EN BE	0801742	1
French operating system and keyboard	MARKING BOX FR FR	0801590	1
Spanish operating system and keyboard	MARKING BOX ES ES	0801747	1
Italian operating system and keyboard	MARKING BOX IT IT	0801745	1
Polish operating system and US international keyboard	MARKING BOX PL US	0801744	1
Hungarian operating system and keyboard	MARKING BOX HU HU	0801750	1
Portuguese operating system and keyboard	MARKING BOX PT PT	0801748	1
Danish operating system and keyboard	MARKING BOX DK DK	0801741	1
Swedish operating system and keyboard	MARKING BOX SE SE	0801740	1

Ordering data

Type	Order No.	Pcs. / Pkt.
MARKING BOX	5147100	1
MARKING BOX DE CH	0801749	1
MARKING BOX EN	5147101	1
MARKING BOX EN BE	0801742	1
MARKING BOX FR FR	0801590	1
MARKING BOX ES ES	0801747	1
MARKING BOX IT IT	0801745	1
MARKING BOX PL US	0801744	1
MARKING BOX HU HU	0801750	1
MARKING BOX PT PT	0801748	1
MARKING BOX DK DK	0801741	1
MARKING BOX SE SE	0801740	1

Printer accessories

Accessories

www.phoenixcontact.net/catalog



The MARKING system

Thermal transfer printer sets, for cards



Thermal transfer for sheets and cards



Print set for cards and mats

The THERMOMARK CARD SET is the labeling system for all terminal block, conductor, cable, and device marking applications. It is available for various country-specific keyboard and operating systems.

- Includes the THERMOMARK CARD printer for all materials in the UniCard (UCT) and UniSheet (US) formats
- Includes a powerful notebook with pre-installed CLIP PROJECT configuration and marking software, as well as the printer drivers required to enable quick startup without any need for installation and setup work. Plug and print. Simply connect the devices via USB and you're ready to print

Notes:

For printer accessories, see www.phoenixcontact.net/catalog



Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Printing set , consisting of: 1 x THERMOMARK CARD, Order No. 5146464, 1 x MARKING NOTEBOOK, CLIP-PROJECT PROFESSIONAL German operating system and keyboard	THERMOMARK CARD SET	5147200	1
German operating system and Swiss keyboard	THERMOMARK CARD SET DE CH	5147220	1
English operating system and US international keyboard	THERMOMARK CARD SET EN	5147201	1
English operating system and Belgian keyboard	THERMOMARK CARD SET EN BE	5147214	1
French operating system and keyboard	THERMOMARK CARD SET FR FR	0801591	1
Spanish operating system and keyboard	THERMOMARK CARD SET ES ES	5147218	1
Italian operating system and keyboard	THERMOMARK CARD SET IT IT	5147217	1
Polish operating system and US international keyboard	THERMOMARK CARD SET PL US	5147215	1
Hungarian operating system and keyboard	THERMOMARK CARD SET HU HU	5147221	1
Portuguese operating system and keyboard	THERMOMARK CARD SET PT PT	5147219	1
Russian operating system and keyboard	THERMOMARK CARD SET RU RU	5147211	1
Danish operating system and keyboard	THERMOMARK CARD SET DK DK	5147213	1
Swedish operating system and keyboard	THERMOMARK CARD SET SE SE	5147212	1

Thermal transfer printer sets, for material off the roll



Thermo transfer for rolls



Printing set for material provided on rolls

The THERMOMARK ROLL SET is the labeling system for all terminal block, conductor, cable, and device marking applications. It is available for various country-specific keyboard and operating systems.

- Includes the THERMOMARK ROLL printer for all labels and shrink sleeves supplied in rolls
- Includes a powerful notebook with pre-installed CLIP PROJECT configuration and marking software, as well as the printer drivers required to enable quick startup without any need for installation and setup work. Plug and print. Simply connect the devices via USB and you're ready to print

Notes:

For printer accessories, see www.phoenixcontact.net/catalog



Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Printing set , consisting of: 1 x THERMOMARK ROLL, Order No. 5146477, 1 x MARKING NOTEBOOK, CLIP-PROJECT PROFESSIONAL German operating system and keyboard	THERMOMARK ROLL SET	5147300	1
German operating system and Swiss keyboard	THERMOMARK ROLL SET DE CH	5147230	1
English operating system and US international keyboard	THERMOMARK ROLL SET EN	5147301	1
English operating system and Belgian keyboard	THERMOMARK ROLL SET EN BE	5147225	1
French operating system and keyboard	THERMOMARK ROLL SET FR FR	0801592	1
Spanish operating system and keyboard	THERMOMARK ROLL SET ES ES	5147228	1
Italian operating system and keyboard	THERMOMARK ROLL SET IT IT	5147227	1
Polish operating system and US international keyboard	THERMOMARK ROLL SET PL US	5147226	1
Hungarian operating system and keyboard	THERMOMARK ROLL SET HU HU	5147231	1
Portuguese operating system and keyboard	THERMOMARK ROLL SET PT PT	5147229	1
Russian operating system and keyboard	THERMOMARK ROLL SET RU RU	5147222	1
Danish operating system and keyboard	THERMOMARK ROLL SET DK DK	5147224	1
Swedish operating system and keyboard	THERMOMARK ROLL SET SE SE	5147223	1



Explicit marking of electrical and electronic control cabinet components is essential for safe and efficient work. As with comprehensive technical documentation, labeling all operating equipment increases the availability of the switchgear and simplifies maintenance. Last but not least, equipment identification improves the quality of the control cabinets and systems. Phoenix Contact offers a wide range of labels and tags. Depending on the type, they can be labeled using BLUEMARK, thermal transfer printers, the plotter, engraving devices, commercially available desktop laser printers or by hand.

For the BLUEMARK and THERMOMARK CARD, there is a complete range of plastic labels available for control cabinets as well as for buttons and switchgear. The labels of all the various printing systems feature a high level of wipe and scratch resistance. The self-adhesive labels are made from a two-layer material and are highly durable, e.g., where buttons and switches are subject to frequent use. The best way to mark these labels is to use the engraving device of the CMS-P1-PLOTTER plotter.

Please contact us if you are unable to find a suitable size or color for your application from the options available in our product range. It goes without saying that Phoenix Contact also offers a comprehensive engraving and labeling service for device marking applications. Test us out!

UniCard snap-in device marking for devices from other manufacturers



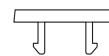
Can be printed with:



Thermal transfer for sheets and cards



UV LED technology



PRINTED FOR YOU



The UCT-EM ... UniCard labeling range includes markers for devices and switchgear from a wide range of manufacturers.

- The markers, which are supplied in uniform sheets, can be labeled quickly and easily using the BLUEMARK CLED and THERMOMARK CARD products
- The format automatically ensures printing with a high level of positional accuracy
- The large temperature range for application means that the labels can be used in control cabinets as well as in the field
- The sheets provide space for including function texts
- **An overview of the devices that support labeling plus their manufacturers can be found starting on page 88**

General data

Can be printed with:

Number of individual labels
 Material
 Inflammability class according to UL 94
 Temperature range [°C]
 Wipe resistance
 Components

Technical Data

THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED

66
 PC
 V0
 -40 ... 120
 DIN EN 61010-1 (VDE 0411-1)
 free from silicone and halogen

Description	Color
UniCard , for labeling devices from the following manufacturers: CONTA-CLIP, MURR ELEKTRONIK Lettering field size: 5 x 10 mm	white
UniCard , for labeling devices from the following manufacturers: see previous products, labeled according to customer specifications¹⁾ Lettering field size: 5 x 10 mm	white

Magazine, for THERMOMARK CARD, for accommodating:
 UCT-TM ..., UCT1-TM ..., UCT5-TM ..., UCT-EM (5X10), UCT-EM (6X10)

Ordering data

Type	Order No.	Pcs. / Pkt.
UCT-EM (5X10)	0801497	10
UCT-EM (5X10) CUS	0801583	1

Accessories

THERMOMARK CARD-UCT-MAG1	5146480	1
--------------------------	---------	---

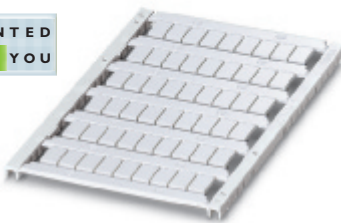
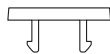
Notes:

¹⁾ For ordering example, see page 117.

The MARKING system

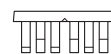
UniCard snap-in device marking for devices from other manufacturers

– An overview of the devices that support labeling plus their manufacturers can be found starting on page 88



Notes:
1) For ordering example, see page 117.

General data		Technical Data			Technical Data		
Can be printed with:		THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED			THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED		
Number of individual labels		54		60			
Material		PC		PC			
Inflammability class according to UL 94		V0		V0			
Temperature range	[°C]	-40 ... 120		-40 ... 120			
Wipe resistance		DIN EN 61010-1 (VDE 0411-1)		DIN EN 61010-1 (VDE 0411-1)			
Components		free from silicone and halogen		free from silicone and halogen			
Description		Ordering data			Ordering data		
	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
UniCard , for labeling devices from the following manufacturers: CONTA-CLIP, FESTO, FINDER		UCT-EM (6X10)	0801493	10	UCT-EM (10X5)	0801470	10
Lettering field size: 6 x 10 mm	white						
UniCard , for labeling devices from the following manufacturers: Beckhoff, ESCHA, LUMBERG, MURR ELEKTRONIK, PEPPERL & FUCHS, TURCK							
Lettering field size: 10 x 5 mm	white						
UniCard , for labeling devices from the following manufacturers: SIEMENS							
Lettering field size: 10 x 7 mm	white						
Lettering field size: 10 x 7 mm	turquoise						
UniCard , for labeling devices from the following manufacturers: ifm-electronic, PHOENIX CONTACT, SIEMENS							
24-section, lettering field size: 20 x 7 mm	white						
24-section, lettering field size: 20 x 7 mm	turquoise						
UniCard , for labeling devices from the following manufacturers: BOSCH/REXROTH, ifm-electronic, LUMBERG, PEPPERL & FUCHS, SIEMENS							
Lettering field size: 10 x 8 mm	white						
Lettering field size: 10 x 8 mm	turquoise						
UniCard , for labeling devices from the following manufacturers: BERNECKE + RAINER							
Lettering field size: 12 x 3.3 mm	white						
Lettering field size: 12 x 6 mm	white						
UniCard , for labeling devices from the following manufacturers: see previous products, labeled according to customer specifications¹⁾		UCT-EM (6X10) CUS	0801579	1	UCT-EM (10X5) CUS	0801568	1
Lettering field size: 6 x 10 mm	white						
Lettering field size: 10 x 5 mm	white						
Lettering field size: 10 x 7 mm	white						
Lettering field size: 10 x 7 mm	turquoise						
24-section, lettering field size: 20 x 7 mm	white						
24-section, lettering field size: 20 x 7 mm	turquoise						
Lettering field size: 10 x 8 mm	white						
Lettering field size: 10 x 8 mm	turquoise						
Lettering field size: 12 x 3.3 mm	white						
Lettering field size: 12 x 6 mm	white						
Magazine		Accessories			Accessories		
Magazine , for THERMOMARK CARD, for accommodating: UCT-TM ..., UCT1-TM ..., UCT5-TM ..., UCT-EM (5X10), UCT-EM (6X10)		THERMOMARK CARD-UCT-MAG1	5146480	1	THERMOMARK CARD-UCT-MAG13	0830400	1
for accommodating UCT-EM (10X5)							
for accommodating UCT-EM (10X7)							
for accommodating UCT-EM (17.5X8), UCT-EM (20X7)							
for accommodating UCT-EM (10X8), UCT-EM (12X7)							
for accommodating UCT-EM (12X3.3), UCT-EM (12X6)							



PRINTED
FOR YOU



PRINTED
FOR YOU



PRINTED
FOR YOU



Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
36
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
36
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
30
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (10X7) UCT-EM (10X7) TQ	0801498 0801499	10 10
UCT-EM (20X7) UCT-EM (20X7) TQ	0801494 0801495	10 10
UCT-EM (10X7) CUS UCT-EM (10X7) TQ CUS UCT-EM (20X7) CUS UCT-EM (20X7) TQ CUS	0801585 0801586 0801580 0801581	1 1 1 1

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (10X8) UCT-EM (10X8) TQ	0801485 0801486	10 10
UCT-EM (10X8) CUS UCT-EM (10X8) TQ CUS	0801570 0801572	1 1

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (12X3,3) UCT-EM (12X6)	0801502 0801503	10 10
UCT-EM (12X3,3) CUS UCT-EM (12X6) CUS	0801577 0801578	1 1

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG20 THERMOMARK CARD-UCT-MAG8	0830751 0801735	1 1

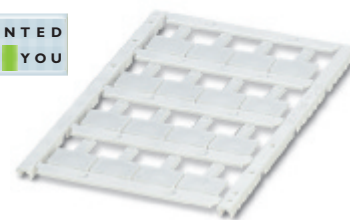
Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG12	0830399	1

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG9	0801736	1

The MARKING system

UniCard snap-in device marking for devices from other manufacturers

– An overview of the devices that support labeling plus their manufacturers can be found starting on page 88

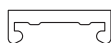


Notes:
 1) For ordering example, see page 117.

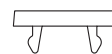
General data		Technical Data			Technical Data		
Can be printed with:		THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED			THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED		
Number of individual labels		30			16		
Material		PC			PC		
Inflammability class according to UL 94		V0			V0		
Temperature range		-40 ... 120 [°C]			-40 ... 120		
Wipe resistance		DIN EN 61010-1 (VDE 0411-1)			DIN EN 61010-1 (VDE 0411-1)		
Components		free from silicone and halogen			free from silicone and halogen		
Description		Ordering data			Ordering data		
Color		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
UniCard , for labeling devices from the following manufacturers: Beckhoff, Wago Lettering field size: 12 x 7 mm		UCT-EM (12X7)	0801501	10			
white UniCard , for labeling devices from the following manufacturers: Siemens Lettering field size: 15 x 10 mm					UCT-EM (15X10)	0801504	10
white UniCard , for labeling devices from the following manufacturers: ABB, FESTO, FINDER, MURR ELEKTRONIK, Wago Lettering field size: 17 x 9 mm							
white Lettering field size: 17 x 9 mm							
yellow UniCard , for labeling devices from the following manufacturers: Allen Bradley, FESTO Lettering field size: 17 x 10 mm							
white Lettering field size: 17 x 10 mm							
yellow UniCard , for labeling devices from the following manufacturers: ABB, Lumberg Lettering field size: 17.5 x 7.5 mm							
white UniCard , for labeling devices from the following manufacturers: see previous products, labeled according to customer specifications¹⁾ Lettering field size: 12 x 7 mm		UCT-EM (12X7) CUS	0801587	1			
white Lettering field size: 15 x 10 mm					UCT-EM (15X10) CUS	0801588	1
white Lettering field size: 17 x 9 mm							
yellow Lettering field size: 17 x 9 mm							
white Lettering field size: 17 x 10 mm							
yellow Lettering field size: 17 x 10 mm							
white Lettering field size: 17.5 x 7.5 mm							
Magazine		Accessories			Accessories		
Magazine , for THERMOMARK CARD, for accommodating: UCT-EM (10X8), UCT-EM (12X7)		THERMOMARK CARD-UCT-MAG12	0830399	1			
for accommodating UCT-EM (15X10)					THERMOMARK CARD-UCT-MAG19	0830406	1
for accommodating UCT-EM (17X9)							
for accommodating UCT-EM (17X10)							
for accommodating UCT-EM (17.5X7.5) and UCT-EM (17X9)							



PRINTED
FOR YOU



PRINTED
FOR YOU



PRINTED
FOR YOU



Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
24
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
20
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
24
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (17X9) UCT-EM (17X9) YE	0801475 0801476	10 10
UCT-EM (17X9) CUS UCT-EM (17X9) YE CUS	0801559 0801560	1 1

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (17X10) UCT-EM (17X10) YE	0801483 0801484	10 10
UCT-EM (17X10) CUS UCT-EM (17X10) YE CUS	0801567 0801569	1 1

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (17,5X7,5)	0801482	10
UCT-EM (17,5X7,5) CUS	0801566	1

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG16	0830403	1

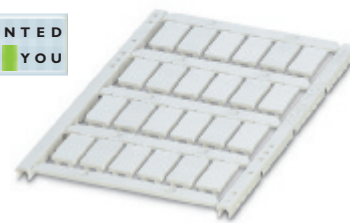
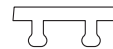
Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG11	0801738	1

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG18	0830405	1

The MARKING system

UniCard snap-in device marking for devices from other manufacturers

– An overview of the devices that support labeling plus their manufacturers can be found starting on page 88



Notes:
 1) For ordering example, see page 117.

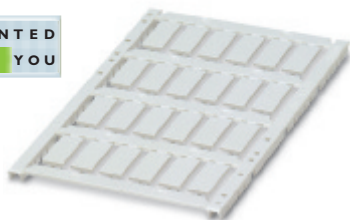
General data	Technical Data	Technical Data
Can be printed with:	THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED	THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
Number of individual labels	24	24
Material	PC	PC
Inflammability class according to UL 94	V0	V0
Temperature range	[-40 ... 120] [°C]	-40 ... 120
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)	DIN EN 61010-1 (VDE 0411-1)
Components	free from silicone and halogen	free from silicone and halogen

Description	Color	Ordering data			Ordering data		
Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.		
UniCard , for labeling devices from the following manufacturers: ABB, ifm-electronic, Moeller, MURR ELEKTRONIK			UCT-EM (17,5X8)	0801496	10		
Lettering field size: 17.5 x 8 mm	white						
UniCard , for labeling devices from the following manufacturers: MURR ELEKTRONIK, Phoenix Contact, Weidmüller							
Lettering field size: 17.5 x 9 mm	white		UCT-EM (17,5X9)	0801491	10		
Lettering field size: 17.5 x 9 mm	yellow		UCT-EM (17,5X9) YE	0801492	10		
UniCard , for labeling devices from the following manufacturers: ABB, Schneider Electric Group, ifm-electronic, MURR ELEKTRONIK							
Lettering field size: 18 x 8 mm	white						
UniCard , for labeling devices from the following manufacturers: ABB, Schneider Electric Group, ifm-electronic, MURR ELEKTRONIK							
18-section, lettering field size: 21 x 8 mm	white						
UniCard , for labeling devices from the following manufacturers: ESCHA, MURR ELEKTRONIK, Turck							
Lettering field size: 20 x 8 mm	white						
UniCard , for labeling devices from the following manufacturers: ABB, CONTA-CLIP, ESCHA, FESTO, ifm-electronic, Lumberg, Moeller, MURR ELEKTRONIK, Pepperl & Fuchs, Phoenix Contact, Siemens, Turck, Weidmüller							
Lettering field size: 20 x 9 mm	white						
Lettering field size: 20 x 9 mm	yellow						
Lettering field size: 20 x 9 mm	turquoise						
UniCard , for labeling devices from the following manufacturers: see previous products, labeled according to customer specifications¹⁾			UCT-EM (17,5X8) CUS	0801582	1		
Lettering field size: 17.5 x 8 mm	white						
Lettering field size: 17.5 x 9 mm	white		UCT-EM (17,5X9) CUS	0801575	1		
Lettering field size: 17.5 x 9 mm	yellow		UCT-EM (17,5X9) YE CUS	0801576	1		
Lettering field size: 18 x 8 mm	white						
18-section, lettering field size: 21 x 8 mm	white						
Lettering field size: 20 x 8 mm	white						
Lettering field size: 20 x 9 mm	white						
Lettering field size: 20 x 9 mm	yellow						
Lettering field size: 20 x 9 mm	turquoise						

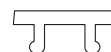
Accessories			Accessories			
Magazine , for THERMOMARK CARD, for accommodating: UCT-EM (17.5X8), UCT-EM (20X7)	THERMOMARK CARD-UCT-MAG8	0801735	1	THERMOMARK CARD-UCT-MAG18	0830405	1
for accommodating UCT-EM (17.5X7.5) and UCT-EM (17X9)						
for accommodating UCT-EM (18X8)						
for accommodating UCT-EM (21X8)						
for accommodating UCT-EM (20X8)						
for accommodating UCT-EM (20X9)						



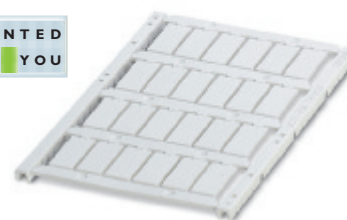
PRINTED
FOR YOU



PRINTED
FOR YOU



PRINTED
FOR YOU



Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
24
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
24
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED
24
PC
V0
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (18X8)	0801488	10
UCT-EM (21X8)	0801489	10
UCT-EM (18X8) CUS	0801573	1
UCT-EM (21X8) CUS	0801574	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (20X8)	0801477	10
UCT-EM (20X8) CUS	0801561	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (20X9)	0801471	10
UCT-EM (20X9) YE	0801472	10
UCT-EM (20X9) TQ	0801473	10
UCT-EM (20X9) CUS	0801556	1
UCT-EM (20X9) YE CUS	0801557	1
UCT-EM (20X9) TQ CUS	0801558	1

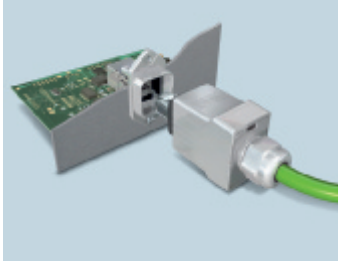
Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG17	0830404	1
THERMOMARK CARD-UCT-MAG14	0830401	1

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG21	0830752	1

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG15	0830402	1

The MARKING system

Device marking for Phoenix Contact



PLUSCON

Data front plate VS-SI...

Modular contact insert HC-M...

SACB-SPEEDCON distributor boxes with M12 slots and metal threads

SACB-SPEEDCON distributor boxes with M12 slots and plug-in screw connection

Distributor boxes with QUICKON slots

UCT-EM (17,5X9)

UCT-EM (20X7)

UCT-EM (20X9)



INTERFACE

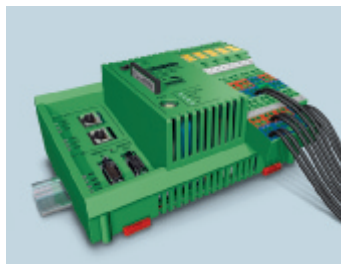
Inverter module DEK-TR...

Power supply sockets SD-D/..., SD-F/..., SD-US/...

INTERFACE Relay PLC power terminal block
Order No. 2966508

UCT-EM (17,5X9)

UCT-EM (20X9)



AUTOMATION

Axioline modules

EMT (35X28)

EMT (35X46)

Device marking for devices from other manufacturers



* See CLIPLINE catalog, part 2.

	UCT-EM (10X5)	UCT-EM (10X8)	UCT-EM (12X3,3)	UCT-EM (12X6)	UCT-EM (12X7)	UCT-EM (17X9)	UCT-EM (17,5X7,5)	UCT-EM (17,5X8)	UCT-EM (17X10)	UCT-EM (18X8)	UCT-EM (20X9)	UCT-EM (21X8)	UCT-TMF 6*
ABB	[Solid blue bar]												
Miniature circuit breakers S 221... - S 223..., S 281..., - S 284...							█						
Residual current device F271... F172...							█						
Switch, button, indicator light E 221..., E 222..., E 223...							█						
Switch, button, indicator light E 225..., E 226..., E 227..., E 227...							█						
Power dimmer STD..., power supply unit NTLS...							█						
Power distributor counter RS-232...							█						
Installation contactor ESB..., EN...							█						
Miniature circuit breakers LE1..., LE3..., LP1-3..., LPUC 1/2, LP1NA..., LP3NA...							█						
Residual current device F..., FIP..., FIK..., FI-LP..., FIS...							█						
FI signal encoder FISG..., load switch IS...							█						
Surge arrester SA 4...							█						
Logic modules							█						
Logic and extension module LM..., DO..., DX...								█					
Miniature circuit breaker						█							
Switch contacts A9, A12, A16, A26, A30, A40, A50, A63, A75, A95, A110, A145, A185, A210, A260, A300, AF400, AF460, AF580, AF750										█			
Mini contacts B6, B7										█			
SZ-KZS											█		
Switch contacts A9, A12, A16, A26, A30, A40, A50, A63, A75, A95, A110, A145, A185, A210, A260, A300, AF400, AF460, AF580, AF750												█	
Mini contacts B6, B7												█	
Allen Bradley	[Solid blue bar]												
100-C09Z*10, 100-F A22, 100-F A40										█			
Motor starter 140M x										█			
Beckhoff	[Solid blue bar]												
BK 3010, BK 3110						█							
BC 2000, BC 3100, BC 4000						█							█
BC 9000, BC 9050						█							█
Field distributor IE 3112-2-00	█												
IL 2301-B310	█												
SAI distributor (sensor/actuator interface)	█												
Bernecke + Rainer	[Solid blue bar]												
X20 system			█	█									
Bosch/Rexroth	[Solid blue bar]												
Bosch/distributor		█											

The MARKING system

Device marking for devices from other manufacturers



	UCT-EM (5X10)	UCT-EM (6X10)	UCT-EM (10X5)	UCT-EM (17X9)	UCT-EM (17X10)	UCT-EM (18X8)	UCT-EM (20X8)	UCT-EM (20X9)	UCT-EM (21X8)
CONTA-CLIP									
PRSU	■								
CP V4, optocoupler, AOP		■							
PGSV, PSP								■	
ESCHA									
Distributor block MB			■						
Distributor block FK/FKS							■	■	
M12 distributor								■	
Distributor 8MB								■	
FESTO									
Compact Performance		■							
CPA10/EV1		■							
CP-E16 valve island		■							
CP-E16-KL-CL		■							
Electronics CP-16-M		■							
IBS 6x10		■							
MPV-E/A08-M8, MPV-E/A08-M12, MPV-E/A12-M8		■							
CPV pneumatics		■							
IBS 9/17				■					
IBS 10/17					■				
MT					■				
Valve island IBS 9/20								■	
CPV18-V1 valves								■	
Finder									
Variclip (relay retaining bracket)				■					
Variclip 020.24				■					
Sockets with screw and spring-cage terminal block, series 93		■							
Group Schneider Electric									
Standard contactors GC 1610, 1611, 1620, 2502, 2510, 2511, 2520							■		
"Dual tariff" contactors GY 1611, 1620, 2511, 2520							■		
TeSys model U							■		
Standard contactors GC 1622, 1630, 1640, 2504, 2522, 2530, 2540, 4002, 4004, 4011, 4020, 4022, 4030, 4040, 6302, 6304, 6311, 6320, 6322, 6330, 6340, 10020, 10040									■
"Dual tariff" contactors GY 1640, 2530, 2540, 4020, 4030, 4040, 6320, 6330, 6340									■
Motor adjustment combination TeSys LD1...									■
Motor adjustment combination HL contactors LD 4...									■
Motor output combination/reversing combination LD5...									■



	UCT-EM (10X5)	UCT-EM (10X8)	UCT-EM (17,5X7,5)	UCT-EM (17,5X8)	UCT-EM (18X8)	UCT-EM (20X7)	UCT-EM (20X9)	UCT-EM (21X8)
ifm-electronic								
AC 20 xx classic module/universal M		■						
AC 24 80/81 Compact Line		■						
AC 50 xx module lower parts		■						
Active AS-i module AC2480...		■						
AC 5210 ASI module				■				
AV 52xx Classic Line				■				
AC 225 Smart Line					■			
Active AS-i module AC 225...						■		
Compact module AC 24 xx							■	
AC 225 Smart Line								■
Lumberg								
AS-Interface ABAS/UTAS		■						
AS-Interface module ASL 501		■						
Terminal strip SBS4/LED-3		■						
Distributors E2C and SB8		■						
AS-Interface IBA, IBI, IBP							■	
ASB 2-VC-1A, ASB 8							■	
Valve adapter VAD..., VBD...							■	
I/O module UEM...							■	
ASBM 12/LED 3, ASBSM 4/LED 3	■							
PROFIBUS 0970-PSL-651	■							
INTERBUS remote bus terminal block			■					
PROFIBUS DP..			■					
CANopen-compliant device CSL			■					
DeviceNet-compliant device DSL			■					
AS-Interface module			■					
Ethernet switch EEC...			■					
Actuator/sensor box ASB			■					
Moeller								
Function relay DILET 11 ..., DILET 70 ..., EMR 4 ...				■				
Basic device and extension module EASY 2 ..., EASY 5 ..., EASY 6 ..., EASY 7 ..., EASY 200 ...				■				
Relay ZE ..., ZEV ...				■				
Contactors, DILER, DILEM							■	

The MARKING system

Device marking for devices from other manufacturers



	UCT-EM (5X10)	UCT-EM (10X5)	UCT-EM (10X8)	UCT-EM (17X9)	UCT-EM (17,5X8)	UCT-EM (17,5X9)	UCT-EM (18X8)	UCT-EM (20X8)	UCT-EM (20X9)	UCT-EM (21X8)
MURR ELEKTRONIK										
ASI IO SL DIO 8/4/4	■									
M8 distributors	■									
MSUD valve plug combination	■									
AS-i bus module MVK8	■									
MVPS8 sensor/actuator box	■									
B6 mini contact							■			■
Initiator holder					■					
M12 Y cable		■								
Plastic M12 distributor systems						■				
MERINO										
Merio M12 8-way distributor 27106				■						
MVK12 AS-i bus module				■						
MVM8 Order No. 276658				■						
MVP 12 distributor: 4-way 27114				■						
MVP 12 distributor: 6-way 27115				■						
MVP 12 distributor: 8-way 27116				■						
MVP 12 AS-i module distributor 27773 to 27778				■						
Cube 67								■		
MASI								■		
MICO 4.6								■		
MVP 12 distributor: 4-way 27530, MVP 12 distributor: 8-way 27535								■		
MVK MP DI 08, DI 8 PROFIBUS								■		
AMMS/AMMDS									■	
AMZS/AMZSW, Order No. 276397									■	
AS/S01/DIL/RC-BUG2									■	
Cube 67 BN-P, KM 5, Logic distributor 8-way M12, Order No. 276247									■	
M12 distributor; MAW/MDW, MBM bus modules IP 20, MBV series									■	
MIS system wiring, MKS/MKSxxx, MPOT, MSUD valve connection technology									■	
MSVD/MSDO, MSVS, MUFW/ME...W/MIB									■	
MVK-I bus module Order No. ME 553300									■	
NEF mains interference filter, RMM/RMME, UFL/UG-SB/UGS/SV/LUGS/PKB									■	
Valve plug design A, B, BI, C, CI, distributor MVB 8V									■	
Pepperl & Fuchs										
G6 compact modules		■								
AS-i VAA-2E-64SN (pneumatic module VAA)			■							
AS-i bus module, G6 compact module, IPG-64-B7			■							
VAS 2A-K 12 U, WA-4E-62-ZE									■	



Siemens

Auxiliary switch blocks 3RH 1921...

ET 200SP

Bus module ET 200X, contact block, Signum button series, button 3SB3, switching element 3SB14..., AS-i compact module K20..., AS-i repeater, 4-way distributor; round cable distributor; AS-i Slaves surge protection module

AS-i Slaves Slim Line S22.5.../S45..., AS-i Slaves counter module, earth fault detection module, contactor, auxiliary contactor, contactor combination auxiliary switch block, motor circuit breaker, auxiliary switch blocks 3RH 1921..., EMC interference suppression module, solid-state relay, solid-state contactor, special function module, circuit breaker; el. overload relay, therm. overload relay, soft starter, direct starter, motor management and control units, timer relay, monitoring relay, safety relay, S7-300

End block 8VA1 808, AS-i Slaves I/O module K45.../K60..., ASIsafe module K45.../K60..., mounting plate K45/K60

Turck

PLC distributor SDPB-0404D-006, SDPL-0404D-1003, SAI distributor

JTBS-46SC

8MB12-xxx, FLDP-IM-8, PDP-M81/I16T

Wago

Miniature circuit breaker

I/O modules

Weidmüller

M12 metal distributor systems

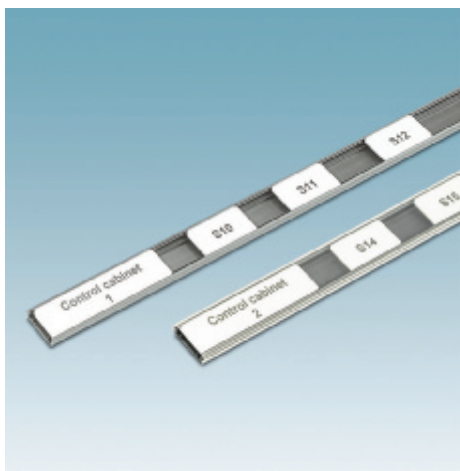
SAI distributor; M12 distributor systems

UCT-EM (6X10)	UCT-EM (10X5)	UCT-EM (10X7)	UCT-EM (10X8)	UCT-EM (12X7)	UCT-EM (15X10)	UCT-EM (17X9)	UCT-EM (17,5X9)	UCT-EM (20X7)	UCT-EM (20X8)	UCT-EM (20X9)
[Solid bar]										
		█								
					█					
			█							
								█		
										█
[Solid bar]										
		█								
									█	
										█
[Solid bar]										
					█					
								█		
										█
[Solid bar]										
										█

The MARKING system

UniSheet device marking that can be snapped into marker carriers

Can be printed with:



Thermal transfer for sheets and cards



Unlabeled

The US-EMP ... UniSheet device markers can be easily and individually snapped into the CARRIER(/L)-EMP (1000X15)... marker profile. They offer the following advantages and are suitable for the following:

- Device marking
- Module marking
- Switchgear marking
- The labels are available in different sizes corresponding to common device pitch measurements
- The markers, which are supplied in uniform sheets, can be printed onto quickly, easily, and cost-effectively using the THERMOMARK CARD printer
- The perforated markers are easy to separate and can be easily fitted
- The sheets provide space for including function texts

Marking of power circuit breakers, for example:

- 8.8 x 15 mm for ABB, Schneider Electric Group
- 17 x 15 mm for ABB, Hager, Legrand
- 35 x 15 mm for ABB, Legrand, Schneider Electric Group
- 52.5 x 15 mm for ABB, Legrand, Schneider Electric Group
- 70 x 15 mm for Legrand, Schneider Electric Group

General data

Can be printed with:
Material
Inflammability class according to UL 94
Temperature range [°C]
Wipe resistance
Components

THERMOMARK CARD
PVC
V0
-30 ... 80
DIN EN 61010-1 (VDE 0411-1)
silicone-free

Description	Color
UniSheet , 0.5 mm thick, can be labeled with THERMOMARK CARD	
88-section, lettering field size: 8.8 x 15 mm	white yellow red silver
54-section, lettering field size: 17 x 15 mm	white yellow silver
27-section, lettering field size: 27 x 15 mm	white yellow silver
24-section, lettering field size: 35 x 15 mm	white yellow red silver
18-section, lettering field size: 49 x 15 mm	white yellow silver
16-section, lettering field size: 52.5 x 15 mm	white yellow red silver
9-section, lettering field size: 60 x 15 mm	white yellow silver
8-section, lettering field size: 70 x 15 mm	white yellow red silver
9-section, lettering field size: 100 x 15 mm	white yellow silver

Technical Data

THERMOMARK CARD
PVC
V0
-30 ... 80
DIN EN 61010-1 (VDE 0411-1)
silicone-free

Ordering data

Type	Order No.	Pcs. / Pkt.
US-EMP (8,8X15)	0830293	10
US-EMP (8,8X15) YE	0830426	10
US-EMP (8,8X15) RD	0830428	10
US-EMP (8,8X15) SR	0830427	10
US-EMP (17X15)	0828774	10
US-EMP (17X15) YE	0828842	10
US-EMP (17X15) SR	0828843	10
US-EMP (27X15)	0828777	10
US-EMP (27X15) YE	0828848	10
US-EMP (27X15) SR	0828849	10
US-EMP (35X15)	0830295	10
US-EMP (35X15) YE	0830307	10
US-EMP (35X15) RD	0830309	10
US-EMP (35X15) SR	0830308	10
US-EMP (49X15)	0828780	10
US-EMP (49X15) YE	0828854	10
US-EMP (49X15) SR	0828855	10
US-EMP (52,5X15)	0830296	10
US-EMP (52,5X15) YE	0830310	10
US-EMP (52,5X15) RD	0830312	10
US-EMP (52,5X15) SR	0830311	10
US-EMP (60X15)	0828781	10
US-EMP (60X15) YE	0828856	10
US-EMP (60X15) SR	0828857	10
US-EMP (70X15)	0830297	10
US-EMP (70X15) YE	0830313	10
US-EMP (70X15) RD	0830315	10
US-EMP (70X15) SR	0830314	10
US-EMP (100X15)	0829521	10
US-EMP (100X15) YE	0829522	10
US-EMP (100X15) SR	0829523	10

Profile, for screwing or riveting, 1000 mm long, for accommodating UC... and US... materials with a height of 15 mm

gray
transparent

Profile, self-adhesive, 1000 mm long, for accommodating UC... and US... materials with a height of 15 mm

gray
transparent

CARRIER cover, 1000 mm long

transparent

Magazine, for THERMOMARK CARD, for accommodating all US-... materials

Accessories

Accessories	Order No.	Pcs. / Pkt.
CARRIER-EMP (1000X15) GY	0829366	25
CARRIER-EMP (1000X15) TR	0829530	25
CARRIER/L-EMP (1000X15) GY	0829559	25
CARRIER/L-EMP (1000X15) TR	0829560	25
CARRIER-EMP (1000X15) COVER	0829520	25
THERMOMARK CARD-US-MAG1	5146451	1

UniSheet device marking that can be snapped into marker carriers

– All US-EMP ... device markers can also be supplied labeled according to customer requirements



Labeled according to customer specifications

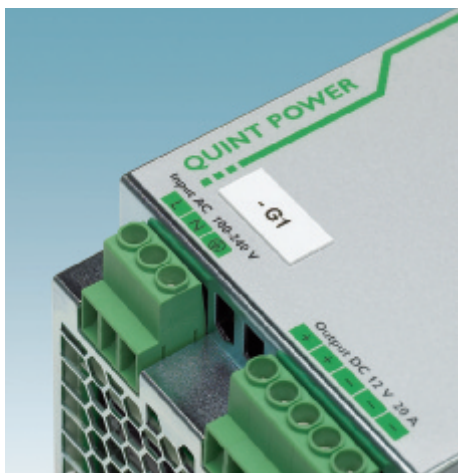
Notes:
1) For ordering example, see page 117.

General data		Technical Data		
Material		PVC		
Inflammability class according to UL 94		V0		
Temperature range	[°C]	-30 ... 80		
Wipe resistance		DIN EN 61010-1 (VDE 0411-1)		
Components		silicone-free		

Ordering data				
Description	Color	Type	Order No.	Pcs. / Pkt.
UniSheet, with self-adhesive plastic labels, 0.5 mm thick, labeled according to customer specifications¹⁾				
88-section, lettering field size: 8.8 x 15 mm	white	US-EMP (8,8X15) CUS	0830349	1
	yellow	US-EMP (8,8X15) YE CUS	0830350	1
	red	US-EMP (8,8X15) RD CUS	0830352	1
	silver	US-EMP (8,8X15) SR CUS	0830351	1
54-section, lettering field size: 17 x 15 mm	white	US-EMP (17X15) CUS	0830025	1
	yellow	US-EMP (17X15) YE CUS	0830026	1
	silver	US-EMP (17X15) SR CUS	0830027	1
27-section, lettering field size: 27 x 15 mm	white	US-EMP (27X15) CUS	0830036	1
	yellow	US-EMP (27X15) YE CUS	0830037	1
	silver	US-EMP (27X15) SR CUS	0830038	1
24-section, lettering field size: 35 x 15 mm	white	US-EMP (35X15) CUS	0830353	1
	yellow	US-EMP (35X15) YE CUS	0830354	1
	red	US-EMP (35X15) RD CUS	0830356	1
	silver	US-EMP (35X15) SR CUS	0830355	1
18-section, lettering field size: 49 x 15 mm	white	US-EMP (49X15) CUS	0830049	1
	yellow	US-EMP (49X15) YE CUS	0830050	1
	silver	US-EMP (49X15) SR CUS	0830051	1
16-section, lettering field size: 52.5 x 15 mm	white	US-EMP (52,5X15) CUS	0830357	1
	yellow	US-EMP (52,5X15) YE CUS	0830358	1
	red	US-EMP (52,5X15) RD CUS	0830360	1
	silver	US-EMP (52,5X15) SR CUS	0830359	1
9-section, lettering field size: 60 x 15 mm	white	US-EMP (60X15) CUS	0830052	1
	yellow	US-EMP (60X15) YE CUS	0830053	1
	silver	US-EMP (60X15) SR CUS	0830054	1
8-section, lettering field size: 70 x 15 mm	white	US-EMP (70X15) CUS	0830361	1
	yellow	US-EMP (70X15) YE CUS	0830362	1
	red	US-EMP (70X15) RD CUS	0830364	1
	silver	US-EMP (70X15) SR CUS	0830363	1
9-section, lettering field size: 100 x 15 mm	white	US-EMP (100X15) CUS	0830061	1
	yellow	US-EMP (100X15) YE CUS	0830062	1
	silver	US-EMP (100X15) SR CUS	0830063	1

UniSheet stick-on device marking

Can be printed with:



Thermal transfer for sheets and cards



Unlabeled or labeled according to customer specifications

- The US-EMLP ... UniSheet labeling range includes self-adhesive device markers with good adhesive properties in different sizes for:
- Device marking
- Module marking
- Switchgear marking
- The markers, which are supplied in uniform sheets, can be printed onto quickly, easily, and cost-effectively using the THERMOMARK CARD printer
- The perforated markers are easy to separate and can be easily fitted
- The sheets provide space for including function texts
- For more label sizes, visit www.phoenixcontact.net/catalog

Marking of power circuit breakers, for example:

- 8.8 x 15 mm for ABB, Schneider Electric Group
- 17 x 15 mm for ABB, Hager, Legrand
- 35 x 15 mm for ABB, Legrand, Schneider Electric Group
- 52.5 x 15 mm for ABB, Legrand, Schneider Electric Group
- 70 x 15 mm for Legrand, Schneider Electric Group

Notes:

For the corresponding magazine for accommodating US-... materials, see right-hand side.

1) For ordering example, see page 117.

General data

Can be printed with:	
Material	
Inflammability class according to UL 94	
Temperature range	[°C]
Wipe resistance	
Components	

Technical Data

THERMOMARK CARD
PVC
V0
-30 ... 80
DIN EN 61010-1 (VDE 0411-1)
silicone-free

Ordering data

Description	Color	Type	Order No.	Pcs. / Pkt.
UniSheet, with self-adhesive plastic labels, 0.5 mm thick				
88-section, lettering field size: 8.8 x 15 mm	white	US-EMLP (8,8X15)	0830303	10
	yellow	US-EMLP (8,8X15) YE	0830316	10
	red	US-EMLP (8,8X15) RD	0830318	10
	silver	US-EMLP (8,8X15) SR	0830317	10
27-section, lettering field size: 35 x 15 mm	white	US-EMLP (35X15)	0830300	10
	yellow	US-EMLP (35X15) YE	0830319	10
	red	US-EMLP (35X15) RD	0830321	10
	silver	US-EMLP (35X15) SR	0830320	10
28-section, lettering field size: 40 x 10 mm	white	US-EMLP (40X10)	0830341	10
	yellow	US-EMLP (40X10) YE	0830342	10
	silver	US-EMLP (40X10) SR	0830328	10
16-section, lettering field size: 52.5 x 15 mm	white	US-EMLP (52,5X15)	0830301	10
	yellow	US-EMLP (52,5X15) YE	0830322	10
	red	US-EMLP (52,5X15) RD	0830324	10
8-section, lettering field size: 70 x 15 mm	silver	US-EMLP (52,5X15) SR	0830323	10
	white	US-EMLP (70X15)	0830302	10
	yellow	US-EMLP (70X15) YE	0830325	10
1-section, lettering field size: 104 x 140 mm	red	US-EMLP (70X15) RD	0830327	10
	silver	US-EMLP (70X15) SR	0830326	10
	white	US-EMLP (104X140)	0830304	10
UniSheet, with self-adhesive plastic labels, 0.5 mm thick, labeled according to customer specifications, 88-section, lettering field size: 8.8 x 15 mm¹⁾	yellow	US-EMLP (104X140) YE	0830305	10
	red	US-EMLP (104X140) SR	0830306	10
	white	US-EMLP (8,8X15) CUS	0830371	1
27-section, lettering field size: 35 x 15 mm	yellow	US-EMLP (8,8X15) YE CUS	0830372	1
	red	US-EMLP (8,8X15) RD CUS	0830374	1
	silver	US-EMLP (8,8X15) SR CUS	0830373	1
28-section, lettering field size: 40 x 10 mm	white	US-EMLP (35X15) CUS	0830375	1
	yellow	US-EMLP (35X15) YE CUS	0830376	1
	red	US-EMLP (35X15) RD CUS	0830378	1
	silver	US-EMLP (35X15) SR CUS	0830377	1
16-section, lettering field size: 52.5 x 15 mm	white	US-EMLP (40X10) CUS	0830365	1
	yellow	US-EMLP (40X10) YE CUS	0830366	1
	silver	US-EMLP (40X10) SR CUS	0830367	1
8-section, lettering field size: 70 x 15 mm	white	US-EMLP (52,5X15) CUS	0830379	1
	yellow	US-EMLP (52,5X15) YE CUS	0830380	1
	red	US-EMLP (52,5X15) RD CUS	0830382	1
1-section, lettering field size: 104 x 140 mm	silver	US-EMLP (52,5X15) SR CUS	0830381	1
	white	US-EMLP (70X15) CUS	0830383	1
	yellow	US-EMLP (70X15) YE CUS	0830384	1
28-section, lettering field size: 40 x 10 mm	red	US-EMLP (70X15) RD CUS	0830386	1
	silver	US-EMLP (70X15) SR CUS	0830385	1
	white	US-EMLP (104X140) CUS	0830387	1
1-section, lettering field size: 104 x 140 mm	yellow	US-EMLP (104X140) YE CUS	0830388	1
	red	US-EMLP (104X140) SR CUS	0830389	1
	silver	US-EMLP (104X140) SR CUS	0830389	1

UniSheet device marking for sticking on and additional screwing or riveting



Can be printed with:



Thermal transfer for sheets and cards



Unlabeled or labeled according to customer specifications

- The US-EMLSP ... UniSheet labeling range includes adhesive markers which can also be attached with screws or rivets
- The markers, which are supplied in uniform sheets, can be printed onto quickly, easily, and cost-effectively using the THERMOMARK CARD printer
- The perforated markers are easy to separate and can be easily fitted
- The sheets provide space for including function texts
- Labeling service: Phoenix Contact can custom-label all UniSheet markers in accordance with your requirements

General data	
Can be printed with:	
Material	
Temperature range	[°C]
Wipe resistance	
Components	

Technical Data

THERMOMARK CARD
PVC
-30 ... 80
DIN EN 61010-1 (VDE 0411-1)
silicone-free

Description	Color
UniSheet , with self-adhesive plastic labels, mounting holes with 3.2 mm diameter, 0.5 mm thick	
Lettering field size: 28 x 10 mm	white yellow silver
UniSheet , with self-adhesive plastic labels, mounting holes with 3.2 mm diameter, 0.5 mm thick, labeled according to customer specifications , lettering field size: 28 x 10 mm ¹⁾	white yellow silver

Ordering data

Type	Order No.	Pcs. / Pkt.
US-EMLSP (28X10)	0830343	10
US-EMLSP (28X10) YE	0830344	10
US-EMLSP (28X10) SR	0830329	10
US-EMLSP (28X10) CUS	0830368	1
US-EMLSP (28X10) YE CUS	0830369	1
US-EMLSP (28X10) SR CUS	0830370	1

Notes:
For corresponding rivets for attaching the UC-EMLSP ..., see CLIPLINE catalog, part 2.
For drilling diagrams, visit www.phoenixcontact.net/catalog
¹⁾ For ordering example, see page 117.

Magazine , for THERMOMARK CARD, for accommodating all US-... materials

Accessories

THERMOMARK CARD-US-MAG1	5146451	1
-------------------------	---------	---

The MARKING system

Snap-in device markers for Axioline systems from Phoenix Contact



Can be printed with:



Thermo transfer for rolls



Unlabeled or labeled according to customer specifications

- EMT ... insert strips are available in different sizes for labeling the Axioline modules from Phoenix Contact
- Can be printed using all the thermal transfer printers available from Phoenix Contact
- Precise printing quality
- **An overview of the devices that support labeling can be found starting on page 88**

Notes:

¹⁾ For ordering example, see page 117.

General data

Can be printed with:

Material
 Temperature range [°C]
 Wipe resistance
 Components

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1 polyester
 -40 ... 100
 DIN EN 61010-1 (VDE 0411-1)
 free from silicone and halogen

Ordering data

Description	Color	Type	Order No.	Pcs./Pkt.
Insert strips				
500 labels per roll, lettering field size: 35 x 28 mm	white	EMT (35X28)R	0801602	1
	yellow	EMT (35X28)R YE	0801603	1
500 labels per roll, lettering field size: 35 x 46 mm	white	EMT (35X46)R	0801604	1
	yellow	EMT (35X46)R YE	0801605	1
	white	EMT (35X28)R CUS	0830391	1
Insert strips, labeled according to customer specifications, 2 markers per strip, lettering field size: 35 x 28 mm¹⁾				
	yellow	EMT (35X28)R YE CUS	0830392	1
2 markers per strip, lettering field size: 35 x 46 mm	white	EMT (35X46)R CUS	0830393	1
	yellow	EMT (35X46)R YE CUS	0830394	1

Device markers for Siemens ET 200SP controllers

- EMT ... insert strips are available for marking Siemens controllers
- Can be printed using all the thermal transfer printers available from Phoenix Contact
- Precise printing quality
- **An overview of the devices that support labeling can be found starting on page 88**

Can be printed with:



Thermo transfer for rolls



Unlabeled or labeled according to customer specifications

Notes:

¹⁾ For ordering example, see page 117.

General data

Can be printed with:

Material

Temperature range

Wipe resistance

Components

[°C]

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1 polyester
-40 ... 100
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data

Description	Color
Insert strips 500 labels per roll, lettering field size: 31 x 12.5 mm	gray
Insert strips, labeled according to customer specifications, 2 markers per strip, lettering field size: 31 x 12.5 mm¹⁾	gray

Type	Order No.	Pcs. / Pkt.
EMT (31X12,5)R GY	0801612	1
EMT (31X12,5)R GY CUS	0830390	1

The MARKING system

Stick-on device marking, for high-temperature applications



- White polyimide label with high level of temperature resistance
- Permanent exposure to temperature range of -40°C to 170°C, brief exposure to 398°C
- For marking PCBs, can be used in all industrial soldering processes
- High weathering and chemical resistance
- The labeling material is UL listed
- Labeling service: Phoenix Contact can custom-label all EML-HT ... markers according to your requirements
- **Designation example:**
EML-HT (8x8)R
Lettering field size: 8 x 8 mm
Type of packaging: roll
- Single-web large roll with 8000 or 10,000 labels (see figure below)

Notes:

The THERMOMARK-RIBBON 110-EML-HT ink ribbon is required to label EML-HT... high-temperature labels, see the "Printer" section, page 76.

If large rolls are processed with the THERMOMARK ROLL..., the external THERMOMARK ROLL-ERH media hub must be used.

¹⁾ For ordering example, see page 117.



Can be printed with:



Thermo transfer for rolls



Unlabeled

General data

Can be printed with:

Material

Temperature range

Wipe resistance

Components

[°C]

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
Polyimide
-40 ... 170
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data

Description	Color	Type	Order No.	Pcs. / Pkt.
High-temperature labels				
4000 labels per roll	white	EML-HT (8X8)R	0800340	1
4000 labels per roll	white	EML-HT (15X6)R	0830644	1
4000 labels per roll	white	EML-HT (15X15)R	0800341	1
4000 labels per roll	white	EML-HT (20X7)R	0830645	1
4000 labels per roll	white	EML-HT (24X4)R	0830646	1
4000 labels per roll	white	EML-HT (25X8)R	0830647	1
2500 labels per roll	white	EML-HT (25,4X12,7)R	0830648	1
2500 labels per roll	white	EML-HT (32X10)R	0830649	1
2500 labels per roll	white	EML-HT (35X6,5)R	0830650	1
1000 labels per roll	white	EML-HT (40X15)R	0800339	1
2500 labels per roll	white	EML-HT (45X5)R	0800337	1
1000 labels per roll	white	EML-HT (50X10)R	0800338	1
1000 labels per roll, round, 12 mm diameter	white	EML-HT (D12)R	0801376	1
High-temperature labels, on large roll				
10,000 labels per roll	white			
10,000 labels per roll	white			
8000 labels per roll	white			
10,000 labels per roll	white			
10,000 labels per roll	white			
10,000 labels per roll	white			
10,000 labels per roll	white			
10,000 labels per roll	white			
10,000 labels per roll	white			
8000 labels per roll	white			
10,000 labels per roll	white			
10,000 labels per roll	white			
High-temperature label, labeled according to customer specifications¹⁾				
4 labels per strip	white			
5 labels per strip	white			
4 labels per strip	white			
4 labels per strip	white			
2 labels per strip	white			
2 labels per strip	white			
3 labels per strip	white			
2 labels per strip	white			
2 labels per strip	white			
2 labels per strip	white			
4 labels per strip	white			
1 label per strip	white			

Ink ribbon, specifically for high-temperature labels, EML-HT...

black

Accessories

THERMOMARK-RIBBON 110-EML-HT	0800342	1
------------------------------	---------	---



Unlabeled, on large roll



Labeled according to customer specifications

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
 Polyimide
 -40 ... 170
 DIN EN 61010-1 (VDE 0411-1)
 free from silicone and halogen

Technical Data

-
 Polyimide
 -40 ... 170
 DIN EN 61010-1 (VDE 0411-1)
 free from silicone and halogen

Ordering data

Type	Order No.	Pcs. / Pkt.
EML-HT (8X8)RL-T	0830651	1
EML-HT (15X6)RL-T	0830652	1
EML-HT (15X15)RL-T	0830653	1
EML-HT (20X7)RL-T	0830654	1
EML-HT (24X4)RL-T	0830655	1
EML-HT (25X8)RL-T	0830656	1
EML-HT (25,4X12,7)RL-T	0830657	1
EML-HT (32X10)RL-T	0830658	1
EML-HT (35X6,5)RL-T	0830659	1
EML-HT (40X15)RL-T	0830660	1
EML-HT (45X5)RL-T	0830661	1
EML-HT (50X10)RL-T	0830662	1

Ordering data

Type	Order No.	Pcs. / Pkt.
EML-HT (8X8)R CUS	0830169	1
EML-HT (15X6)R CUS	0830663	1
EML-HT (15X15)R CUS	0830170	1
EML-HT (20X7)R CUS	0830664	1
EML-HT (24X4)R CUS	0830665	1
EML-HT (25X8)R CUS	0830666	1
EML-HT (25,4X12,7)R CUS	0830667	1
EML-HT (32X10)R CUS	0830668	1
EML-HT (35X6,5)R CUS	0830669	1
EML-HT (40X15)R CUS	0830168	1
EML-HT (45X5)R CUS	0830166	1
EML-HT (50X10)R CUS	0830167	1

Accessories

THERMOMARK-RIBBON 110-EML-HT	0800342	1
------------------------------	---------	---

Accessories

--	--	--

The MARKING system

Device marking for sticking onto rough or structured surfaces



- The EML–HA ... self-adhesive device markers have excellent adhesive properties on rough, structured, and low-energy surfaces, thanks to their special adhesive.
- Precise printing quality and good adhesive properties
 - If high-quality ink ribbons are used, the labeling is resistant to solvents, making it suitable for use even under harsh industrial conditions
 - A wide range of different marker sizes are available in white and silver for custom designs
 - The special packaging protects rolls that have already been started from the dirt found in industrial environments
 - Labeling service: Phoenix Contact can custom-label all EML–HA ... labels according to your requirements.
 - The labeling material is UL listed
 - **Designation example:**
EML-HA (15x9)R
Lettering field size: 15 x 9 mm
Type of packaging: roll

Notes:

¹⁾ For ordering example, see page 117.

Can be printed with:



Thermo transfer for rolls



Unlabeled, white

General data

Can be printed with:

Material
Temperature range
Wipe resistance
Components

[°C]

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1 polyester
-40 ... 150
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data

Description

Label, for rough plastic surfaces, highly adhesive

- 2500 labels per roll
- 2500 labels per roll
- 2500 labels per roll
- 2500 labels per roll
- 2500 labels per roll
- 1000 labels per roll
- 1000 labels per roll
- 1000 labels per roll
- 1000 labels per roll
- 1000 labels per roll
- 1000 labels per roll
- 250 labels per roll
- 1000 labels per roll
- 1000 labels per roll
- 300 labels per roll
- 250 labels per roll

Label, for rough plastic surfaces, highly adhesive, labeled according to customer specifications¹⁾

- 4 labels per strip
- 4 labels per strip
- 4 labels per strip
- 2 labels per strip
- 2 labels per strip
- 2 labels per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip
- 1 label per strip

Type

- EML-HA (15X9)R
- EML-HA (19X6)R
- EML-HA (20X20)R
- EML-HA (26,5X12)R
- EML-HA (40X8)R
- EML-HA (40X15)R
- EML-HA (51X25)R
- EML-HA (60X30)R
- EML-HA (70X32)R
- EML-HA (70X50)R
- EML-HA (70X150)R
- EML-HA (76X51)R
- EML-HA (85X32)R
- EML-HA (100X73)R
- EML-HA (100X90)R

Order No.

- 0830600
- 0830601
- 0830602
- 0830603
- 0830604
- 0830605
- 0830729
- 0830606
- 0830607
- 0830730
- 0830608
- 0830609
- 0830610
- 0830731
- 0830732

Pcs. / Pkt.

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1



Unlabeled, silver



Labeled according to customer specifications, white



Labeled according to customer specifications, silver

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
polyester
-40 ... 150
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data

-
polyester
-40 ... 150
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Technical Data

-
polyester
-40 ... 150
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

Ordering data

Type	Order No.	Pcs. / Pkt.
EML-HA (15X9)R SR	0830611	1
EML-HA (19X6)R SR	0830612	1
EML-HA (20X20)R SR	0830613	1
EML-HA (26,5X12)R SR	0830614	1
EML-HA (40X8)R SR	0830615	1
EML-HA (40X15)R SR	0830616	1
EML-HA (51X25)R SR	0830733	1
EML-HA (60X30)R SR	0830617	1
EML-HA (70X32)R SR	0830618	1
EML-HA (70X50)R SR	0830734	1
EML-HA (70X150)R SR	0830619	1
EML-HA (76X51)R SR	0830620	1
EML-HA (85X32)R SR	0830621	1
EML-HA (100X73)R SR	0830735	1
EML-HA (100X90)R SR	0830736	1

Ordering data

Type	Order No.	Pcs. / Pkt.
EML-HA (15X9)R CUS	0830622	1
EML-HA (19X6)R CUS	0830623	1
EML-HA (20X20)R CUS	0830624	1
EML-HA (26,5X12)R CUS	0830625	1
EML-HA (40X8)R CUS	0830626	1
EML-HA (40X15)R CUS	0830627	1
EML-HA (51X25)R CUS	0830737	1
EML-HA (60X30)R CUS	0830628	1
EML-HA (70X32)R CUS	0830629	1
EML-HA (70X50)R CUS	0830738	1
EML-HA (70X150)R CUS	0830630	1
EML-HA (76X51)R CUS	0830631	1
EML-HA (85X32)R CUS	0830632	1
EML-HA (100X73)R CUS	0830739	1
EML-HA (100X90)R CUS	0830740	1

Ordering data

Type	Order No.	Pcs. / Pkt.
EML-HA (15X9)R SR CUS	0830633	1
EML-HA (19X6)R SR CUS	0830634	1
EML-HA (20X20)R SR CUS	0830635	1
EML-HA (26,5X12)R SR CUS	0830636	1
EML-HA (40X8)R SR CUS	0830637	1
EML-HA (40X15)R SR CUS	0830638	1
EML-HA (51X25)R SR CUS	0830741	1
EML-HA (60X30)R SR CUS	0830639	1
EML-HA (70X32)R SR CUS	0830640	1
EML-HA (70X50)R SR CUS	0830742	1
EML-HA (70X150)R SR CUS	0830641	1
EML-HA (76X51)R SR CUS	0830642	1
EML-HA (85X32)R SR CUS	0830643	1
EML-HA (100X73)R SR CUS	0830743	1
EML-HA (100X90)R SR CUS	0830744	1

The MARKING system

System marking, adhesive warning labels, unlabeled



Can be printed with:



Thermo transfer for rolls

PRINTED
FOR YOU



Unlabeled or labeled according to customer specifications

The unlabeled PML warning labels allow you to create customized warning instructions. A variety of symbols are available in the CLIP PROJECT software. The warning labels offer the following features:

- Highly flexible, plasticized PVC labels which are ideal for uneven surfaces
- Suitable for indoor and outdoor use
- The special packaging protects rolls that have already been started from the dirt found in industrial environments
- The warning labels conform to the ISO 7010 international standard
- Labeling service: Phoenix Contact can custom-label all PML ... warning labels according to your requirements

Notes:

¹⁾ For ordering example, see page 117.

General data

Can be printed with:

Material
Temperature range [°C]
Wipe resistance
Components

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
PVC
-50 ... 110
DIN EN 61010-1 (VDE 0411-1)
silicone-free

Ordering data

Description	Color	Type	Order No.	Pcs./Pkt.
Warning label , triangular 1000 labels per roll, 3 labels per strip, side length: 25 mm	yellow	PML-W100 (25X25)R	0830429	1
1000 labels per roll, 1 label per strip, side length: 50 mm	yellow	PML-W100 (50X50)R	0830430	1
500 labels per roll, 1 label per strip, side length: 100 mm	yellow	PML-W100 (100X100)R	0830431	1
Warning label , triangular, additional rectangular lettering field 1000 labels per roll, 3 labels per strip, side length: 25 mm	yellow	PML-W200 (25X25)R	0830451	1
1000 labels per roll, 1 label per strip, side length: 50 mm	yellow	PML-W200 (50X50)R	0830452	1
500 labels per roll, 1 label per strip, side length: 100 mm	yellow	PML-W200 (100X100)R	0830453	1
Warning label , rectangular 1000 labels per roll, 1 label per strip, width: 52 mm, height: 26 mm	yellow	PML-W300 (52X26)R	0830458	1
1000 labels per roll, 1 label per strip, width: 74 mm, height: 37 mm	yellow	PML-W300 (74X37)R	0830459	1
1000 labels per roll, 1 label per strip, width: 105 mm, height: 52 mm	yellow	PML-W300 (105X52)R	0830460	1
Warning label , triangular, labeled according to customer specifications¹⁾ 3 labels per strip, side length: 25 mm	yellow	PML-W100 (25X25)R CUS	0830493	1
1 label per strip, side length: 50 mm	yellow	PML-W100 (50X50)R CUS	0830494	1
1 label per strip, side length: 100 mm	yellow	PML-W100 (100X100)R CUS	0830495	1
Warning label , triangular, additional rectangular lettering field, labeled according to customer specifications¹⁾ 3 labels per strip, side length: 25 mm	yellow	PML-W200 (25X25)R CUS	0830496	1
1 label per strip, side length: 50 mm	yellow	PML-W200 (50X50)R CUS	0830497	1
1 label per strip, side length: 100 mm	yellow	PML-W200 (100X100)R CUS	0830498	1
Warning label , rectangular, labeled according to customer specifications¹⁾ 1 label per strip, width: 52 mm, height: 26 mm	yellow	PML-W300 (52X26)R CUS	0830499	1
1 label per strip, width: 74 mm, height: 37 mm	yellow	PML-W300 (74X37)R CUS	0830500	1
1 label per strip, width: 105 mm, height: 52 mm	yellow	PML-W300 (105X52)R CUS	0830501	1

System marking, adhesive warning labels, triangular with lightning flash

The PML warning labels are available with various warning instructions. The warning labels offer the following features:

- Printed cards
- Suitable for indoor and outdoor use
- The warning labels conform to the ISO 7010 international standard



General data		Technical Data		
Material		PVC		
Temperature range	[°C]	-50 ... 110		
Wipe resistance		DIN EN 61010-1 (VDE 0411-1)		
Components		silicone-free		
Description		Ordering data		
Description	Color	Type	Order No.	Pcs. / Pkt.
Warning label , triangular, with lightning flash 110 labels per sheet, side length: 12.5 mm	yellow	PML-W101 (12,5X12,5)	0830432	5
25 labels per sheet, side length: 25 mm	yellow	PML-W101 (25X25)	0830433	5
9 labels per sheet, side length: 50 mm	yellow	PML-W101 (50X50)	0830434	5
9 labels per sheet, side length: 100 mm	yellow	PML-W101 (100X100)	0830435	5
1 label per sheet, side length: 200 mm	yellow	PML-W101 (200X200)	0830436	5

The MARKING system

System marking, adhesive warning labels, triangular with lightning flash and details of voltage

- Printed cards
- Suitable for indoor and outdoor use
- The warning labels conform to the ISO 7010 international standard



		Technical Data			Technical Data		
General data							
Material		PVC			PVC		
Temperature range	[°C]	-50 ... 110			-50 ... 110		
Wipe resistance		DIN EN 61010-1 (VDE 0411-1)			DIN EN 61010-1 (VDE 0411-1)		
Components		silicone-free			silicone-free		
		Ordering data			Ordering data		
Description	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Warning label , triangular with lightning flash, additional rectangular lettering field, printed text: "Spannung Voltage"							
16 labels per sheet, side length: 25 mm	yellow	PML-W201 (25X25)	0830454	5			
4 labels per sheet, side length: 50 mm	yellow	PML-W201 (50X50)	0830455	5			
4 labels per sheet, side length: 100 mm	yellow	PML-W201 (100X100)	0830456	5			
1 label per sheet, side length: 200 mm	yellow	PML-W201 (200X200)	0830457	5			
Warning label , triangular, with lightning flash, additional rectangular lettering field, printed text: 230 V							
16 labels per sheet, side length: 25 mm	yellow				PML-W202 (25X25)	0830437	5
4 labels per sheet, side length: 50 mm	yellow				PML-W202 (50X50)	0830438	5
4 labels per sheet, side length: 100 mm	yellow				PML-W202 (100X100)	0830439	5
1 label per sheet, side length: 200 mm	yellow				PML-W202 (200X200)	0830440	5
Warning label , triangular, additional rectangular lettering field, printed items: lightning flash and 400 V							
16 labels per sheet, side length: 25 mm	yellow				PML-W203 (25X25)	0830441	5
4 labels per sheet, side length: 50 mm	yellow				PML-W203 (50X50)	0830442	5
4 labels per sheet, side length: 100 mm	yellow				PML-W203 (100X100)	0830443	5
1 label per sheet, side length: 200 mm	yellow				PML-W203 (200X200)	0830444	5
Warning label , triangular, additional rectangular lettering field, printed items: lightning flash and 120 V							
4 labels per sheet, side length: 50 mm	yellow				PML-W204 (50X50)	0830445	5
4 labels per sheet, side length: 100 mm	yellow				PML-W204 (100X100)	0830446	5
1 label per sheet, side length: 200 mm	yellow				PML-W204 (200X200)	0830447	5
Warning label , triangular, additional rectangular lettering field, printed items: lightning flash and 240 V							
4 labels per sheet, side length: 50 mm	yellow				PML-W205 (50X50)	0830448	5
4 labels per sheet, side length: 100 mm	yellow				PML-W205 (100X100)	0830449	5
1 label per sheet, side length: 200 mm	yellow				PML-W205 (200X200)	0830450	5

System marking, adhesive warning labels, with lightning flash and warning instruction

- Printed cards
- Suitable for indoor and outdoor use



General data		Technical Data			Technical Data		
Material		PVC		PVC			
Temperature range	[°C]	-50 ... 110		-50 ... 110			
Wipe resistance		DIN EN 61010-1 (VDE 0411-1)		DIN EN 61010-1 (VDE 0411-1)			
Components		silicone-free		silicone-free			
Description		Ordering data			Ordering data		
	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Warning label , rectangular, with lightning flash, printed text in German/English: "Danger! High voltage when main switch is off"							
4 labels per sheet, W x H: 52 x 26 mm	yellow	PML-W301 (52X26)	0830461	5			
3 labels per sheet, W x H: 74 x 37 mm	yellow	PML-W301 (74X37)	0830462	5			
4 labels per sheet, W x H: 105 x 52 mm	yellow	PML-W301 (105X52)	0830463	5			
2 labels per sheet, W x H: 200 x 100 mm	yellow	PML-W301 (200X100)	0830464	5			
Warning label , rectangular, printed text in German: "Achtung! Vor Öffnen des Gehäuses Netzstecker ziehen!"							
27 labels per sheet, W x H: 52 x 26 mm	yellow				PML-W302 (52X26)	0830465	5
12 labels per sheet, W x H: 74 x 37 mm	yellow				PML-W302 (74X37)	0830466	5
4 labels per sheet, W x H: 105 x 52 mm	yellow				PML-W302 (105X52)	0830467	5
2 labels per sheet, W x H: 200 x 100 mm	yellow				PML-W302 (200X100)	0830468	5
Warning label , rectangular, with lightning flash, printed text in English: "Caution! Before opening housing, turn off main power switch!"							
27 labels per sheet, W x H: 52 x 26 mm	yellow				PML-W303 (52X26)	0830469	5
12 labels per sheet, W x H: 74 x 37 mm	yellow				PML-W303 (74X37)	0830470	5
4 labels per sheet, W x H: 105 x 52 mm	yellow				PML-W303 (105X52)	0830471	5
2 labels per sheet, W x H: 200 x 100 mm	yellow				PML-W303 (200X100)	0830472	5
Warning label , rectangular, printed text in German: "Achtung! Vor Öffnen des Gehäuses Hauptschalter ausschalten!"							
27 labels per sheet, W x H: 52 x 26 mm	yellow				PML-W304 (52X26)	0830473	5
12 labels per sheet, W x H: 74 x 37 mm	yellow				PML-W304 (74X37)	0830474	5
4 labels per sheet, W x H: 105 x 52 mm	yellow				PML-W304 (105X52)	0830475	5
2 labels per sheet, W x H: 200 x 100 mm	yellow				PML-W304 (200X100)	0830476	5
Warning label , rectangular, with lightning flash, printed text in English: "Caution! Before opening housing, pull mains plug!"							
27 labels per sheet, W x H: 52 x 26 mm	yellow				PML-W305 (52X26)	0830477	5
12 labels per sheet, W x H: 74 x 37 mm	yellow				PML-W305 (74X37)	0830478	5
4 labels per sheet, W x H: 105 x 52 mm	yellow				PML-W305 (105X52)	0830479	5
2 labels per sheet, W x H: 200 x 100 mm	yellow				PML-W305 (200X100)	0830480	5

The MARKING system

UniCard group marking for snapping into CLIPFIX 35-5 end bracket

Can be printed with:



Thermal transfer for sheets and cards



UV LED technology



- Group marking which saves space
- Large labeling option
- The markers, which are supplied in uniform sheets, can be labeled quickly and easily using the BLUEMARK CLED and THERMOMARK CARD ...
- The format automatically ensures printing with a high level of positional accuracy
- The markers support multiline labeling
- The sheets provide space for including function texts
- Labeling service: Phoenix Contact can custom-label all UniCard markers in accordance with your requirements

Notes:
 1) For ordering example, see page 117.

General data	
Can be printed with:	
Number of individual labels	24
Material	PC
Inflammability class according to UL 94	V0
Temperature range	[-40 ... 120 [°C]
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	free from silicone and halogen

Technical Data	
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED	

Description	Color
UniCard, can be labeled with THERMOMARK CARD and BLUEMARK	
Lettering field size: 30 x 5 mm	white yellow
UniCard, labeled according to customer specifications ¹⁾	
Lettering field size: 30 x 5 mm	white yellow

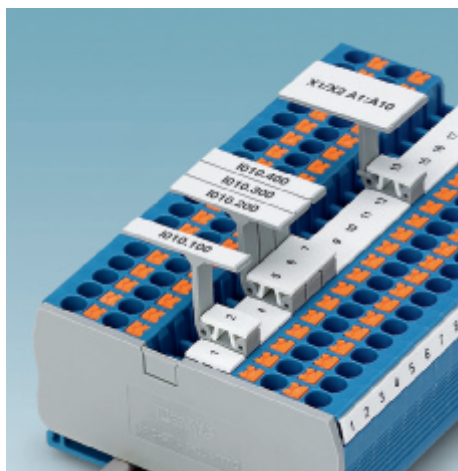
Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-EM (30X5)	0801505	10
UCT-EM (30X5) YE	0830340	10
UCT-EM (30X5) CUS	0801589	1
UCT-EM (30X5) YE CUS	0830348	1

End clamp, for snapping onto NS 35, 5.15 mm wide, labeling with ZB 5, parking facility for bridges and test plugs

Magazine, for THERMOMARK CARD, for accommodating: UCT-EM (30X5)

Accessories		
Type	Order No.	Pcs. / Pkt.
CLIPFIX 35-5	3022276	50
THERMOMARK CARD-UCT-MAG10	0801737	1

Labeling of terminal block groups for snapping into high marker groove



- Space-saving group labeling directly on the terminal block
- Fits all terminal blocks with design width of 3.5 mm and a high center marker groove
- Large-surface labeling with labels or manually using B-STIFT or X-PEN



General data	
Material	PA
Inflammability class according to UL 94	V2
Temperature range	-40 ... 120 [°C]
Components	free from silicone and halogen

Technical Data

Material	PA
Inflammability class according to UL 94	V2
Temperature range	-40 ... 120 [°C]
Components	free from silicone and halogen

Description	Color
Group marking label , can be snapped into terminal center, can be labeled with an EML (24X3)R or EML (25,4X12,5)R... label or manually with B-STIFT or X-PEN, in the foot part with ZB 3,5	gray
	gray

Ordering data

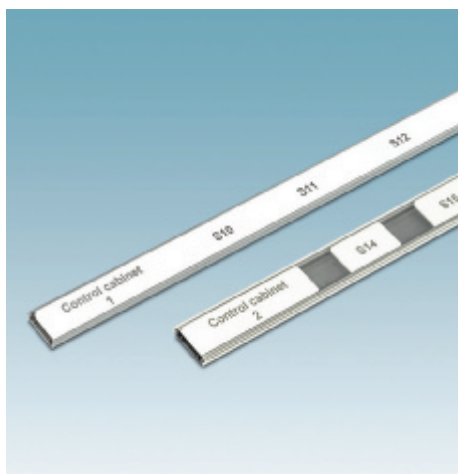
Type	Order No.	Pcs. / Pkt.
GBS 3,5-25X3,5	0830290	100
GBS 3,5-25X12	0830292	100

Label	
2500 labels per roll	white
2500 labels per roll	white

Accessories

Type	Order No.	Pcs. / Pkt.
EML (24X3)R	0830291	1
EML (25,4X12,7)R	0816825	1

Device marking for snapping into marker carriers



- The continuous device marker can be easily and individually snapped into the CARRIER-EMP (1000X15) ... marker profile
- For marking devices, modules, and switchgear
- Accurate positioning, can be cut to length using a printer cutter
- The marker can be easily, quickly, and cost-effectively labeled using any thermal transfer printer from Phoenix Contact

Notes:
For corresponding CARRIER-EMP... carrier profiles, see www.phoenixcontact.net/catalog
1) For ordering example, see page 117.



Unlabeled or labeled according to customer specifications

General data	
Can be printed with:	
Material	
Temperature range	-40 ... 100 [°C]
Wipe resistance	
Components	free from silicone and halogen

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
polyester
-40 ... 100
DIN EN 61010-1 (VDE 0411-1)
free from silicone and halogen

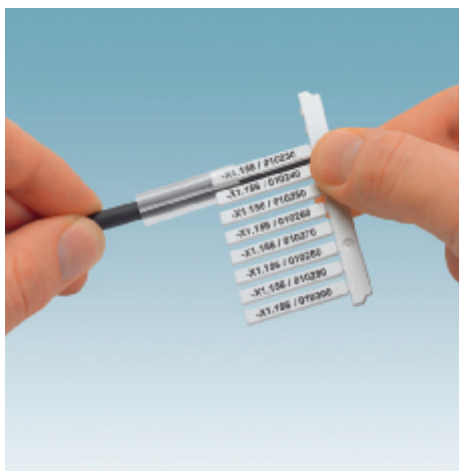
Description	Color
Insert strips, unprinted , 1 roll = 50 m, continuous, strip height: 15 mm	white
Insert strips, unprinted , 1 roll = 50 m, continuous, strip height: 15 mm, labeled according to customer specifications 1)	white

Ordering data

Type	Order No.	Pcs. / Pkt.
EMT (EX15)R	0830671	1
EMT (EX15)R CUS	0830395	1

The MARKING system

UniCard conductor marking for marking collars



- The UCT-WMT ... UniCard labeling range includes markers for conductor marking with marking collars from the PATG/PATO ... system
- The markers, which are supplied in uniform sheets, can be labeled quickly and easily using the BLUEMARK CLED and THERMOMARK CARD ...
- The format automatically ensures printing with a high level of positional accuracy
- Labeled insert strips are simply inserted into the collars, protecting the marking against contamination
- To simplify mounting, the insert labels are arranged on UniCard sheets so that they can be separated branch by branch
- The sheets provide space for including function texts
- Labeling service: Phoenix Contact can custom-label all UniCard markers in accordance with your requirements

Notes:
 For PATG/PATO ... system, see www.phoenixcontact.net/catalog
 1) For ordering example, see page 117.

Can be printed with:



Thermal transfer for sheets and cards



UV LED technology

PRINTED
FOR YOU



60 markers with 10 x 4 mm lettering field size

General data	
Can be printed with:	
Number of individual labels	60
Material	PC
Inflammability class according to UL 94	V0
Temperature range	[-40 ... 120 [°C]
Components	free from silicone and halogen

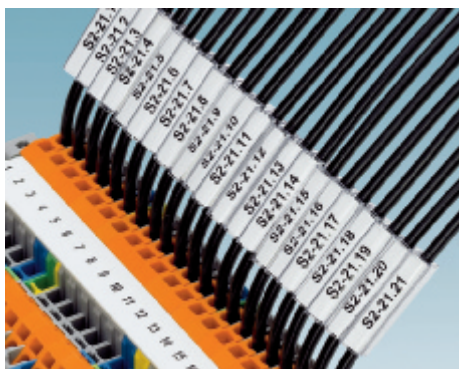
Technical Data	
THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED	

Description	Color
UniCard, with insert strips for PATG and PATO marking collars	
	white
	red
	orange
	yellow
	violet
	blue
	green
UniCard, with insert strips for PATG, PATO marking system, labeled according to customer specifications¹⁾	
	white
	red
	orange
	yellow
	violet
	blue
	green

Ordering data		
Type	Order No.	Pcs. / Pkt.
UCT-WMT (10X4)	0801430	10
UCT-WMT (10X4) RD	0801433	10
UCT-WMT (10X4) OG	0801434	10
UCT-WMT (10X4) YE	0801431	10
UCT-WMT (10X4) VT	0801436	10
UCT-WMT (10X4) BU	0801437	10
UCT-WMT (10X4) GN	0801435	10
UCT-WMT (10X4) CUS	0801515	1
UCT-WMT (10X4) RD CUS	0801517	1
UCT-WMT (10X4) OG CUS	0801518	1
UCT-WMT (10X4) YE CUS	0801516	1
UCT-WMT (10X4) VT CUS	0801520	1
UCT-WMT (10X4) BU CUS	0801521	1
UCT-WMT (10X4) GN CUS	0801519	1

Magazine, for THERMOMARK CARD, for accommodating: UCT-WMT ... sheets

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG7	0801734	1





50 markers with 12 x 4 mm lettering field size



50 markers with 15 x 4 mm lettering field size



40 markers with 18 x 4 mm lettering field size

Technical Data

THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED

50
PC
V0
-40 ... 120
free from silicone and halogen

Ordering data

Type	Order No.	Pcs. / Pkt.
UCT-WMT (12X4)	0801438	10
UCT-WMT (12X4) RD	0801440	10
UCT-WMT (12X4) OG	0801441	10
UCT-WMT (12X4) YE	0801439	10
UCT-WMT (12X4) VT	0801443	10
UCT-WMT (12X4) BU	0801444	10
UCT-WMT (12X4) GN	0801442	10
UCT-WMT (12X4) CUS	0801522	1
UCT-WMT (12X4) RD CUS	0801524	1
UCT-WMT (12X4) OG CUS	0801525	1
UCT-WMT (12X4) YE CUS	0801523	1
UCT-WMT (12X4) VT CUS	0801528	1
UCT-WMT (12X4) BU CUS	0801529	1
UCT-WMT (12X4) GN CUS	0801527	1

Accessories

Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG7	0801734	1

Technical Data

THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED

50
PC
V0
-40 ... 120
free from silicone and halogen

Ordering data

Type	Order No.	Pcs. / Pkt.
UCT-WMT (15X4)	0801446	10
UCT-WMT (15X4) RD	0801448	10
UCT-WMT (15X4) OG	0801449	10
UCT-WMT (15X4) YE	0801447	10
UCT-WMT (15X4) VT	0801451	10
UCT-WMT (15X4) BU	0801452	10
UCT-WMT (15X4) GN	0801450	10
UCT-WMT (15X4) CUS	0801530	1
UCT-WMT (15X4) RD CUS	0801533	1
UCT-WMT (15X4) OG CUS	0801534	1
UCT-WMT (15X4) YE CUS	0801531	1
UCT-WMT (15X4) VT CUS	0801536	1
UCT-WMT (15X4) BU CUS	0801537	1
UCT-WMT (15X4) GN CUS	0801535	1

Accessories

Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG7	0801734	1

Technical Data

THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED

40
PC
V0
-40 ... 120
free from silicone and halogen

Ordering data

Type	Order No.	Pcs. / Pkt.
UCT-WMT (18X4)	0801462	10
UCT-WMT (18X4) RD	0801464	10
UCT-WMT (18X4) OG	0801465	10
UCT-WMT (18X4) YE	0801463	10
UCT-WMT (18X4) VT	0801467	10
UCT-WMT (18X4) BU	0801468	10
UCT-WMT (18X4) GN	0801466	10
UCT-WMT (18X4) CUS	0801538	1
UCT-WMT (18X4) RD CUS	0801541	1
UCT-WMT (18X4) OG CUS	0801543	1
UCT-WMT (18X4) YE CUS	0801540	1
UCT-WMT (18X4) VT CUS	0801545	1
UCT-WMT (18X4) BU CUS	0801546	1
UCT-WMT (18X4) GN CUS	0801544	1

Accessories

Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG7	0801734	1

The MARKING system

UniCard conductor marking for marking collars

- The UCT-WMT ... UniCard labeling range includes markers for conductor marking with marking collars from the PATG/PATO ... system
- The sheets provide space for including function texts
- Labeling service: Phoenix Contact can custom-label all UniCard markers in accordance with your requirements



30 markers with 23 x 4 mm lettering field size

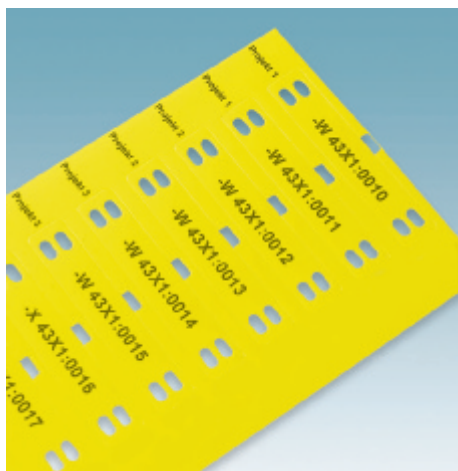


30 markers with 30 x 4 mm lettering field size

Notes:
 1) For ordering example, see page 117.

General data		Technical Data			Technical Data		
Can be printed with:		THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED			THERMOMARK CARD, BLUEMARK LED, BLUEMARK CLED		
Number of individual labels		30			30		
Material		PC			PC		
Inflammability class according to UL 94		V0			V0		
Temperature range		-40 ... 120	[°C]		-40 ... 120		
Components		free from silicone and halogen			free from silicone and halogen		
Description		Ordering data			Ordering data		
UniCard, with insert strips for PATG and PATO marking collars		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
	white	UCT-WMT (23X4)	0801453	10	UCT-WMT (30X4)	0801422	10
	red	UCT-WMT (23X4) RD	0801455	10	UCT-WMT (30X4) RD	0801424	10
	orange	UCT-WMT (23X4) OG	0801456	10	UCT-WMT (30X4) OG	0801425	10
	yellow	UCT-WMT (23X4) YE	0801454	10	UCT-WMT (30X4) YE	0801423	10
	violet	UCT-WMT (23X4) VT	0801459	10	UCT-WMT (30X4) VT	0801427	10
	blue	UCT-WMT (23X4) BU	0801460	10	UCT-WMT (30X4) BU	0801428	10
	green	UCT-WMT (23X4) GN	0801457	10	UCT-WMT (30X4) GN	0801426	10
UniCard, with insert strips for marking system, labeled according to customer specifications ¹⁾		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
	white	UCT-WMT (23X4) CUS	0801547	1	UCT-WMT (30X4) CUS	0801507	1
	red	UCT-WMT (23X4) RD CUS	0801549	1	UCT-WMT (30X4) RD CUS	0801509	1
	orange	UCT-WMT (23X4) OG CUS	0801550	1	UCT-WMT (30X4) OG CUS	0801510	1
	yellow	UCT-WMT (23X4) YE CUS	0801548	1	UCT-WMT (30X4) YE CUS	0801508	1
	violet	UCT-WMT (23X4) VT CUS	0801552	1	UCT-WMT (30X4) VT CUS	0801512	1
	blue	UCT-WMT (23X4) BU CUS	0801553	1	UCT-WMT (30X4) BU CUS	0801514	1
	green	UCT-WMT (23X4) GN CUS	0801551	1	UCT-WMT (30X4) GN CUS	0801511	1
Magazine, for THERMOMARK CARD, for accommodating: UCT-WMT ... sheets		Accessories			Accessories		
		THERMOMARK CARD-UCT-MAG7	0801734	1	THERMOMARK CARD-UCT-MAG7	0801734	1

Conductor marking for cable binder assembly



- Halogen-free conductor and cable marking for marking and bundling conductors and cables indoors and outdoors.
- Made from high-quality thermoplastic polyether urethane
 - Highly flexible material, adapts to the bending of the conductors or cables
 - Additional labeling, such as project information, can be printed on the carrier material, making it easier to assign the markers during mounting
 - Very high tensile strength
 - Flame-retardant material
 - The marker has two fastening lugs so that it can be attached to the conductor by means of cable binders
 - Labeling service: Phoenix Contact can custom-label all conductor markers in accordance with your requirements

Notes:
For corresponding cable binders, see from page 146.
¹⁾ For ordering example, see page 117.

Can be printed with:



Thermo transfer for rolls

PRINTED
FOR YOU



Marker for conductor diameters from 6 mm

General data
Can be printed with:
Material
Inflammability class according to UL 94
Temperature range [°C]
Wipe resistance
Components

Technical Data
THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
PUR
V0
-25 ... 80
DIN EN 61010-1 (VDE 0411-1)
halogen-free

Description	Color
Cable markers for assembly with cable binders, maximum cable binder width: 5 mm	
1000 markers per roll, lettering field size: 40 x 12 mm	white
	yellow
1000 markers per roll, lettering field size: 55 x 15 mm	white
	yellow
500 markers per roll, lettering field size: 55 x 25 mm	white
	yellow
Cable markers for assembly with cable binders, labeled according to customer specifications, 1 marker per strip, lettering field size: 40 x 12 mm¹⁾	white
	yellow
1 marker per strip, lettering field size: 55 x 15 mm	white
	yellow
1 marker per strip, lettering field size: 55 x 25 mm	white
	yellow

Ordering data		
Type	Order No.	Pcs. / Pkt.
WMTB HF (40X12)R	0830407	1
WMTB HF (40X12)R YE	0830408	1
WMTB HF (55X15)R	0830409	1
WMTB HF (55X15)R YE	0830410	1
WMTB HF (55X25)R	0830411	1
WMTB HF (55X25)R YE	0830412	1
WMTB HF (40X12)R CUS	0830413	1
WMTB HF (40X12)R YE CUS	0830414	1
WMTB HF (55X15)R CUS	0830415	1
WMTB HF (55X15)R YE CUS	0830416	1
WMTB HF (55X25)R CUS	0830417	1
WMTB HF (55X25)R YE CUS	0830418	1

Ink ribbon, specifically for cable markers for assembly with cable binders, WMTB HF..., length: 300 m, width: 110 mm
black

Accessories		
Type	Order No.	Pcs. / Pkt.
THERMOMARK-RIBBON 110-WMTB HF	5148007	1



The MARKING system

Conductor marker carriers for assembly with cable binders, for labels with laminated protective foil



- The WM-CARRIER /B... conductor marker carriers consist of a labeling field for labels and a transparent, self-adhesive laminated protective foil
- The protective foil provides permanent protection against contamination and abrasion
- High-quality labeling image created by thermal transfer printing
- Quick and easy handling
- The marker has two fastening lugs so that it can be attached to the conductor by means of cable binders
- Resistant to solvents
- Labeling service: Phoenix Contact can custom-label all cable marker labels in accordance with your requirements

Notes:
 For corresponding cable binders, see from page 146.
 1) For ordering example, see page 117.



For conductor diameters from 6 mm

General data	
Material	
Temperature range	[°C]
Wipe resistance	
Components	

Description	Color
Conductor marker carriers , maximum cable binder width: 5 mm	
Lettering field size: 48 x 10 mm	transparent
Lettering field size: 55 x 15 mm	transparent
Lettering field size: 85 x 15 mm	transparent

Labels	
2500 labels per roll	white
	yellow
2500 labels per roll	white
	yellow
2500 labels per roll	white
	yellow
Labels, labeled according to customer requirements ¹⁾	
2 labels per strip	white
	yellow
1 label per strip	white
	yellow
1 label per strip	white
	yellow

Technical Data

Material	PVC/polyester
Temperature range	-10 ... 60
DIN EN 61010-1 (VDE 0411-1)	halogen-free

Ordering data

Type	Order No.	Pcs. / Pkt.
WM-CARRIER/B (48X10)LPR	0830423	100
WM-CARRIER/B (55X15)LPR	0830424	100
WM-CARRIER/B (85X15)LPR	0830425	100

Accessories

Type	Order No.	Pcs. / Pkt.
EML (40X6)R	0830481	1
EML (40X6)R YE	0830482	1
EML (50X10)R	0830483	1
EML (50X10)R YE	0830484	1
EML (75X10)R	0830485	1
EML (75X10)R YE	0830486	1
EML (40X6)R CUS	0830487	1
EML (40X6)R YE CUS	0830488	1
EML (50X10)R CUS	0830489	1
EML (50X10)R YE CUS	0830490	1
EML (75X10)R CUS	0830491	1
EML (75X10)R YE CUS	0830492	1



Self-adhesive conductor marking with transparent protective foil

Can be printed with:



Thermo transfer for rolls

PRINTED
FOR YOU



Unlabeled or labeled according to customer specifications

- The cable marker labels consist of a labeling field and a transparent protective foil
- The protective foil is wound over the labeling and provides permanent protection against dirt and abrasion
- The cable marker labels do not increase the cross section of the cable, allowing the cable to be subsequently drawn through cable ducts, for example
- High-quality labeling image created by thermal transfer printing
- Quick and easy handling
- Resistant to solvents

General data

Can be printed with:

Material	
Temperature range	[°C]
Wipe resistance	
Components	

Technical Data

THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.1, THERMOMARK X1.2, THERMOMARK S1.1
PVC
-40 ... 70
DIN EN 61010-1 (VDE 0411-1)
silicone-free

Ordering data

Description	Color	Type	Order No.	Pcs. / Pkt.
Cable marker labels				
3000 labels, up to 5 mm Ø	yellow	WML 5 (25X10)R YE	0830673	1
7000 labels, up to 6 mm Ø	yellow	WML 6 (13X13)R YE	0830674	1
1500 labels, up to 14 mm Ø	yellow	WML 14 (38X19)R YE	0830675	1
Cable marker labels, on large roll				
10,000 labels, up to 5 mm Ø	white	WML 5 (25X10)RL	0830676	1
15,000 labels, up to 6 mm Ø	white	WML 6 (13X13)RL	0830677	1
5000 labels, up to 14 mm Ø	white	WML 14 (25X19)RL	0830678	1
3000 labels, up to 14 mm Ø	white	WML 14 (38X19)RL	0830679	1
Cable marker labels, labeled according to customer requirements¹⁾				
Up to 5 mm Ø, 3 labels per strip	yellow	WML 5 (25X10)R YE CUS	0830680	1
Up to 6 mm Ø, 7 labels per strip	yellow	WML 6 (13X13)R YE CUS	0830681	1
Up to 14 mm Ø, 2 labels per strip	yellow	WML 14 (38X19)R YE CUS	0830682	1

Notes:

For more versions, see CLIPLINE catalog part 2 from page 160 or www.phoenixcontact.net/catalog

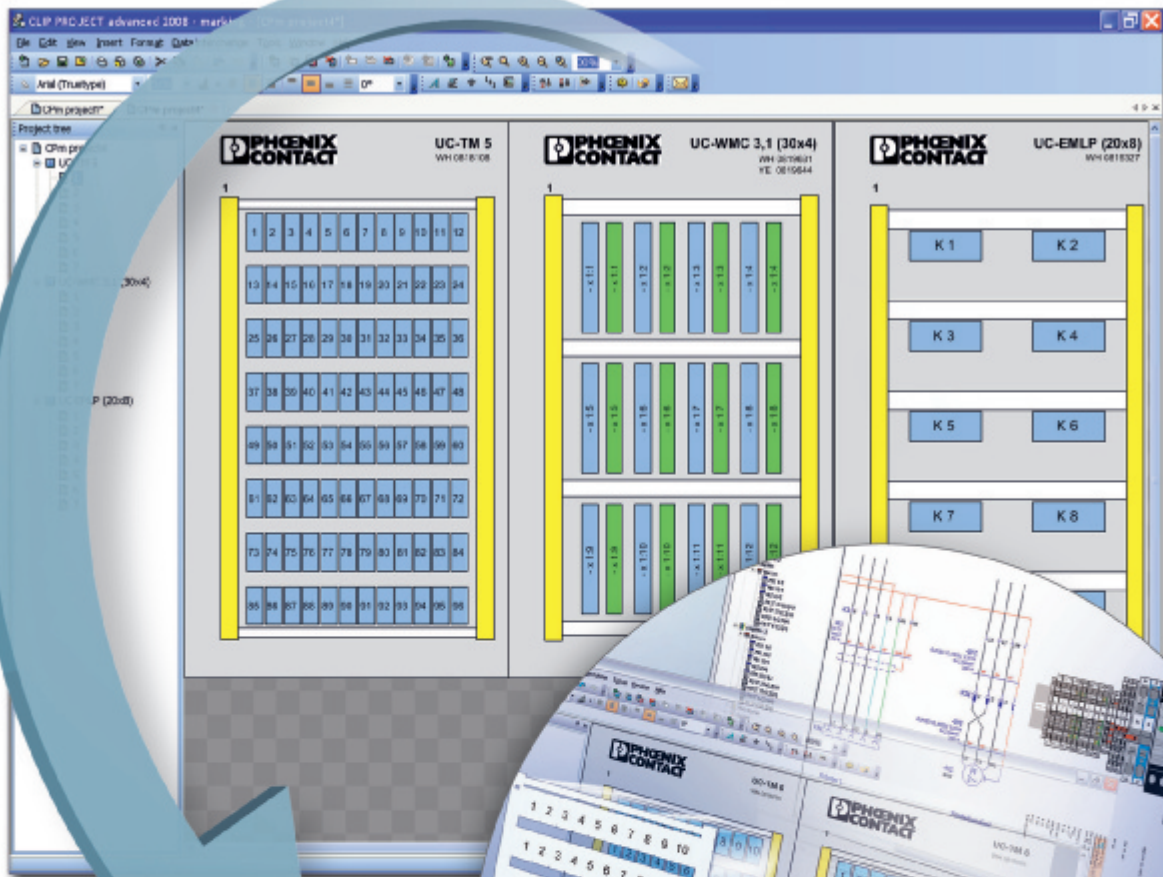
¹⁾ For ordering example, see page 117.

The MARKING system

Ordering special labels with CLIP PROJECT

Phoenix Contact offers a labeling service for all marking materials. We can provide you with marking materials labeled according to your requirements in next to no time.

Simply plan and place your order at the click of a mouse



1. Create labels quickly and easily.
2. Use the clear preview to check your labels.
3. Then place your order directly through the software.

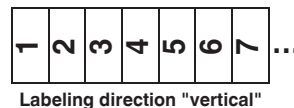
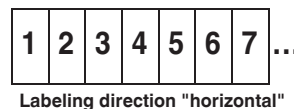
Ordering special labels via fax or e-mail

Minimum order amounts:

- Plastic sheets: 1 sheet
- Paper sheets: 1 sheet
- Rolls: 1 strip (row),
i.e., in the case of EML (20X8)R 4 labels

The following information must be provided when ordering labels:

- Order number of the relevant ...CUS material
- Label text
- Font size
- Read direction "horizontal" or "vertical"
- Normal or bold print
- Please send special characters, symbols, and logos as a bitmap file



120 markers for a terminal block width of 4.2 mm



96 markers for a terminal block width of 5.2 mm

Technical Data

General data

Can be printed with:
Number of individual markers
Number of individual markers per strip
Material
Inflammability class according to UL 94
Temperature range [°C]
Wipe resistance
Components

BLUEMARK CLED, CMS-P1-PLOTTER
120
15
PA
V2
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
Free from silicone and halogen

Technical Data

BLUEMARK CLED, CMS-P1-PLOTTER
96
12
PA
V2
-40 ... 120
DIN EN 61010-1 (VDE 0411-1)
Free from silicone and halogen

Ordering data

Description Color

UniCard sheet, for labeling terminal blocks using a zack marker strip groove, can be labeled with BLUEMARK and CMS-P1-PLOTTER

Type	Order No.	Pcs. / Pkt.
UC-TM 4	0818111	10
UC-TM 4 RD	0818250	10
UC-TM 4 OG	0818221	10
UC-TM 4 YE	0818234	10
UC-TM 4 VT	0819084	10
UC-TM 4 BU	0818247	10
UC-TM 4 GN	0818263	10
UC-TM 4 CUS	0824573	1
UC-TM 4 RD CUS	0824577	1
UC-TM 4 OG CUS	0824576	1
UC-TM 4 YE CUS	0824579	1
UC-TM 4 VT CUS	0824578	1
UC-TM 4 BU CUS	0824574	1
UC-TM 4 GN CUS	0824575	1

Ordering data

Type Order No. Pcs. / Pkt.

Type	Order No.	Pcs. / Pkt.
UC-TM 5	0818108	10
UC-TM 5 RD	0818302	10
UC-TM 5 OG	0818276	10
UC-TM 5 YE	0818289	10
UC-TM 5 VT	0819107	10
UC-TM 5 BU	0818292	10
UC-TM 5 GN	0818315	10
UC-TM 5 CUS	0824581	1
UC-TM 5 RD CUS	0824585	1
UC-TM 5 OG CUS	0824584	1
UC-TM 5 YE CUS	0824587	1
UC-TM 5 VT CUS	0824586	1
UC-TM 5 BU CUS	0824582	1
UC-TM 5 GN CUS	0824583	1

UniCard sheet, for labeling terminal blocks using a zack marker strip groove, labeled according to customer specifications

Type	Order No.	Pcs. / Pkt.
UC-TM 4 CUS	0824573	1
UC-TM 4 RD CUS	0824577	1
UC-TM 4 OG CUS	0824576	1
UC-TM 4 YE CUS	0824579	1
UC-TM 4 VT CUS	0824578	1
UC-TM 4 BU CUS	0824574	1
UC-TM 4 GN CUS	0824575	1

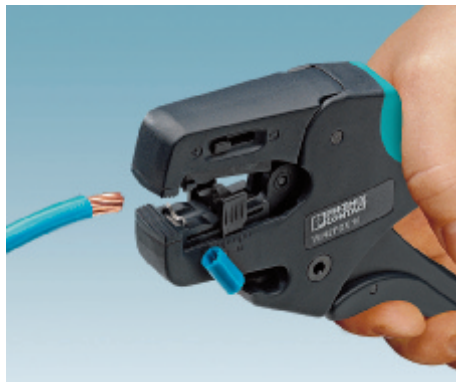
Ordering example for UC-TM 5 GN CUS

Vertical consecutive numbering from 1 to 12 is required for 8 identical terminal strips with 5 mm pitch. The UC-TM 5 ... sheet has 8 strips, each of which has 12 individual markers. In this case order as follows:

Unit (sheet)	Labeling	Order No.
1	Numbers: 1 to 12 Font size: 10 pt Read direction: vertical Normal printing	0824583



Professional cutting



Professional stripping



Professional crimping

Pneumatic crimping pliers



- The crimping pliers are a pneumatic tool for ferrules with cross sections of 0.25 to 4 mm²
- For pneumatic crimping pliers with a conductor cross section of up to 10 mm², see www.phoenixcontact.net/catalog



Conductor cross section of 0.25 to 4 mm²

application range	
Conductor	[mm ²]/AWG
Pressure range	[bar]
Air consumption per compression	[l]
Compression	

Technical Data		
Conductor	0.25 - 4/24 - 12	
Pressure range	4 - 6	
Air consumption per compression	0.2	
Compression	trapezoidal	

Description
Pneumatic crimping pliers , for ferrules according to DIN 46228, three marked die stations, lateral entry

Ordering data		
Type	Order No.	Pcs. / Pkt.
ZAP 40	1212630	1

Ferrules, with plastic sleeve, color range as per DIN 46228-4: 1990-09, CSA-certified
0.25 - 0.34 mm ² , yellow
0.25 - 0.34 mm ² , yellow
0.5 mm ² , white
0.5 mm ² , white
0.75 mm ² , gray
0.75 mm ² , gray
1 mm ² , red
1 mm ² , red
1.5 mm ² , black
1.5 mm ² , black
2.5 mm ² , blue
2.5 mm ² , blue
4 mm ² , gray
4 mm ² , gray

Accessories		
Type	Order No.	Pcs. / Pkt.
AI 0,25- 6 YE	3203024	100
AI 0,25- 8 YE	3203037	100
AI 0,5 - 8 WH	3200014	100
AI 0,5 -10 WH	3201275	100
AI 0,75- 8 GY	3200519	100
AI 0,75-10 GY	3201288	100
AI 1 - 8 RD	3200030	100
AI 1 -10 RD	3200182	100
AI 1,5 - 8 BK	3200043	100
AI 1,5 -10 BK	3200195	100
AI 2,5 -10 BU	3202533	100
AI 2,5 -12 BU	3200962	100
AI 4 -10 GY	3200535	100
AI 4 -12 GY	3200959	100



CRIMPFOX crimping pliers



The CRIMPFOX ... N series with permanently built-in die offers the following features:

- Precise processing, thanks to special profile geometries
- Low level of manual force required, thanks to optimum transfer of force
- Marked die stations
- Parts which undergo particularly heavy use are specially quenched and tempered
- Unlockable pressure lock
- Can accommodate Clip&Strip cutting and stripping unit for complete processing of cables with just one tool, stripping capability up to 6.0 mm²



Conductor cross section of 0.14 to 16 mm²

application range	
Conductor	[mm ²]/AWG
Compression	

Description

Crimping pliers, for ferrules according to DIN 46228, seven marked die stations, pressure lock can be unlocked, lateral entry

Crimping pliers, for insulated cable lugs, three marked die stations (red, blue, yellow), pressure lock can be unlocked, lateral entry

Crimping pliers, for uninsulated cable and tube lugs with closed ferrule, five marked die stations, pressure lock can be unlocked, lateral entry

Crimping pliers, for 2.8 /4.8 /6.3 /9.5 uninsulated slip-on sleeves, four marked die stations, pressure lock can be unlocked, lateral entry

Stripping blade, insert

Technical Data

0.14 - 16/26 - 6
trapezoidal crimp

Ordering data

Type	Order No.	Pcs. / Pkt.
CRIMPFOX 16-N	1212686	1

Accessories

CRIMPFOX-WF 6-N/DIE	1212690	1
---------------------	---------	---





Conductor cross section of 0.5 to 6 mm²



Conductor cross section of 0.1 mm² to 16 mm²



Conductor cross section of 0.25 mm² to 6 mm²

Technical Data

0.5 - 6/20 - 10
oval crimp

Ordering data

Type	Order No.	Pcs. / Pkt.
CRIMPFOX-RCI 6-N	1212687	1

Accessories

CRIMPFOX-WF 6-N/DIE	1212690	1
---------------------	---------	---

Technical Data

0.1 - 16/26 - 6
indent crimp

Ordering data

Type	Order No.	Pcs. / Pkt.
CRIMPFOX-RC 16-N	1212688	1

Accessories

CRIMPFOX-WF 6-N/DIE	1212690	1
---------------------	---------	---

Technical Data

0.25 - 6/24 - 10
B crimp

Ordering data

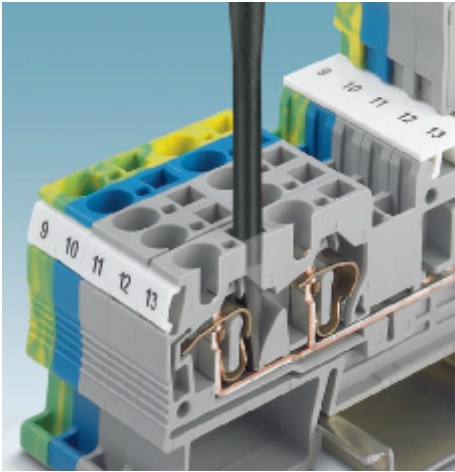
Type	Order No.	Pcs. / Pkt.
CRIMPFOX-SC 6-N	1212689	1

Accessories

CRIMPFOX-WF 6-N/DIE	1212690	1
---------------------	---------	---

Tools - TOOL fox

VDE screwdriver set, screwdrivers with insulation integrated into shaft



- VDE-tested, for maximum safety
- Because the insulation runs into the shaft, there is no protruding edge
- Wall-mountable screwdriver rack included

Notes:

Pozidriv®/Supadriv®, trademarks of European Ind. Serv. Ltd.
Phillips Recess®, trademark of Phillips Screw Company

For more screwdrivers and screwdriver sets, see www.phoenixcontact.net/catalog



VDE screwdriver with various drives

Description

Screwdriver set, protective insulation integrated into shaft, slotted/Phillips crosshead/combined profile, Pozidriv® + slotted (plus-minus), insulated according to VDE, 7-piece, including rack, set contains the following products: 0.6 x 3.5 x 100; 0.8 x 4.0 x 100; 1.0 x 5.5 x 125; PH1 x 80; PH2 x 100; PZ1 x 80; PZ2 x 100

Ordering data

Type	Order No.	Pcs. / Pkt.
SF-SL/PH/PZ-SL SET S-VDE	1212701	1

VDE screwdrivers with integrated insulation in shaft

- The VDE screwdrivers with integrated insulation are available with different bits
- The tools feature ergonomic two-component safety handles with a non-slip grip



VDE screwdriver with Pozidriv® or Phillips-Recess® drive



VDE screwdriver with plus-minus drive

Ordering data

Type	Order No.	Pcs. / Pkt.
SF-PZ 1-80 S-VDE	1212695	10
SF-PZ 2-100 S-VDE	1212696	10
SF-PH 1-80 S-VDE	1212693	10
SF-PH 2-100 S-VDE	1212694	10

Ordering data

Type	Order No.	Pcs. / Pkt.
SF-PZSL 1-80 S-VDE	1212699	10
SF-PZSL 2-100 S-VDE	1212700	10
SF-PHSL 1-80 S-VDE	1212697	10
SF-PHSL 2-100 S-VDE	1212698	10

Description

Screwdriver, protective insulation integrated into shaft, insulated according to VDE

Size: PZ1 x 80 mm

Size: PZ2 x 100 mm

Screwdriver, protective insulation integrated into shaft, insulated according to VDE

Size: PH1 x 80 mm

Size: PH2 x 100 mm

Screwdriver, protective insulation integrated into shaft, insulated according to VDE

Size: Pozidriv® - slotted (plus-minus) PZ1 x 80 mm

Size: Pozidriv® - slotted (plus-minus)

PZ2 x 100 mm

Screwdriver, protective insulation integrated into shaft, insulated according to VDE

Size: Phillips-Recess® - slotted (plus-minus)

PH1 x 80 mm

Size: Phillips-Recess® - slotted (plus-minus)

PH2 x 100 mm

T-handle screwdrivers for Allen screws



- Ergonomically designed handles ensure an optimum grip and prevent fatigue when working
- The hardened blades are designed for durability
- Optimum edge geometries increase the bearing surface and prevent the screws from being over-tightened

Description

T-handle screwdriver, for Allen screws, ergonomically shaped handle, matt chrome-plated

- Size: hex 2 x 100 mm
- Size: hex 2.5 x 100 mm
- Size: hex 3 x 100 mm
- Size: hex 4 x 150 mm
- Size: hex 5 x 150 mm
- Size: hex 6 x 200 mm
- Size: hex 8 x 200 mm
- Size: hex 10 x 200 mm



For hexagonal screws

Ordering data

Type	Order No.	Pcs. / Pkt.
SF-THEX 2-100	1212637	5
SF-THEX 2,5-100	1212638	5
SF-THEX 3-100	1212639	5
SF-THEX 4-150	1212640	5
SF-THEX 5-150	1212641	5
SF-THEX 6-200	1212642	5
SF-THEX 8-200	1212643	5
SF-THEX 10-200	1212644	5

Screw bits for Allen screws



- Tool inserts for hand-held or cordless screwdrivers with E6.3-1/4" drive
- The hardened bits are suitable for hard and soft screws
- Optimum edge geometries increase the bearing surface and prevent the screws from being over-tightened

Notes:
For torque and cordless screwdrivers, see CLIPLINE catalog, part 1 from page 286 or www.phoenixcontact.net/catalog



Screw bit, hex

Description

Screw bit, hexagonal, E6.3-1/4" drive, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

- Size: hex 2 x 50 mm
- Size: hex 2.5 x 50 mm
- Size: hex 3 x 50 mm
- Size: hex 4 x 50 mm
- Size: hex 5 x 50 mm
- Size: hex 6 x 50 mm
- Size: hex 8 x 50 mm

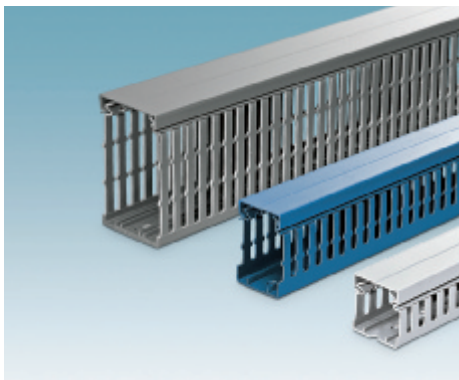
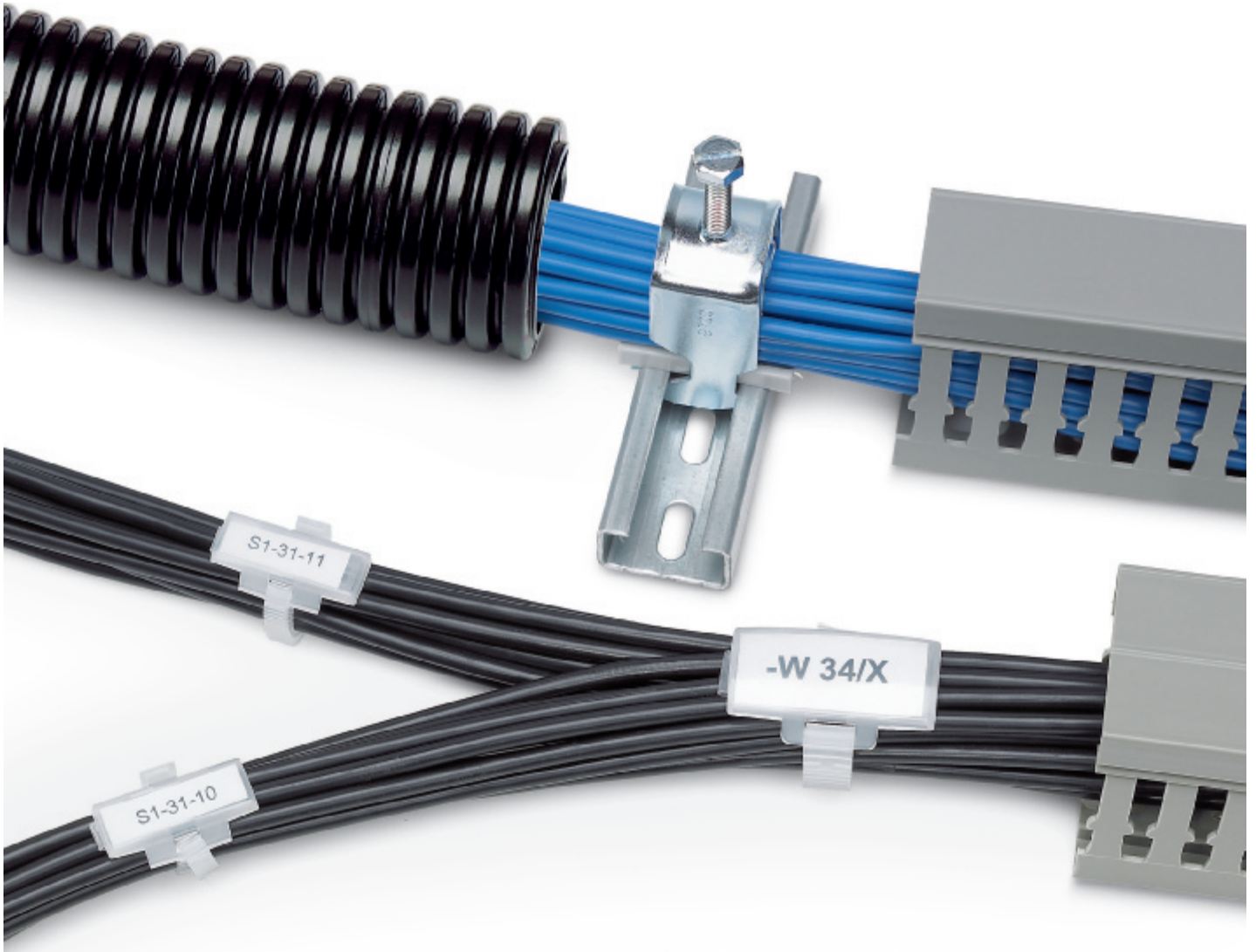
Ordering data

Type	Order No.	Pcs. / Pkt.
SF-BIT-HEX 2-50	1212645	5
SF-BIT-HEX 2,5-50	1212646	5
SF-BIT-HEX 3-50	1212647	5
SF-BIT-HEX 4-50	1212648	5
SF-BIT-HEX 5-50	1212649	5
SF-BIT-HEX 6-50	1212650	5
SF-BIT-HEX 8-50	1212651	5

Accessories

Bit screwdriver, with 1/4" quick-action chuck, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic

SF-M BH	1212070	1
---------	---------	---



Cable routing

The wide choice of cable ducts provides users with flexible and straightforward cable installation solutions that simply involve breaking out the lateral segments without any need for tools. The cable ducts are available in different colors and with a halogen-free design.

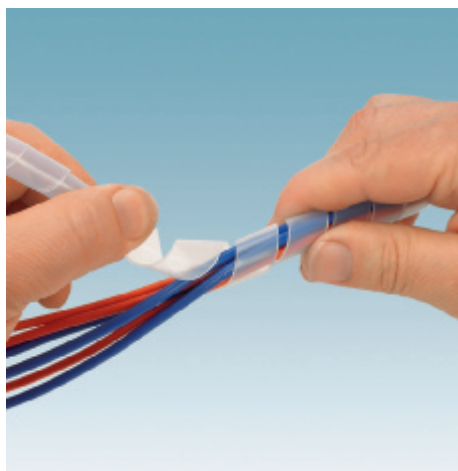
Cable protection

The extensive product range of protective hoses made of plastic and metal offers the ideal solution for every application. Protective hose screw connections with tool-free quick mounting function and various IP degrees of protection round off the range of products.

Cable bundling

For bundling cables, detectable cable binders and stainless steel or plastic cable binders are available in either a removable version or with a labeling area. Whether you are working in the food industry or the offshore sector, our comprehensive product range offers the ideal solution for every application.

Spiral hoses



Notes:
Pcs. / Pkt. indicates the spiral hose length in [m].



Spiral hose, for bundle diameters of 2 - 150 mm

The spiral hoses are used for easy bundling and guiding of cables and conductors and offer the following features:

- Quick and easy to use
- Can be retrofitted
- Single conductors or cables can be brought out through the helix structure at any point
- Offer protection under light mechanical strain

General data	
Material	PE
Components	free from silicone and halogen
Inflammability class according to UL 94	HB
Temperature range	-50 ... 85 [°C]

Technical Data

Material	PE
Components	free from silicone and halogen
Inflammability class according to UL 94	HB
Temperature range	-50 ... 85 [°C]

Description	Color
Spiral hose, for bundle diameters	
2 - 15 mm	transparent
4 - 20 mm	transparent
7 - 40 mm	transparent
12 - 50 mm	transparent
13 - 70 mm	transparent
15 - 80 mm	transparent
20 - 120 mm	transparent
25 - 150 mm	transparent
Spiral hose, for bundle diameters	
2 - 15 mm	black
4 - 20 mm	black
7 - 40 mm	black
12 - 50 mm	black
13 - 70 mm	black
15 - 80 mm	black
20 - 120 mm	black
25 - 150 mm	black

Ordering data

Type	Order No.	Pcs. / Pkt.
WG-S HF 15	3241109	50
WG-S HF 20	3241111	25
WG-S HF 40	3241113	25
WG-S HF 50	3241115	25
WG-S HF 70	3241117	25
WG-S HF 80	3241119	20
WG-S HF 120	3241121	25
WG-S HF 150	3241123	20
WG-S HF 15 BK	3241110	50
WG-S HF 20 BK	3241112	25
WG-S HF 40 BK	3241114	25
WG-S HF 50 BK	3241116	25
WG-S HF 70 BK	3241118	25
WG-S HF 80 BK	3241120	20
WG-S HF 120 BK	3241122	25
WG-S HF 150 BK	3241124	20

Electrician's scissors, high-performance cutting, thanks to micro-serrated cutting area

Accessories

CUTFOX-ES	1212621	1
-----------	---------	---

Mounting material - CABINET add-on

Protective hoses made of plastic



The plastic protective hoses offer optimum protection, thanks to the following properties:

- Airtight and liquid tight
- Oil-resistant up to +80°C
- Gasoline-resistant
- Largely resistant to acids and solvents
- Free from silicone, halogen, and cadmium
- UV resistant

The V0 version offers additional protection, thanks to its self-extinguishing property. This makes it suitable for use in the following areas:

- Machine and system engineering
- Vehicle construction
- Rail vehicles
- Shipbuilding
- Automation
- Electrical systems

The transition and end sleeves offer an alternative form of termination to the actual cable gland.

- Can be used wherever it is not possible or necessary to attach a cable gland
- Prevent damage to the conductors being fed through



Notes:
Pcs. / Pkt. specifies the protective hose length in [m].



slotted, outside diameter of 21.2 - 42.5 mm

General data
Material
Components
Inflammability class according to UL 94
Temperature range

Technical Data
PA
free from silicone, halogen, and cadmium
HB
-40 ... 105

Description	Color
--------------------	--------------

Protective hose, slotted, for retrofitting

Diameter [mm] Outside/inside	Bending radius [mm] static	
21.2/16.5	40	black
28.5/23	45	black
34.5/29	55	black
42.5/36	65	black

Protective hose		
Diameter [mm] Outside/inside	Bending radius [mm] static/dynamic	
10/6.5	13/35	black
13/10	20/45	black
15.8/12	35/55	black
21.2/16.5	45/75	black
28.5/23	55/100	black
34.5/29	65/120	black
42.5/36	90/150	black

Protective hose		
Diameter [mm] Outside/inside	Bending radius [mm] static/dynamic	
10/6.5	13/35	black
13/10	20/45	black
15.8/12	35/55	black
21.2/16.5	45/75	black
28.5/23	55/100	black
34.5/29	65/120	black
42.5/36	90/150	black

Transition sleeves, from hose to cable	
Diameter [mm] Outside/inside	
10/8	black
13/10	black
15.8/12	black
21.2/16.5	black
28.2/23	black
34.5/29	black
42.5/37	black

End sleeves	
Diameter [mm] Outside/inside	
10/4.3	black
13/7.8	black
15.8/10.3	black
21.2/14.3	black
28.2/20.8	black
34.5/26.8	black
42.5/33.8	black

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-PA HF-SL 21,2 BK	3240845	10
WP-PA HF-SL 28,5 BK	3240846	10
WP-PA HF-SL 34,5 BK	3240847	10
WP-PA HF-SL 42,5 BK	3240848	10



PA 6.6 V0 plastic protective hose, outside diameter of 10 - 42.5 mm



PA 6.6 HB plastic protective hose, outside diameter of 10 - 42.5 mm



Transition sleeve for protective hose diameters of 10 - 42.5 mm

Technical Data
PA free from silicone, halogen, and cadmium V0 -40 ... 115

Technical Data
PA free from silicone, halogen, and cadmium HB -40 ... 105

Technical Data
TPE halogen-free HB -40 ... 120

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

WP-PA HF 10,0 BK	3240680	50
WP-PA HF 13,0 BK	3240681	50
WP-PA HF 15,8 BK	3240682	50
WP-PA HF 21,2 BK	3240683	50
WP-PA HF 28,5 BK	3240684	50
WP-PA HF 34,5 BK	3241088	25
WP-PA HF 42,5 BK	3241089	25

WP-PA HF-HB 10,0 BK	3240838	50
WP-PA HF-HB 13,0 BK	3240839	50
WP-PA HF-HB 15,8 BK	3240840	50
WP-PA HF-HB 21,2 BK	3240841	50
WP-PA HF-HB 28,5 BK	3240842	50
WP-PA HF-HB 34,5 BK	3240843	25
WP-PA HF-HB 42,5 BK	3240844	25

WP-EC TPE HF 10,0 BK	3240974	50
WP-EC TPE HF 13,0 BK	3240975	50
WP-EC TPE HF 15,8 BK	3240976	50
WP-EC TPE HF 21,2 BK	3240977	50
WP-EC TPE HF 28,5 BK	3240978	25
WP-EC TPE HF 34,5 BK	3240979	25
WP-EC TPE HF 42,5 BK	3240980	25

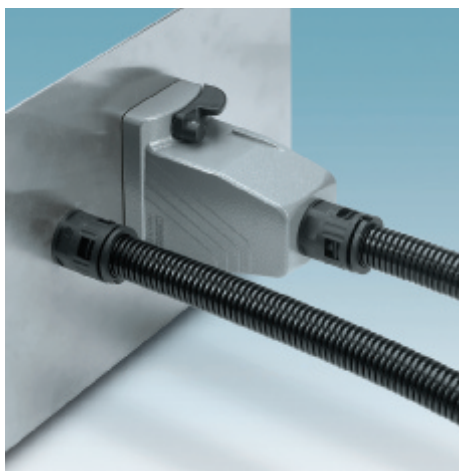
WP-SC PA HF 10,0 BK	3240981	50
WP-SC PA HF 13,0 BK	3240982	50
WP-SC PA HF 15,8 BK	3240983	50
WP-SC PA HF 21,2 BK	3240984	50
WP-SC PA HF 28,5 BK	3240985	25
WP-SC PA HF 34,5 BK	3240986	25
WP-SC PA HF 42,5 BK	3240987	25

WP-SC PA HF 10,0 BK	3240981	50
WP-SC PA HF 13,0 BK	3240982	50
WP-SC PA HF 15,8 BK	3240983	50
WP-SC PA HF 21,2 BK	3240984	50
WP-SC PA HF 28,5 BK	3240985	25
WP-SC PA HF 34,5 BK	3240986	25
WP-SC PA HF 42,5 BK	3240987	25

WP-SC PA HF 10,0 BK	3240981	50
WP-SC PA HF 13,0 BK	3240982	50
WP-SC PA HF 15,8 BK	3240983	50
WP-SC PA HF 21,2 BK	3240984	50
WP-SC PA HF 28,5 BK	3240985	25
WP-SC PA HF 34,5 BK	3240986	25
WP-SC PA HF 42,5 BK	3240987	25

Mounting material - CABINET add-on

Screw connections for plastic protective hoses



The plastic screw connections with straight design are available in IP66 and IP69K protection classes. They offer the following features:

- Vibration-resistant, automatic protective hose latching
- Pg or metric thread
- Resistant to oil and gasoline
- Resistant to acids and solvents
- Free from silicone, halogen, and cadmium

Tool-free protective hose mounting

- Secure, reliable, and easy latching in the hose screw connection, see figure below



Notes:

For accessories and dimensional drawings, see www.phoenixcontact.net/catalog



IP66 protection, Pg7 - Pg36 thread

General data

Material	PA
Components	free from silicone, halogen and cadmium
Degree of protection	IP66
Thread type	Pg
Inflammability class according to UL 94	V0
Temperature range	-40 ... 115 [°C]

Technical Data

Material	PA
Components	free from silicone, halogen and cadmium
Degree of protection	IP66
Thread type	Pg
Inflammability class according to UL 94	V0
Temperature range	-40 ... 115

Ordering data

Description	Color
Screw connection, IP66, straight, with Pg thread, for protective hose outside diameter [mm]	
10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black
Screw connection, IP66, straight, with metric thread, for protective hose outside diameter [mm]	
10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black
Screw connection, IP69K, straight, with Pg thread, for protective hose outside diameter [mm]	
10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black
Screw connection, IP69K, straight, with metric thread, for protective hose outside diameter [mm]	
10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Type	Order No.	Pcs. / Pkt.
WP-G HF IP66 PG7 BK	3240888	50
WP-G HF IP66 PG9 BK	3240889	50
WP-G HF IP66 PG11 BK	3240890	50
WP-G HF IP66 PG16 BK	3240891	50
WP-G HF IP66 PG21 BK	3240892	25
WP-G HF IP66 PG29 BK	3240893	25
WP-G HF IP66 PG36 BK	3240894	25

Counter nuts and seals

Accessories

www.phoenixcontact.net/catalog



IP66 protection, M10 - M40 metric thread



IP69K protection, Pg7 - Pg36 thread



IP69K protection, M10 - M40 metric thread

Technical Data

PA
free from silicone, halogen and cadmium
IP66
metric
V0
-40 ... 115

Technical Data

PA
free from silicone, halogen and cadmium
IP68/IP69K
Pg
V0
-40 ... 115

Technical Data

PA
free from silicone, halogen and cadmium
IP68/IP69K
metric
V0
-40 ... 115

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-G HF IP66 M10 BK	3240895	50
WP-G HF IP66 M12 BK	3240896	50
WP-G HF IP66 M16 BK	3240897	50
WP-G HF IP66 M20 BK	3240898	50
WP-G HF IP66 M25 BK	3240899	25
WP-G HF IP66 M32 BK	3240900	25
WP-G HF IP66 M40 BK	3240901	25

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-G HF IP69K PG7 BK	3240874	50
WP-G HF IP69K PG9 BK	3240875	50
WP-G HF IP69K PG11 BK	3240876	50
WP-G HF IP69K PG16 BK	3240877	50
WP-G HF IP69K PG21 BK	3240878	25
WP-G HF IP69K PG29 BK	3240879	25
WP-G HF IP69K PG36 BK	3240880	25

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-G HF IP69K M10 BK	3240881	50
WP-G HF IP69K M12 BK	3240882	50
WP-G HF IP69K M16 BK	3240883	50
WP-G HF IP69K M20 BK	3240884	50
WP-G HF IP69K M25 BK	3240885	25
WP-G HF IP69K M32 BK	3240886	25
WP-G HF IP69K M40 BK	3240887	25

Accessories

www.phoenixcontact.net/catalog

Accessories

www.phoenixcontact.net/catalog

Accessories

www.phoenixcontact.net/catalog

Mounting material - CABINET add-on

Screw connections, angled, for plastic protective hoses



The plastic screw connections with angled design are available with IP66 and IP69K protection. They offer the following features:

- Vibration-resistant, automatic protective hose latching
- Pg or metric thread
- Resistant to oil and gasoline
- Resistant to acids and solvents
- Free from silicone, halogen, and cadmium

Tool-free protective hose mounting

- Secure, reliable, and easy latching in the hose screw connection

Notes:

For accessories and dimensional drawings, see www.phoenixcontact.net/catalog



IP66 protection, Pg7 - Pg36 thread

General data

Material	
Components	
Degree of protection	
Thread type	
Inflammability class according to UL 94	
Temperature range	[°C]

Technical Data

PA
free from silicone, halogen and cadmium
IP66
Pg
HB
-40 ... 115

Description	Color
-------------	-------

Screw connection, IP66, 90° angled, with Pg thread, for protective hose outside diameter [mm]

10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Screw connection, IP66, 90° angled, with metric thread, for protective hose outside diameter [mm]

10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Screw connection, IP69K, 90° angled, with Pg thread, for protective hose outside diameter [mm]

10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Screw connection, IP69K, 90° angled, with metric thread, for protective hose outside diameter [mm]

10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GA HF IP66 PG7 BK	3240916	50
WP-GA HF IP66 PG9 BK	3240917	50
WP-GA HF IP66 PG11 BK	3240918	50
WP-GA HF IP66 PG16 BK	3240919	50
WP-GA HF IP66 PG21 BK	3240920	25
WP-GA HF IP66 PG29 BK	3240921	10
WP-GA HF IP66 PG36 BK	3240922	10

Counter nuts and seals

Accessories

www.phoenixcontact.net/catalog



IP66 protection, M10 - M40 metric thread



IP69K protection, Pg7 - Pg36 thread



IP69K protection, M10 - M40 metric thread

Technical Data

PA
free from silicone, halogen and cadmium
IP66
metric
HB
-40 ... 115

Technical Data

PA
free from silicone, halogen and cadmium
IP68/IP69K
Pg
HB
-40 ... 115

Technical Data

PA
free from silicone, halogen and cadmium
IP68/IP69K
metric
HB
-40 ... 115

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GA HF IP66 M10 BK	3240923	50
WP-GA HF IP66 M12 BK	3240924	50
WP-GA HF IP66 M16 BK	3240925	50
WP-GA HF IP66 M20 BK	3240926	50
WP-GA HF IP66 M25 BK	3240927	50
WP-GA HF IP66 M32 BK	3240928	25
WP-GA HF IP66 M40 BK	3240929	10

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GA HF IP69K PG7 BK	3240902	50
WP-GA HF IP69K PG9 BK	3240903	50
WP-GA HF IP69K PG11 BK	3240904	50
WP-GA HF IP69K PG16 BK	3240905	50
WP-GA HF IP69K PG21 BK	3240906	25
WP-GA HF IP69K PG29 BK	3240907	10
WP-GA HF IP69K PG36 BK	3240908	10

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GA HF IP69K M10 BK	3240909	50
WP-GA HF IP69K M12 BK	3240910	50
WP-GA HF IP69K M16 BK	3240911	50
WP-GA HF IP69K M20 BK	3240912	50
WP-GA HF IP69K M25 BK	3240913	25
WP-GA HF IP69K M32 BK	3240914	10
WP-GA HF IP69K M40 BK	3240915	10

Accessories

www.phoenixcontact.net/catalog

Accessories

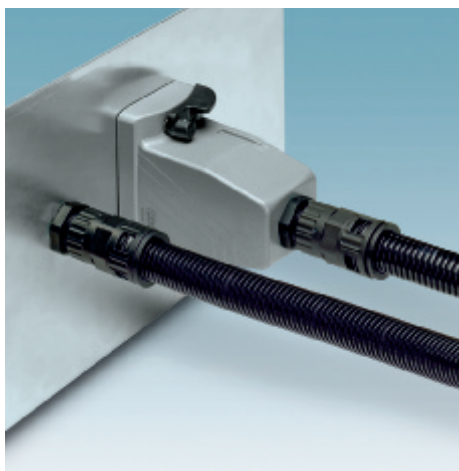
www.phoenixcontact.net/catalog

Accessories

www.phoenixcontact.net/catalog

Mounting material - CABINET add-on

Screw connections with strain relief, for plastic protective hoses



The plastic screw connections with strain relief are available in IP66 and IP69K protection classes. They offer the following features:

- Vibration-resistant, automatic protective hose latching
- Pg or metric thread
- Integrated cable strain relief
- Resistant to oil and gasoline
- Resistant to acids and solvents
- Free from silicone, halogen, and cadmium

Tool-free protective hose mounting

- Secure, reliable, and easy latching in the hose screw connection

Notes:

For accessories and dimensional drawings, see www.phoenixcontact.net/catalog



IP66 protection, Pg7 - Pg36 thread, with strain relief

General data

Material	
Components	
Degree of protection	
Thread type	
Inflammability class according to UL 94	
Temperature range	[°C]

Technical Data

PA
free from silicone, halogen and cadmium
IP66
Pg
V0
-40 ... 115

Description	Color
-------------	-------

Screw connection, IP66, straight, with Pg thread, for protective hose outside diameter [mm]	
10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Screw connection, IP66, straight, with metric thread, for protective hose outside diameter [mm]	
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Screw connection, IP69K, straight, with Pg thread, for protective hose outside diameter [mm]	
10	black
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Screw connection, IP69K, straight, with metric thread, for protective hose outside diameter [mm]	
13	black
15.8	black
21.2	black
28.5	black
34.5	black
42.5	black

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GR HF IP66 PG7 BK	3240944	20
WP-GR HF IP66 PG9 BK	3240945	20
WP-GR HF IP66 PG11 BK	3240946	20
WP-GR HF IP66 PG16 BK	3240947	10
WP-GR HF IP66 PG21 BK	3240948	10
WP-GR HF IP66 PG29 BK	3240949	10
WP-GR HF IP66 PG36 BK	3240950	10

Counter nuts and seals

Accessories

www.phoenixcontact.net/catalog



IP66 protection, M12 - M40 metric thread, with strain relief



IP69K protection, Pg7 - Pg36 thread, with strain relief



IP69K protection, M12 - M40 metric thread, with strain relief

Technical Data

PA
free from silicone, halogen and cadmium
IP66
metric
V0
-40 ... 115

Technical Data

PA
free from silicone, halogen and cadmium
IP68/IP69K
Pg
V0
-40 ... 115

Technical Data

PA
free from silicone, halogen and cadmium
IP68/IP69K
metric
V0
-40 ... 115

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GR HF IP66 M12 BK	3240952	20
WP-GR HF IP66 M16 BK	3240953	20
WP-GR HF IP66 M20 BK	3240954	20
WP-GR HF IP66 M25 BK	3240955	10
WP-GR HF IP66 M32 BK	3240956	10
WP-GR HF IP66 M40 BK	3240957	10

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GR HF IP69K PG7 BK	3240930	20
WP-GR HF IP69K PG9 BK	3240931	20
WP-GR HF IP69K PG11 BK	3240932	20
WP-GR HF IP69K PG16 BK	3240933	10
WP-GR HF IP69K PG21 BK	3240934	10
WP-GR HF IP69K PG29 BK	3240935	10
WP-GR HF IP69K PG36 BK	3240936	10

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-GR HF IP69K M12 BK	3240938	20
WP-GR HF IP69K M16 BK	3240939	20
WP-GR HF IP69K M20 BK	3240940	20
WP-GR HF IP69K M25 BK	3240941	10
WP-GR HF IP69K M32 BK	3240942	10
WP-GR HF IP69K M40 BK	3240943	10

Accessories

www.phoenixcontact.net/catalog

Accessories

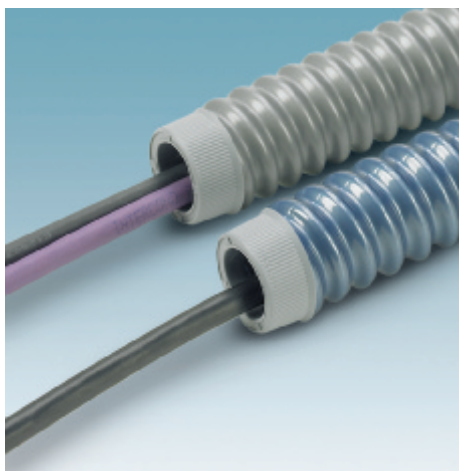
www.phoenixcontact.net/catalog

Accessories

www.phoenixcontact.net/catalog

Mounting material - CABINET add-on

Protective hoses with PVC- or PU-coated spirals



The **WP-SPIRAL PVC C ...** plastic protective hoses with soft PVC-coated spring wire helix offer optimum protection, thanks to the following properties:

- Highly flexible
- Can be stretched and compressed
- Internal corrosion protection
- Largely resistant to acids and solvents
- Free from silicone and cadmium
- Airtight and liquid tight

The **WP-SPIRAL PU C ...** plastic protective hoses with fixed, PU-coated spring wire helix offer the following:

- Very tough and resistant to abrasion
- Highly flexible
- Resistant to germs
- Airtight and liquid tight
- Resistant to oil and grease
- Gasoline-resistant
- Largely resistant to acids and solvents
- Free from silicone, halogen, and cadmium
- Flame-protected
- Behaves extremely well at low temperatures
- V2 according to UL 94
- Suitable as a suction tube

The covered protective hoses are particularly suitable for the following fields of application:

- Machine and system engineering
- Vehicle construction
- Use in guide chains
- Shipbuilding
- Automation
- Electrical systems

Notes:
Pcs. / Pkt. specifies the protective hose length in [m].



Protective hose, PVC coated spiral, outside diameter of 10 - 45 mm

General data	
Material	PVC
Components	Free from silicone and cadmium
Inflammability class according to UL 94	-
Temperature range	-25 ... 80 [°C]

Technical Data

Material	PVC
Components	Free from silicone and cadmium
Inflammability class according to UL 94	-
Temperature range	-25 ... 80 [°C]

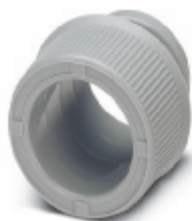
Description	Color	
Protective hose, PVC-coated spiral		
Diameter [mm]	Bending radius [mm]	
Outside/inside	static	
10/7	8	gray
14/10	10	gray
17/13	13	gray
21/16	17	gray
27/22	20	gray
36/29	24	gray
45/38	36	gray
Protective hose, PU-coated spiral		
Diameter [mm]	Bending radius [mm]	
Outside/inside	static	
10/7	8	blue
14/10	10	blue
17/13	13	blue
21/16	17	blue
27/22	20	blue
36/29	24	blue
45/38	36	blue
End sleeves		
Diameter [mm]	Cable diameter [mm]	
Outside/inside		
10/7	6	gray
14/10	9	gray
17/13	11.5	gray
21/16	14.5	gray
27/21	19.5	gray
36/29	26.5	gray
45/38	36	gray

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-SPIRAL PVC C 10	3240849	10
WP-SPIRAL PVC C 14	3240850	10
WP-SPIRAL PVC C 17	3240851	10
WP-SPIRAL PVC C 21	3240852	10
WP-SPIRAL PVC C 27	3240853	10
WP-SPIRAL PVC C 36	3240854	10
WP-SPIRAL PVC C 45	3240855	10



Protective hose, PU coated spiral,
outside diameter of 10 - 45 mm



End sleeve for protective hose diameter of
10 - 45 mm

Technical Data
PU free from silicone, halogen and cadmium V2 -40 ... 80

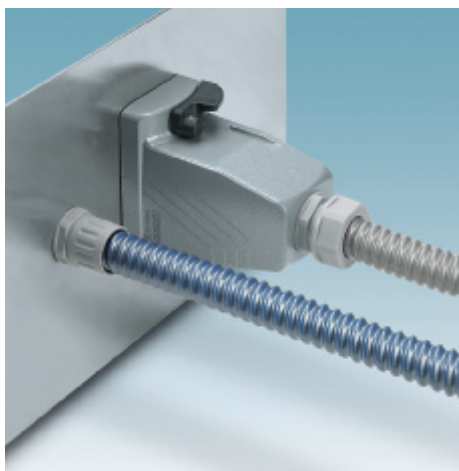
Technical Data
PP halogen-free HB -10 ... 110

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP-SPIRAL PU C HF 10	3240856	10
WP-SPIRAL PU C HF 14	3240857	10
WP-SPIRAL PU C HF 17	3240858	10
WP-SPIRAL PU C HF 21	3240859	10
WP-SPIRAL PU C HF 27	3240860	10
WP-SPIRAL PU C HF 36	3240861	10
WP-SPIRAL PU C HF 45	3240862	10

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP-SC HF 10	3241016	50
WP-SC HF 14	3241017	50
WP-SC HF 17	3241018	50
WP-SC HF 21	3241019	50
WP-SC HF 27	3241020	25
WP-SC HF 36	3241021	25
WP-SC HF 45	3241022	20

Mounting material - CABINET add-on

Screw connections, for protective hoses with coated spirals



The polypropylene screw connections with a straight design are available with or without a rotatable connecting thread.

- Easy, tool-free mounting
- High resistance to dust and fluids
- Vibration resistance and high tensile strength, thanks to hose screw-out locking

Rotatable screw connections

- The protective hose can still be rotated after panel mounting, thanks to the special screw connections



IP65 protection, Pg7 - Pg36 thread



General data

Material	PP
Degree of protection	IP65
Thread type	Pg
Components	halogen-free
Inflammability class according to UL 94	HB
Temperature range	-10 ... 110 [°C]

Technical Data

Description	Color
-------------	-------

Screw connection, IP65, straight, with Pg thread

Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	6	gray
14	9	gray
17	11	gray
21	14.5	gray
27	19.5	gray
36	27	gray
45	36	gray

Screw connection, IP65, straight, with metric thread

Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	6	gray
14	8	gray
17	11	gray
21	15	gray
27	20	gray
36	27	gray
45	35	gray

Screw connection, IP54, rotatable, with Pg thread

Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	5.5	gray
14	9.5	gray
17	11.5	gray
21	14.5	gray
27	19.5	gray
36	27	gray
45	35.5	gray

Screw connection, IP54, rotatable, with metric thread

Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	5.5	gray
14	9.5	gray
17	11.5	gray
21	14.5	gray
27	19.5	gray
36	27	gray

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-G PP HF PG7	3240988	10
WP-G PP HF PG9	3240989	10
WP-G PP HF PG11	3240990	10
WP-G PP HF PG16	3240991	10
WP-G PP HF PG21	3240992	10
WP-G PP HF PG29	3240993	2
WP-G PP HF PG36	3240994	2

Accessories

Counter nuts and seals

www.phoenixcontact.net/catalog



IP65 protection, M10 - M40 metric thread



IP54 protection, Pg7 - Pg36 thread, rotatable



IP54 protection, M12 - M40 metric thread, rotatable

Technical Data
PP IP65 metric halogen-free HB -10 ... 110

Technical Data
PP IP54 Pg halogen-free HB -10 ... 110

Technical Data
PP IP54 metric halogen-free HB -10 ... 110

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

WP-G PP HF M10	3240995	10
WP-G PP HF M12	3240996	10
WP-G PP HF M16	3240997	10
WP-G PP HF M20	3240998	10
WP-G PP HF M25	3240999	10
WP-G PP HF M32	3241000	2
WP-G PP HF M40	3241001	2

WP-GT PP HF PG7	3241002	10
WP-GT PP HF PG9	3241003	10
WP-GT PP HF PG11	3241004	10
WP-GT PP HF PG16	3241005	10
WP-GT PP HF PG21	3241006	10
WP-GT PP HF PG29	3241007	2
WP-GT PP HF PG36	3241008	2

WP-GT PP HF M12	3241010	10
WP-GT PP HF M16	3241011	10
WP-GT PP HF M20	3241012	10
WP-GT PP HF M25	3241013	10
WP-GT PP HF M32	3241014	10
WP-GT PP HF M40	3241015	2

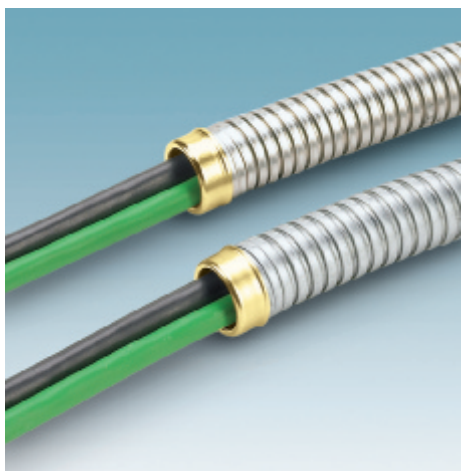
Accessories
www.phoenixcontact.net/catalog

Accessories
www.phoenixcontact.net/catalog

Accessories
www.phoenixcontact.net/catalog

Mounting material - CABINET add-on

Protective hoses made of steel or stainless steel



The metal protective hoses made of galvanized steel or stainless steel offer optimum protection and have a wide range of uses, thanks to the following properties:

- Interlocked, helix-wound profile
- Highly flexible
- High tensile strength and resistance to lateral pressure

These properties make the products suitable for use in the following areas:

- Machine and system engineering
- Vehicle construction
- Ex area according to EN 60079–14 and EN 61241–14
- Shipbuilding
- Rail vehicles
- Automation
- Electrical systems

Notes:
Pcs. / Pkt. specifies the protective hose length in [m].



Stainless steel protective hose, outside diameter of 10 - 45 mm

General data	
Material	steel, galvanized
Temperature range	-200 ... 220 [°C]

Technical Data	
Material	steel, galvanized
Temperature range	-200 ... 220

Description	Color	
Protective hose		
Diameter [mm]	Bending radius [mm]	
Outside/inside	static	
10/8	28	silver
14/11	34	silver
17/14	40	silver
21/18	50	silver
27/23	63	silver
36/31	85	silver
45/40	100	silver
Protective hose		
Diameter [mm]	Bending radius [mm]	
Outside/inside	static	
10/8	22	silver
14/11	25	silver
17/14	40	silver
21/18	50	silver
27/23	63	silver
36/31	85	silver
45/40	100	silver
End sleeves		
Outside diameter of hose [mm]	Cable diameter [mm]	
10	6.5	brass
14	10	brass
17	12.5	brass
21	16.5	brass
27	21.5	brass
36	29.5	brass
45	38	brass

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP-STEEL ZC 10	3240697	10
WP-STEEL ZC 14	3240865	10
WP-STEEL ZC 17	3240698	10
WP-STEEL ZC 21	3240699	10
WP-STEEL ZC 27	3240866	10
WP-STEEL ZC 36	3240700	10
WP-STEEL ZC 45	3240701	10



Stainless steel protective hose (V2A), outside diameter of 10 - 45 mm

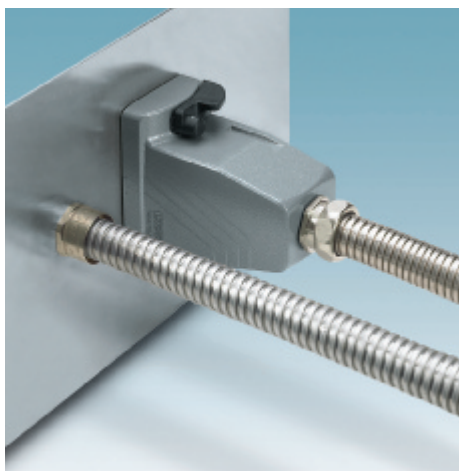


End sleeve for protective hose diameter of 10 - 45 mm

Technical Data			Technical Data		
stainless steel 1.4301/AISI 304 -200 ... 600			brass -40 ... 250		
Ordering data			Ordering data		
Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
WP-STEEL S 10	3240686	10	WP-SC BRASS 10	3241065	50
WP-STEEL S 14	3240687	10	WP-SC BRASS 14	3241066	50
WP-STEEL S 17	3240863	10	WP-SC BRASS 17	3241067	50
WP-STEEL S 21	3240688	10	WP-SC BRASS 21	3241068	50
WP-STEEL S 27	3240864	10	WP-SC BRASS 27	3241069	25
WP-STEEL S 36	3240689	10	WP-SC BRASS 36	3241070	25
WP-STEEL S 45	3240690	10	WP-SC BRASS 45	3241071	20

Mounting material - CABINET add-on

Screw connections, for protective hoses made of steel or stainless steel



The screw connections are available with or without a rotatable connecting thread and have the following properties:

- Easy mounting of protective hose without tools
- Vibration resistance and high tensile strength, thanks to hose screw-out locking
- Integrated inner sleeve and rotation lock for hose

Rotatable screw connections

- The protective hose can still be rotated after panel mounting, thanks to the special screw connections



IP40 protection, Pg7 - Pg36 thread

General data

Material	brass
Degree of protection	IP40
Thread type	Pg
Temperature range	-40 ... 125 [°C]

Technical Data

Material	brass
Degree of protection	IP40
Thread type	Pg
Temperature range	-40 ... 125

Ordering data

Description	Color
-------------	-------

Screw connection, IP40, with Pg thread		
Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	6.5	brass
14	10	brass
17	12.5	brass
21	16	brass
27	21.5	brass
36	29	brass
45	38	brass

Screw connection, IP40, with metric thread		
Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	6.5	brass
14	10	brass
17	12.5	brass
21	16	brass
27	21.5	brass
36	27.5	brass
45	35	brass

Screw connection, IP40, rotatable, with Pg thread

Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	6	brass
14	9	brass
17	12	brass
21	15.5	brass
27	20.5	brass
36	27.5	brass
45	36.5	brass

Screw connection, IP40, rotatable, with metric thread

Outside diameter of protective hose [mm]	Cable diameter [mm]	
10	6	brass
14	9	brass
17	12	brass
21	15.5	brass
27	20.5	brass
36	27.5	brass
45	35	brass

Type	Order No.	Pcs. / Pkt.
------	-----------	-------------

WP-G BRASS IP40 PG7	3241037	10
WP-G BRASS IP40 PG9	3241038	10
WP-G BRASS IP40 PG11	3241039	10
WP-G BRASS IP40 PG16	3241040	10
WP-G BRASS IP40 PG21	3241041	10
WP-G BRASS IP40 PG29	3241042	2
WP-G BRASS IP40 PG36	3241043	2

Accessories

Counter nuts and seals

www.phoenixcontact.net/catalog



IP40 protection, M10 - M40 metric thread



IP40 protection, Pg7 - Pg36 thread, rotatable



IP40 protection, M10 - M40 metric thread, rotatable

Technical Data
brass IP40 metric -40 ... 125

Technical Data
brass IP40 Pg -40 ... 250

Technical Data
brass IP40 metric -40 ... 250

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

WP-G BRASS IP40 M10	3241044	10
WP-G BRASS IP40 M12	3241045	10
WP-G BRASS IP40 M16	3241046	10
WP-G BRASS IP40 M20	3241047	10
WP-G BRASS IP40 M25	3241048	10
WP-G BRASS IP40 M32	3241049	2
WP-G BRASS IP40 M40	3241050	2

WP-GT BRASS PG7	3241023	10
WP-GT BRASS PG9	3241024	10
WP-GT BRASS PG11	3241025	10
WP-GT BRASS PG16	3241026	10
WP-GT BRASS PG21	3241027	10
WP-GT BRASS PG29	3241028	2
WP-GT BRASS PG36	3241029	2

WP-GT BRASS M10	3241030	10
WP-GT BRASS M12	3241031	10
WP-GT BRASS M16	3241032	10
WP-GT BRASS M20	3241033	10
WP-GT BRASS M25	3241034	10
WP-GT BRASS M32	3241035	2
WP-GT BRASS M40	3241036	2

Accessories		
-------------	--	--

Accessories		
-------------	--	--

Accessories		
-------------	--	--

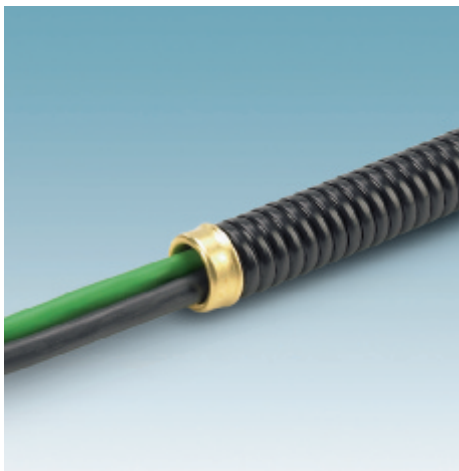
www.phoenixcontact.net/catalog

www.phoenixcontact.net/catalog

www.phoenixcontact.net/catalog

Mounting material - CABINET add-on

Protective hoses made of steel with PVC coating



The protective hoses made of galvanized steel with a PVC coating offer optimum protection and have a wide range of uses, thanks to the following properties:

- Weatherproof
- Watertight
- Largely resistant to sea water, acids, and oils
- Free from silicone and cadmium
- High tensile strength
- Very flexible
- Resistant to lateral pressure

These properties make the products suitable for use in the following areas:

- Machine and system engineering
- Vehicle construction
- Shipbuilding
- Rail vehicles
- Automation
- Electrical systems

Notes:
Pcs. / Pkt. specifies the protective hose length in [m].



Stainless steel protective hose (V2A), PVC coated, outside diameter of 10 - 45 mm

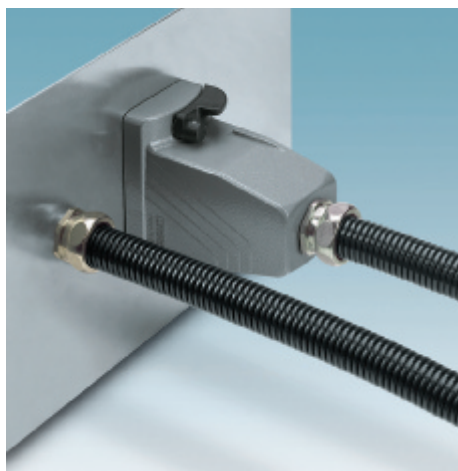
General data	
Material	Steel, galvanized/PVC
Temperature range	-25 ... 80 [°C]

Technical Data		
Steel, galvanized/PVC		
-25 ... 80		

Description	Color
Protective hose, in galvanized steel, PVC coated	
Diameter [mm] Outside/inside	Bending radius [mm] static
10/7	95
14/10	105
17/13	115
21/17	110
27/22	135
36/29	145
45/38	215
End sleeves, in brass	
Outside diameter of hose [mm]	Cable diameter [mm]
10	6
14	8.5
17	11.5
21	15.5
27	20.5
36	27.5
45	36.5

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP-STEEL PVC C 10	3240867	10
WP-STEEL PVC C 14	3240868	10
WP-STEEL PVC C 17	3240869	10
WP-STEEL PVC C 21	3240870	10
WP-STEEL PVC C 27	3240871	10
WP-STEEL PVC C 36	3240872	10
WP-STEEL PVC C 45	3240873	10
WP-SC BRASS WP PVC 10	3241072	50
WP-SC BRASS WP PVC 14	3241073	50
WP-SC BRASS WP PVC 17	3241074	50
WP-SC BRASS WP PVC 21	3241075	50
WP-SC BRASS WP PVC 27	3241076	25
WP-SC BRASS WP PVC 36	3241077	25
WP-SC BRASS WP PVC 45	3241078	20

Screw connections for protective hoses made of steel with PVC coating



- The screw connections offer:
- Easy mounting of protective hose without tools
 - High resistance to dust and fluids
 - Vibration resistance and high tensile strength
 - Integrated inner sleeve with safety screw connection



IP65 protection, Pg7 - Pg36 thread and M10 - M40 metric thread

General data	
Material	brass
Degree of protection	IP65
Thread type	Pg
Temperature range	-40 ... 125 [°C]

Technical Data

Material	brass
Degree of protection	IP65
Thread type	Pg
Temperature range	-40 ... 125

Description	Color
Screw connection, IP65, with Pg thread	
Outside diameter of protective hose [mm]	Cable diameter [mm]
10	6
14	8.5
17	11.5
21	15.5
27	20.5
36	27.5
45	35
Screw connection, IP65, with metric thread	
Outside diameter of protective hose [mm]	Cable diameter [mm]
10	6
14	8.5
17	11.5
21	15.5
27	20.5
36	27.5
45	35

Ordering data

Type	Order No.	Pcs. / Pkt.
WP-G BRASS IP65 PG7	3241051	10
WP-G BRASS IP65 PG9	3241052	10
WP-G BRASS IP65 PG11	3241053	10
WP-G BRASS IP65 PG16	3241054	10
WP-G BRASS IP65 PG21	3241055	10
WP-G BRASS IP65 PG29	3241056	2
WP-G BRASS IP65 PG36	3241057	2
Screw connection, IP65, with metric thread		
WP-G BRASS IP65 M10	3241058	10
WP-G BRASS IP65 M12	3241059	10
WP-G BRASS IP65 M16	3241060	10
WP-G BRASS IP65 M20	3241061	10
WP-G BRASS IP65 M25	3241062	10
WP-G BRASS IP65 M32	3241063	2
WP-G BRASS IP65 M40	3241064	2

Accessories

Counter nuts and seals

www.phoenixcontact.net/catalog

Mounting material - CABINET add-on

Accessories for protective hose mounting

The WP-BASE C... protective hose holders with cover can be attached using a screw.

- An integrated rib fastening also helps to relieve the strain on the protective hose
- The base of the holder is designed so that it can even be pushed onto a C DIN rail
- The engagement pins enable hose holders of different sizes to be arranged alongside each other

WP-BASE HF... protective hose clips:

- Galvanized steel locking latch with rubber profile
- Screw mounting

WP-BASE ... fixing bracket:

- With two mounting holes according to DIN 46320
- Protective hose feed-through can be attached to the side of the panel
- Pg or metric protective hose screw connections can be mounted on a bracket



Protective hose with cover

General data		
Material		
Description	Color	
Protective hose holder with cover, screwable, made of plastic		
Outside diameter of protective hose [mm]	Hole diameter [mm]	
10	5.5	black
13	5.5	black
15.8	5.5	black
21.2	6.5	black
28.5	6.5	black
34.5	6.5	black
42.5	6.5	black
Protective hose clip , screwable		
Outside diameter of protective hose [mm]	Hole diameter [mm]	
10	4.5	silver/black
13	4.5	silver/black
14	4.5	silver/black
15.8	5.5	silver/black
17	5.5	silver/black
22	5.5	silver/black
29	6.5	silver/black
36	6.5	silver/black
45	6.5	silver/black
Fixing bracket , screwable		
Screw connection	Hole diameter [mm]	
Pg16	23	silver
Pg21	29	silver
Pg29	37.5	silver
Pg36	47.5	silver
Fixing bracket , screwable		
Screw connection	Hole diameter [mm]	
M16	17	silver
M20	21	silver
M25	26	silver
M32	33	silver
M40	43	silver

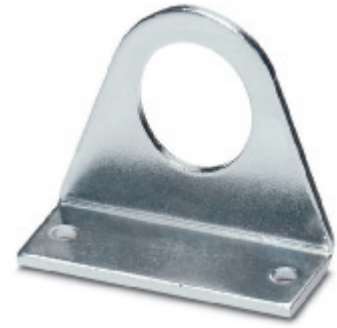
Technical Data		
PA		
Ordering data		
Type	Order No.	Pcs. / Pkt.
WP-BASE C PA HF 10,0 BK	3240958	50
WP-BASE C PA HF 13,0 BK	3240959	50
WP-BASE C PA HF 15,8 BK	3240960	50
WP-BASE C PA HF 21,2 BK	3240961	50
WP-BASE C PA HF 28,2 BK	3240962	25
WP-BASE C PA HF 34,5 BK	3240963	25
WP-BASE C PA HF 42,5 BK	3240964	25



Protective hose clip



Fixing bracket, screw version, for PG screw connection



Fixing bracket, screw version, for metric screw connection

Technical Data
steel, galvanized

Technical Data
steel, galvanized

Technical Data
steel, galvanized

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

Ordering data		
Type	Order No.	Pcs. / Pkt.

WP-BASE HF 9-10	3240965	50
WP-BASE HF 13	3240966	50
WP-BASE HF 14	3240967	50
WP-BASE HF 15,8	3240968	50
WP-BASE HF 17	3240969	50
WP-BASE HF 22	3240970	50
WP-BASE HF 29	3240971	50
WP-BASE HF 37	3240972	50
WP-BASE HF 45	3240973	25

WP-BASE A PG16	3241079	25
WP-BASE A PG21	3241080	25
WP-BASE A PG29	3241081	25
WP-BASE A PG36	3241082	25

WP-BASE A M16	3241083	25
WP-BASE A M20	3241084	25
WP-BASE A M25	3241085	25
WP-BASE A M32	3241086	25
WP-BASE A M40	3241087	25

Plastic cable binders



- For bundling and fastening conductors and cables
- Can be used indoors and outdoors even under unfavorable industrial conditions
- With the UNIFOX-CT ... cable binder tool, the cable binders can be easily tightened and cut off flush in one step
- Cable binders are easy to use, thanks to their optimized geometries
- Optimum head shape for high tensile forces
- Temperature range: briefly up to 110°C
- Comprehensive approvals
- **Designation example:**
WT-HF 2,5X98
Cable binder width: 2.5 mm
Cable binder length: 98 mm

Cable marking

- The plastic cable binders are ideal for use with the WMTB, KMK 2, and KMK 4 cable markers from Phoenix Contact



Cable tie length of 98 - 1000 mm



General data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Description	Color
Cable binder, maximum bundle Ø [mm]/minimum tensile strength [N]	
21/80	transparent
40/80	transparent
52/80	transparent
35/130	transparent
50/130	transparent
80/130	transparent
40/220	transparent
50/220	transparent
79/220	transparent
100/220	transparent
115/220	transparent
80/540	transparent
100/540	transparent
158/540	transparent
233/700	transparent
143/1080	transparent
302/1080	transparent
Cable binder, large pack, maximum bundle Ø [mm]/minimum tensile strength [N]	
21/80	transparent
40/80	transparent
52/80	transparent
35/130	transparent
50/130	transparent
80/130	transparent
40/220	transparent
50/220	transparent

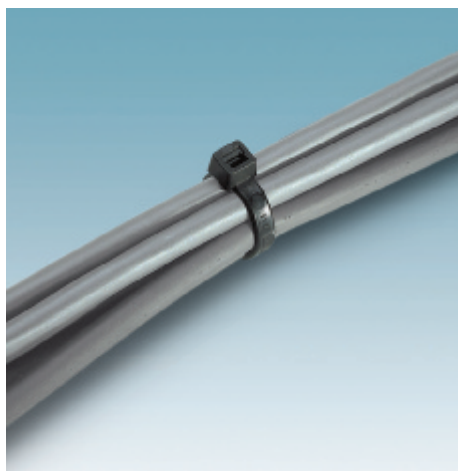
Ordering data		
Type	Order No.	Pcs. / Pkt.
WT-HF 2,5X98	3240732	100
WT-HF 2,6X160	3240736	100
WT-HF 2,6X200	3240740	100
WT-HF 3,6X140	3240744	100
WT-HF 3,6X200	3240748	100
WT-HF 3,6X290	3240752	100
WT-HF 4,5X160	3240756	100
WT-HF 4,5X200	3240760	100
WT-HF 4,5X290	3240764	100
WT-HF 4,5X360	3240768	100
WT-HF 4,5X430	3240770	100
WT-HF 7,8X300	3240772	100
WT-HF 7,8X365	3240774	100
WT-HF 7,8X540	3240719	100
WT-HF 9X780	3240778	100
WT-HF 12,6X850	3240730	100
WT-HF 12,6X1000	3240728	50
WT-HF 2,5X98-L	3240735	1000
WT-HF 2,6X160-L	3240739	1000
WT-HF 2,6X200-L	3240743	1000
WT-HF 3,6X140-L	3240747	1000
WT-HF 3,6X200-L	3240751	1000
WT-HF 3,6X290-L	3240755	1000
WT-HF 4,5X160-L	3240759	1000
WT-HF 4,5X200-L	3240763	1000

Cable binder pliers, for plastic cable binders with a width of 2.2 - 4.8 mm, for a material thickness of up to 1.6 mm

Professional cable binder pliers, for plastic cable binders with a width of 2.2 - 4.8 mm, up to 1.6 mm material thickness

Accessories		
UNIFOX-CT 4,8	1212475	1
UNIFOX-CT 4,8P	1212609	1

Plastic cable binders



- The black cable binders are UV stabilized by adding carbon black and are suitable for use in outdoor systems according to ISO 4892 (QUV-B 150 hours) for up to three years
- Temperature range: briefly up to 110°C
- Comprehensive approvals

In part 2 of the CLIPLINE catalog, you can find the comprehensive product range of cable binders with KMK ..., KME ..., and LM ... labeling options, see also the figure below.



Cable tie length of 98 - 1000 mm



Technical Data

General data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Ordering data

Description	Color
Cable binder, maximum bundle Ø [mm]/minimum tensile strength [N]	
21/80	black
40/80	black
52/80	black
35/130	black
50/130	black
80/130	black
40/220	black
50/220	black
79/220	black
100/220	black
115/220	black
80/540	black
100/540	black
158/540	black
233/700	black
143/1080	black
302/1080	black
Cable binder, large pack, maximum bundle Ø [mm]/minimum tensile strength [N]	
21/80	black
40/80	black
52/80	black
35/130	black
50/130	black
80/130	black
40/220	black
50/220	black

Type	Order No.	Pcs. / Pkt.
WT-HF 2,5X98 BK	3240733	100
WT-HF 2,6X160 BK	3240737	100
WT-HF 2,6X200 BK	3240741	100
WT-HF 3,6X140 BK	3240745	100
WT-HF 3,6X200 BK	3240749	100
WT-HF 3,6X290 BK	3240753	100
WT-HF 4,5X160 BK	3240757	100
WT-HF 4,5X200 BK	3240761	100
WT-HF 4,5X290 BK	3240765	100
WT-HF 4,5X360 BK	3240769	100
WT-HF 4,5X430 BK	3240771	100
WT-HF 7,8X300 BK	3240773	100
WT-HF 7,8X365 BK	3240775	100
WT-HF 7,8X540 BK	3240721	100
WT-HF 9X780 BK	3240779	100
WT-HF 12,6X850 BK	3240731	100
WT-HF 12,6X1000 BK	3240729	50
WT-HF 2,5X98 BK-L	3240734	1000
WT-HF 2,6X160 BK-L	3240738	1000
WT-HF 2,6X200 BK-L	3240742	1000
WT-HF 3,6X140 BK-L	3240746	1000
WT-HF 3,6X200 BK-L	3240750	1000
WT-HF 3,6X290 BK-L	3240754	1000
WT-HF 4,5X160 BK-L	3240758	1000
WT-HF 4,5X200 BK-L	3240762	1000

Cable binder pliers, for plastic cable binders with a width of 2.2 - 4.8 mm, for a material thickness of up to 1.6 mm

Professional cable binder pliers, for plastic cable binders with a width of 2.2 - 4.8 mm, up to 1.6 mm material thickness

Accessories

Accessories	Order No.	Pcs. / Pkt.
UNIFOX-CT 4,8	1212475	1
UNIFOX-CT 4,8P	1212609	1

Cable binders for outdoor use



The WT-UV HF ... cable binders are specially designed for outdoor use and offer the following features:

- Weatherproof and UV resistant according to ISO 4892 (QUV-B 600 hours) for up to ten years
- Cable binders are easy to use, thanks to their optimum geometries
- Optimum head shape for high tensile forces
- Halogen-free/silicone-free
- Constantly high temperature resistance up to 105°C
- **Designation example:**
WT-UV HF 2,5X98 BK
 Cable binder width: 2.5 mm
 Cable binder length: 98 mm



Cable tie length of 98 - 365 mm

General data	
Material	
Components	
Inflammability class according to UL 94	
Temperature range	[°C]

Technical Data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 105

Description	Color
Cable binder , maximum bundle Ø [mm]/minimum tensile strength [N]	
21/80	black
35/130	black
50/130	black
50/220	black
79/220	black
100/540	black

Ordering data		
Type	Order No.	Pcs. / Pkt.
WT-UV HF 2,5X98 BK	3240831	100
WT-UV HF 3,6X140 BK	3240832	100
WT-UV HF 3,6X200 BK	3240833	100
WT-UV HF 4,5X200 BK	3240834	100
WT-UV HF 4,5X290 BK	3240835	100
WT-UV HF 7,8X365 BK	3240837	100

Cable binder pliers , for plastic cable binders with a width of 2.2 - 4.8 mm, for a material thickness of up to 1.6 mm
Professional cable binder pliers , for plastic cable binders with a width of 2.2 - 4.8 mm, up to 1.6 mm material thickness

Accessories		
Type	Order No.	Pcs. / Pkt.
UNIFOX-CT 4,8	1212475	1
UNIFOX-CT 4,8P	1212609	1

Cable binders for use under high temperatures



The WT-HT HF ... cable binders are specially designed for high-temperature applications and offer the following features:

- Constantly high temperature resistance up to 125°C and briefly up to 145°C
- Cable binders are easy to use, thanks to their optimum geometries
- Black cable binders are UV stabilized
- Special head shape for high tensile forces
- Halogen-free/silicone-free

Designation example:
WT-HT HF 2,5X98

Cable binder width: 2.5 mm
Cable binder length: 98 mm



Cable tie length of 98 - 365 mm

General data

Material	
Components	
Inflammability class according to UL 94	
Temperature range	[°C]

Technical Data

PA 6.6
free from silicone and halogen
V2
-40 ... 125

Description **Color**

Cable binder, maximum bundle Ø [mm]/minimum tensile strength [N]

21/80	transparent
35/130	transparent
50/130	transparent
50/220	transparent
79/220	transparent
100/540	transparent

Cable binder, maximum bundle Ø [mm]/minimum tensile strength [N]

21/80	black
35/130	black
50/130	black
50/220	black
79/220	black
100/540	black

Ordering data

Type	Order No.	Pcs. / Pkt.
WT-HT HF 2,5X98	3240780	100
WT-HT HF 3,6X140	3240782	100
WT-HT HF 3,6X200	3240784	100
WT-HT HF 4,5X200	3240786	100
WT-HT HF 4,5X290	3240788	100
WT-HT HF 7,8X365	3240792	100
WT-HT HF 2,5X98 BK	3240781	100
WT-HT HF 3,6X140 BK	3240783	100
WT-HT HF 3,6X200 BK	3240785	100
WT-HT HF 4,5X200 BK	3240787	100
WT-HT HF 4,5X290 BK	3240789	100
WT-HT HF 7,8X365 BK	3240793	100

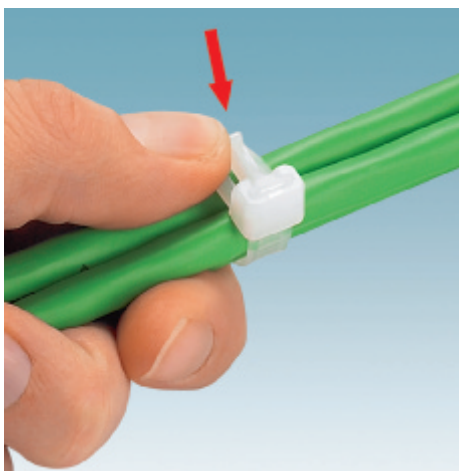
Cable binder pliers, for plastic cable binders with a width of 2.2 - 4.8 mm, for a material thickness of up to 1.6 mm

Professional cable binder pliers, for plastic cable binders with a width of 2.2 - 4.8 mm, up to 1.6 mm material thickness

Accessories

UNIFOX-CT 4,8	1212475	1
UNIFOX-CT 4,8P	1212609	1

Cable binders for reopening



The WT-D HF ... cable binders are ideal for temporary mounting and offer the following features:

- Can be removed easily without tools and reused
- Cable binders are easy to use, thanks to their optimum geometries
- Halogen-free/silicone-free



Cable tie length of 200 - 350 mm

General data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 80 [°C]

Technical Data

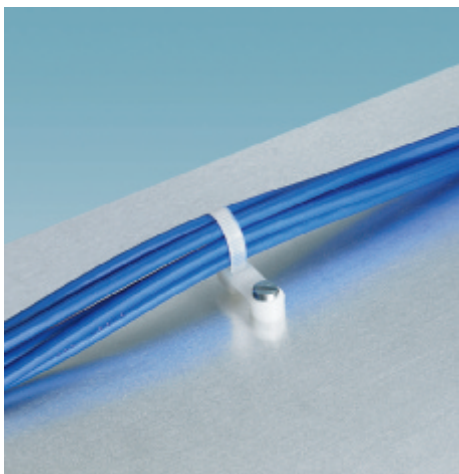
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 80 [°C]

Description	Color
Cable binder , maximum bundle Ø [mm]/minimum tensile strength [N]	
50/220	transparent
65/220	transparent
100/220	transparent
Cable binder , maximum bundle Ø [mm]/minimum tensile strength [N]	
50/220	black
65/220	black
100/220	black

Ordering data

Type	Order No.	Pcs. / Pkt.
WT-D HF 7,5X200	3240712	100
WT-D HF 7,5X250	3240714	100
WT-D HF 7,5X350	3240716	100
WT-D HF 7,5X200 BK	3240713	100
WT-D HF 7,5X250 BK	3240715	100
WT-D HF 7,5X350 BK	3240717	100

Cable binders with lug for direct rivet or screw mounting



The WTE HF ... cable binders with lug for direct mounting offer the following features:

- Space saving, thanks to molded fastening lug
- Secure hold, thanks to screw or rivet fixing
- Easy to use
- Halogen-free/silicone-free
- Optimum head shape for high tensile forces
- Temperature range: briefly up to 110°C

Notes:
For corresponding cable binder pliers, see previous page.



Cable tie length of 150 - 380 mm

General data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data

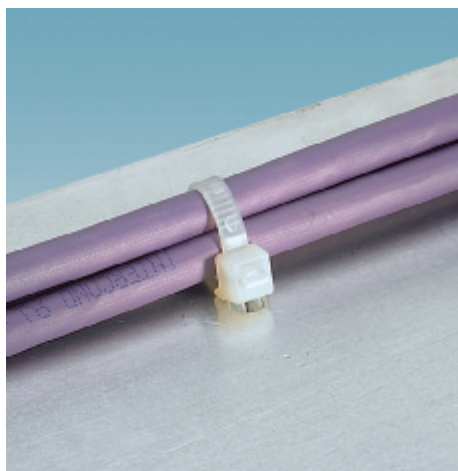
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Description	Color
Cable binder , maximum bundle Ø [mm]/minimum tensile strength [N]	
32/130 hole diameter 4.5 mm	transparent
50/220 hole diameter 5.2 mm	transparent
44/540 hole diameter 6.5 mm	transparent
75/540 hole diameter 6.5 mm	transparent
104/540 hole diameter 6.5 mm	transparent

Ordering data

Type	Order No.	Pcs. / Pkt.
WT-E HF 3,6X150	3240718	100
WT-E HF 4,8X200	3240720	100
WT-E HF 7,8X200	3240722	100
WT-E HF 7,8X300	3240724	100
WT-E HF 7,8X380	3240726	100

Cable binders with body-bound rivet for direct mounting



Notes:
For corresponding cable binder pliers, see previous page.



Cable tie length of 150 - 200 mm

General data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data		
----------------	--	--

Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85

Ordering data		
---------------	--	--

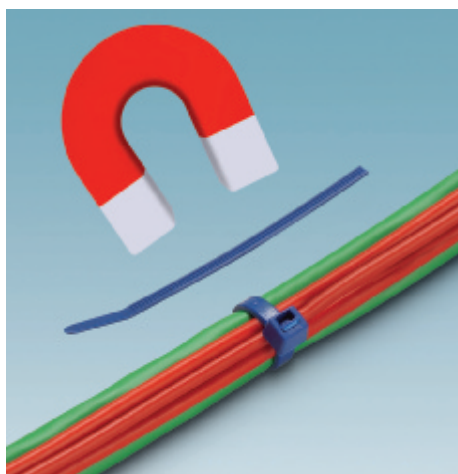
Type	Order No.	Pcs. / Pkt.
WT-R HF 3,6X150	3240801	100
WT-R HF 4,8X200	3240803	100

Description	Color
Cable binder , maximum bundle Ø [mm]/minimum tensile strength [N]	
38/130 hole diameter 5.2 mm	transparent
50/220 hole diameter 6.3 mm	transparent

The WT-R HF ... cable binders for straightforward direct mounting offer the following features:

- Space saving, thanks to molded body-bound rivet
- Easy to plug in and optimum hold in standard drill hole
- Optimum head shape for high tensile forces
- Halogen-free/silicone-free

Detectable cable binders



Notes:
For corresponding cable binder pliers, see previous page.



Cable tie length of 98 - 365 mm

General data	
Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data		
----------------	--	--

Material	PA 6.6
Components	free from silicone and halogen
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85

Ordering data		
---------------	--	--

Type	Order No.	Pcs. / Pkt.
WT-ID HF 2,5X98 BU	3240794	100
WT-ID HF 3,5X140 BU	3240795	100
WT-ID HF 3,5X200 BU	3240796	100
WT-ID HF 4,5X200 BU	3240797	100
WT-ID HF 4,5X290 BU	3240798	100
WT-ID HF 7,5X365 BU	3240800	100

Description	Color
Cable binder , with metal portions, maximum bundle Ø [mm]/minimum tensile strength [N]	
21/80	blue
35/130	blue
50/130	blue
50/220	blue
79/220	blue
100/540	blue

The WT-ID HF ... cable binders are specially designed for production processes in the food, pharmaceutical, and chemical industries and offer the following features:

- High level of protection against contamination in the production process
- Detectable using X-ray units or metal detectors
- Magnetic
- Easy to see
- Corrosion-free

Mounting material - CABINET add-on

Cable binders made of stainless steel AISI 304 (V2A)



The WT-STEEL S ... cable binders are especially suited to use outdoors and in the chemical industry. They offer the following features:

- Secure, permanent attachment and a long service life
- Corrosion resistant
- Chemical resistance
- UV resistant
- Weatherproof
- Fire-proof
- Vibration-resistant
- Easy to use and self-locking
- Anti-magnetic
- Halogen-free/silicone-free

Notes:

For corresponding stainless steel cable markers, see CLIPLINE catalog, part 2, page 189.



Cable tie length of 150 - 1067 mm



Technical Data

General data	
Material	stainless steel 1.4301/AISI 304
Temperature range	-80 ... 538 [°C]

stainless steel 1.4301/AISI 304
-80 ... 538

Ordering data

Description	Color
Cable binder , made of stainless steel (AISI 304), width 4.6 mm, maximum bundle Ø [mm]/minimum tensile strength [N]	
30/890	silver
50/890	silver
69/890	silver
102/890	silver
152/890	silver
203/890	silver
254/890	silver
305/890	silver
Cable binder , made of stainless steel (AISI 304), width 7.9 mm, maximum bundle Ø [mm]/minimum tensile strength [N]	
69/1335	silver
102/1335	silver
152/1335	silver
203/1335	silver
254/1335	silver
305/1335	silver

Type	Order No.	Pcs. / Pkt.
WT-STEEL S 4,6X150	3240807	100
WT-STEEL S 4,6X201	3240808	100
WT-STEEL S 4,6X259	3240809	100
WT-STEEL S 4,6X360	3240810	100
WT-STEEL S 4,6X520	3240811	100
WT-STEEL S 4,6X679	3240812	100
WT-STEEL S 4,6X838	3240723	100
WT-STEEL S 4,6X1067	3240805	100
WT-STEEL S 7,9X259	3240814	100
WT-STEEL S 7,9X360	3240815	100
WT-STEEL S 7,9X520	3240816	100
WT-STEEL S 7,9X679	3240817	100
WT-STEEL S 7,9X838	3240725	100
WT-STEEL S 7,9X1067	3240813	100

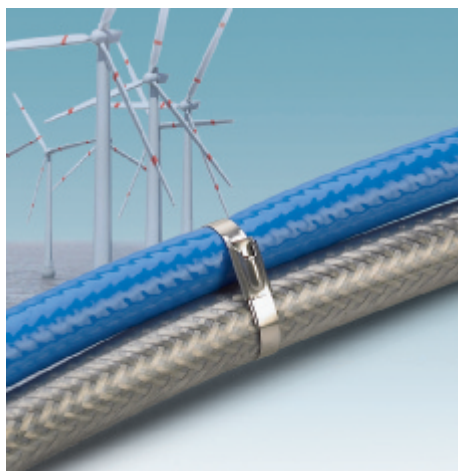
Cable binder pliers, for steel cable binders with a width of up to 7.9 mm, for a material thickness of up to 0.3 mm

Accessories

UNIFOX-CT M 7,9	1212610	1
-----------------	---------	---



**Cable binders made of stainless steel
AISI 316 (V4A)**



The WT-STEEL SH ... cable binders are especially suited to use with aggressive chemicals and in onshore and offshore areas. They offer the following features:

- Secure, permanent attachment with long service life
- Corrosion resistant when exposed to aggressive chemicals, e.g., acids, salt fog, and sea water
- UV resistant
- Weatherproof
- Fire-proof
- Vibration-resistant
- Easy to use
- Anti-magnetic
- Halogen-free/silicone-free



Cable tie length of 150 - 1067 mm



General data	
Material	stainless steel 1.4401/AISI 316
Temperature range	-80 ... 538 [°C]

Technical Data		
stainless steel 1.4401/AISI 316		
-80 ... 538		

Description	Color
Cable binder , made of stainless steel (AISI 316), width 4.6 mm, maximum bundle Ø [mm]/minimum tensile strength [N]	
30/890	silver
50/890	silver
69/890	silver
102/890	silver
152/890	silver
203/890	silver
254/890	silver
305/890	silver
Cable binder , made of stainless steel (AISI 316), width 7.9 mm, maximum bundle Ø [mm]/minimum tensile strength [N]	
69/1335	silver
102/1335	silver
152/1335	silver
203/1335	silver
254/1335	silver
305/1335	silver

Ordering data

Type	Order No.	Pcs. / Pkt.
WT-STEEL SH 4,6X150	3240820	100
WT-STEEL SH 4,6X201	3240821	100
WT-STEEL SH 4,6X259	3240822	100
WT-STEEL SH 4,6X360	3240823	100
WT-STEEL SH 4,6X520	3240824	100
WT-STEEL SH 4,6X679	3240825	100
WT-STEEL SH 4,6X838	3240727	100
WT-STEEL SH 4,6X1067	3240818	100
WT-STEEL SH 7,9X259	3240827	100
WT-STEEL SH 7,9X360	3240828	100
WT-STEEL SH 7,9X520	3240829	100
WT-STEEL SH 7,9X679	3240830	100
WT-STEEL SH 7,9X838	3240766	100
WT-STEEL SH 7,9X1067	3240826	100

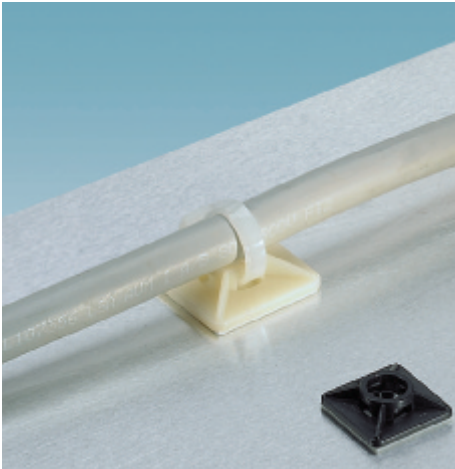
Cable binder pliers, for steel cable binders with a width of up to 7.9 mm, for a material thickness of up to 0.3 mm

Accessories

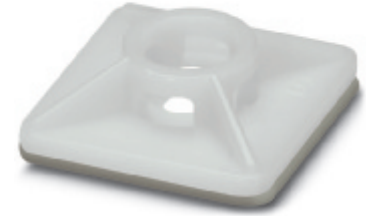
UNIFOX-CT M 7,9	1212610	1
-----------------	---------	---

Mounting material - CABINET add-on

Cable binder base, self-adhesive and/or screwable



- The WT-BASE LS ... cable binder bases are characterized by their excellent adhesive properties as well as the following:
- Easy to use
 - Cable binders can be fed through on four sides
 - Self-adhesive and optionally screwable
 - Secure hold, load can be applied after just a few minutes
 - Halogen-free/silicone-free



General data	
Material	ABS
Inflammability class according to UL 94	HB
Temperature range	-40 ... 60 [°C]

Technical Data

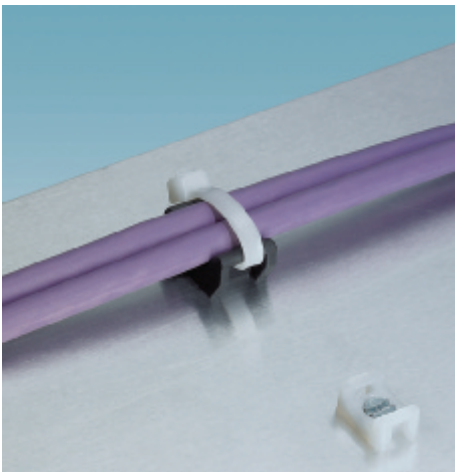
ABS
HB
-40 ... 60

Description	Color
Cable binder base , for cable binders of up to 4 mm width, self-adhesive and screwable, 4 mm fixing hole, dimensions: 19 x 19 mm	transparent black
Cable binder base , for cable binders of up to 6 mm width, self-adhesive and screwable, 4.8 mm fixing hole, dimensions: 27 x 27 mm	transparent black

Ordering data

Type	Order No.	Pcs. / Pkt.
WT-BASE LS HF 4	3240706	100
WT-BASE LS HF 4 BK	3240707	100
WT-BASE LS HF 6	3240708	100
WT-BASE LS HF 6 BK	3240709	100

Cable binder base, screwable



- Space-saving design
- Easy to use
- Cable binders can be fed through on two sides
- Halogen-free/silicone-free



General data	
Material	PA 6.6
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data

PA 6.6
V2
-40 ... 85

Description	Color
Cable binder base , for cable binders of up to 5 mm width, screwable, 3.5 mm fixing hole, dimensions: 9.5 x 15 mm	transparent black
Cable binder base , for cable binders of up to 9 mm width, screwable, 5 mm fixing hole, dimensions: 14.6 x 22 mm	transparent black

Ordering data

Type	Order No.	Pcs. / Pkt.
WT-BASE HF 5	3240702	100
WT-BASE HF 5 BK	3240703	100
WT-BASE HF 9	3240704	100
WT-BASE HF 9 BK	3240705	100

Cable binder base for direct mounting

- WT-BASE R ... with molded body-bound rivet for direct mounting in materials of up to 3 mm thickness
- WT-BASE P ... is ideally suited to use in solid panels
- Easy to use, can be directly knocked into the panel



General data	
Material	PA 6.6
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data		
Material	PA 6.6	
Inflammability class according to UL 94	V2	
Temperature range	-40 ... 85	

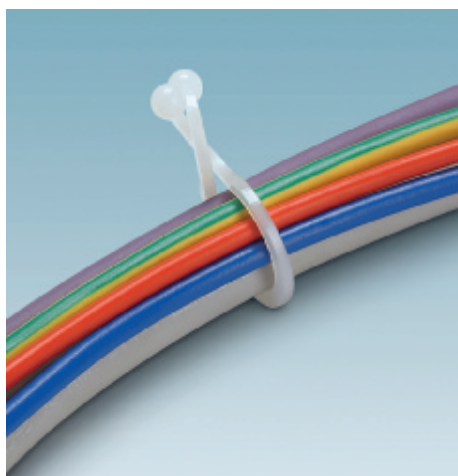
Technical Data		
Material	PA 6	
Inflammability class according to UL 94	HB	
Temperature range	-10 ... 65	

Description	Color
Cable binder base , for cable binders of up to 8 mm width, with molded body-bound rivet, 6.5 mm drilling diameter	transparent
Cable binder base , for cable binders of up to 9.5 mm width, with fins, 8 mm drilling diameter, can be knocked in	black

Ordering data		
Type	Order No.	Pcs. / Pkt.
WT-BASE R HF 8	3240711	100

Ordering data		
Type	Order No.	Pcs. / Pkt.
WT-BASE P HF 9,5 BK	3240710	100

Cable drillers, for fast and tool-free bundling of conductors and cables



- Fast and easy to use
- Can be removed again
- Reusable
- Tool-free mounting
- Ideal for temporary bundling
- Halogen-free/silicone-free



General data	
Material	PA 6.6
Inflammability class according to UL 94	V2
Temperature range	-40 ... 85 [°C]

Technical Data		
Material	PA 6.6	
Inflammability class according to UL 94	V2	
Temperature range	-40 ... 85	

Description	Color
Cable driller	
Bundle diameters 5.1 - 7.6 mm	transparent
Bundle diameters 7.6 - 10.2 mm	transparent
Bundle diameters 10.2 - 12.7 mm	transparent
Bundle diameters 12.7 - 16 mm	transparent
Bundle diameters 16 - 20.3 mm	transparent
Cable driller	
Bundle diameters 5.1 - 7.6 mm	black
Bundle diameters 7.6 - 10.2 mm	black
Bundle diameters 10.2 - 12.7 mm	black
Bundle diameters 12.7 - 16 mm	black
Bundle diameters 16 - 20.3 mm	black

Ordering data		
Type	Order No.	Pcs. / Pkt.
WG-D HF 7,6	3241099	100
WG-D HF 10,2	3241101	100
WG-D HF 12,7	3241103	100
WG-D HF 16	3241105	100
WG-D HF 20,3	3241107	100
WG-D HF 7,6 BK	3241100	100
WG-D HF 10,2 BK	3241102	100
WG-D HF 12,7 BK	3241104	100
WG-D HF 16 BK	3241106	100
WG-D HF 20,3 BK	3241108	100



M8 flush-type plug-in connectors

page 158



M12 flush-type plug-in connectors

page 160



M12 plug-in connectors

page 163



M17 compact plug-in connectors

page 166



QUICKON installation system

page 168



Charging cables for electric vehicles

page 174



SUNCLIX solar plug-in connectors

page 178



M8 and M12 assembled cables

page 186



Valve plug-in connectors

page 192



Assembled cables for the food processing industry

page 198



EMC-resistant installation systems

page 204



Service interfaces

page 208



CES cable entry system

page 210



Plug assembly frames

page 220



HEAVYCON standard housings

page 222



HEAVYCON ADVANCE housings

page 232

Circular plug-in connectors - PLUSCON circular

M8 flush-type plug-in connector, with 0.5 m long litz wires



Front mounting



Rear mounting

	Technical Data		Technical Data	
	5-pos., DeviceNet	8-pos.	8-pos.	
Electrical data				
Rated voltage	30 V	30 V	30 V	-
Nominal current I_N	3 A	1.5 A	1.5 A	-
Volume resistance	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	-
Insulation resistance	$\geq 100 \text{ M}\Omega$	$\geq 100 \text{ M}\Omega$	$\geq 100 \text{ M}\Omega$	-
Material data				
Material contact/contact surface	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au	-/-
Contact carrier material	PA 66	PA 66	PA 66	-
Inflammability class according to UL 94	HB	HB	HB	-
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104	-
Pollution degree	3	3	3	-
Degree of protection	IP67	IP67	IP67	-
Connection method	individual wires	individual wires	individual wires	-
Cable type	PVC litz wire	PVC litz wire	PVC litz wire	-
Temperature data				
Plug/socket	[°C] -25 ... 85	-25 ... 85	-25 ... 85	-
	Ordering data			
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Description				
	5-pos., DeviceNet		8-pos.	8-pos.
Flush-type plug-in connector, M10 fastening thread				
Socket	1424233	1	1424231	1
Pin	1424234	1	1424232	1
Flush-type plug-in connector, M8 fastening thread				
Pin			1424230	1

M8 flush-type plug-in connector, for wave soldering process



Shielded



Unshielded

	Technical Data			Technical Data		
	5-pos., DeviceNet	6-pos.	8-pos.	8-pos.		
Electrical data						
Rated voltage	30 V	30 V	30 V	30 V	-	-
Nominal current I _N	3 A	1.5 A	1.5 A	1.5 A	-	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	-	-
Insulation resistance	≥ 100 MΩ	≥ 100 MΩ	≥ 100 MΩ	≥ 100 MΩ	-	-
Material data						
Material contact/contact surface	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au	-/-	-/-
Contact carrier material	PA 66	PA 66	PA 66	PA 66	-	-
Inflammability class according to UL 94	HB	HB	HB	HB	-	-
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104	-	-
Pollution degree	3	3	3	3	-	-
Degree of protection	IP67	IP67	IP67	IP67	-	-
Connection method	solder pins	solder pins	solder pins	solder pins	-	-
Temperature data						
Plug/socket	-25 ... 85 [°C]	-25 ... 85	-25 ... 85	-25 ... 85	-	-

Description	Ordering data			Ordering data		
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Flush-type plug-in connector, M10 fastening thread						
Socket, straight	1424241	1			1424235	1
Socket, angled	1424239	1	1424243	1		
Flush-type plug-in connector, M8 fastening thread						
Plug, straight	1424242	1			1424236	1
Plug, angled	1424240	1	1424244	1		

Connection technology for field devices and field cabling - PLUSCON

Circular plug-in connectors - PLUSCON circular

M12 power flush-type plug, with 0.5 m long litz wires



S-encoded,
3-pos. + PE



T-encoded,
4-pos.

	Technical Data		Technical Data	
	Front mounting	Rear mounting	Front mounting	Rear mounting
Electrical data				
Rated voltage	630 V	630 V	60 V	60 V
Nominal current I_N	12 A	12 A	12 A	12 A
Volume resistance	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$	$\geq 100 \text{ M}\Omega$	$\geq 100 \text{ M}\Omega$	$\geq 100 \text{ M}\Omega$
Material data				
Material contact/contact surface	CuZn/Au	CuZn/Au	CuZn/Au	CuZn/Au
Contact carrier material	PA6	PA6	PA6	PA6
Pollution degree	3	3	3	3
Degree of protection	IP67	IP67	IP67	IP67
Connection method	individual wires	individual wires	individual wires	individual wires
Cable type	PP litz wire	PP litz wire	PP litz wire	PP litz wire
Temperature data				
Plug/socket	[°C] -25 ... 85	[°C] -25 ... 85	[°C] -25 ... 85	[°C] -25 ... 85
Cable, fixed installation	[°C] -40 ... 90	[°C] -40 ... 90	[°C] -40 ... 90	[°C] -40 ... 90

Description	Ordering data				Ordering data			
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Flush-type plug-in connector, M16 fastening thread								
	Front mounting		Rear mounting		Front mounting		Rear mounting	
Socket	1424137	1	1424133	1	1424138	1	1424134	1
Pin	1424139	1	1424132	1	1424140	1	1424136	1

M12 power flush-type plug-in connector, modular, 25 mm square flange, pre-assembled



Flange housing, 2.7 mm housing bore holes



Pre-assembled contact carrier and insulating body with 0.5 m long litz wires

	Technical Data		Technical Data	
			S-encoded, 3-pos. + PE	T-encoded, 4-pos.
Electrical data				
Rated voltage	-	-	630 V	60 V
Nominal current I _N	-	-	12 A	12 A
Volume resistance	-	-	≤ 3 mΩ	≤ 3 mΩ
Insulation resistance	-	-	≥ 100 MΩ	≥ 100 MΩ
Material data				
Material contact/contact surface	-/-	-/-	CuZn/Au	CuZn/Au
Contact carrier material	-	-	PA6	PA6
Cable gland material	Zinc die-cast, nickel-plated	-	-	-
Pollution degree	-	-	3	3
Degree of protection	-	-	IP67	IP67
Connection method	-	-	individual wires	individual wires
Cable type	-	-	PP litz wire	PP litz wire
Temperature data				
Plug/socket	[°C]	-40 ... 85	-25 ... 85	-25 ... 85
Cable, fixed installation	[°C]	-	-40 ... 90	-40 ... 90
	Ordering data		Ordering data	
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
			S-encoded, 3-pos. + PE	T-encoded, 4-pos.
Square flange housing, with flat gasket	1424131	10		
Assembled contact carrier and insulating body, with 0.5 m litz wires and crimp contacts			1424129	1
Pin				1424130 1

Circular plug-in connectors - PLUSCON circular

**M12, two-piece, angled,
for wave soldering processes,
12 and 17-pos.**



Unshielded



Shielded

	Technical Data		Technical Data	
	12-pos.	17-pos.	12-pos.	17-pos.
Electrical data				
Rated voltage	30 V	30 V	30 V	30 V
Nominal current I _N	1.5 A	1.5 A	1.5 A	1.5 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ	≥ 100 MΩ	≥ 100 MΩ	≥ 100 MΩ
Material data				
Material contact/contact surface	CuZn/Au	CuZn/Au	CuZn/Au	CuZn/Au
Contact carrier material	PA6T	PA6T	PA6T	PA6T
Inflammability class according to UL 94	V0	V0	V0	V0
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3	3
Degree of protection	IP67	IP67	IP67	IP67
Connection method	wave soldering	wave soldering	wave soldering	wave soldering
Temperature data				
Plug/socket	-25 ... 85 [°C]	-25 ... 85	-25 ... 85	-25 ... 85
	Ordering data		Ordering data	
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	12-pos.	17-pos.	12-pos.	17-pos.
Flush-type plug-in connector				
Socket	1424195	20	1424197	20
Pin	1424194	20	1424196	20
	Accessories		Accessories	
Housing screw connections, SPEEDCON screw versions and press-in versions, for all two-piece THR and wave soldering contact carriers	See PLUSCON 2011 catalog, page 58/59		See PLUSCON 2011 catalog, page 58/59	

M12 plug-in connectors, 12-pos., solder connection



Unshielded



Shielded

Technical Data

Electrical data	
Rated voltage	30 V
Nominal current I_N	1 A
Volume resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$> 10 \text{ G}\Omega$
Material data	
Material contact/contact surface	CuSn/Au
Contact carrier material	PA
M12 circular plug-in connector according to:	IEC 61076-2-101
Pollution degree	3
Degree of protection	IP67
Connection method	solder connection
Cable passage	6 mm ... 8 mm
Connection cross section [mm ²]	0.08 mm ² ... 0.25 mm ²
Temperature data	
Plug/socket	-25 ... 85 [°C]

Technical Data

Electrical data	
Rated voltage	30 V
Nominal current I_N	1 A
Volume resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$> 10 \text{ G}\Omega$
Material data	
Material contact/contact surface	CuSn/Au
Contact carrier material	PA
M12 circular plug-in connector according to:	IEC 61076-2-101
Pollution degree	3
Degree of protection	IP67
Connection method	solder connection
Cable passage	6 mm ... 8 mm
Connection cross section [mm ²]	0.08 mm ² ... 0.25 mm ²
Temperature data	
Plug/socket	-25 ... 85

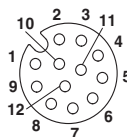
Ordering data

Description
Plug-in connectors
Socket, straight
Plug, straight
Socket, angled
Plug, angled

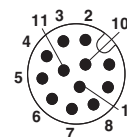
Type	Order No.	Pcs. / Pkt.
SACC-M12FS-12SOL-PG 9-M	1404420	1
SACC-M12MS-12SOL-PG 9-M	1404419	1
SACC-M12FR-12SOL-PG 9-M	1404423	1
SACC-M12MR-12SOL-PG 9-M	1404421	1

Ordering data

Type	Order No.	Pcs. / Pkt.
SACC-M12FS-12SOL-PG 9-M SH	1404411	1
SACC-M12MS-12SOL-PG 9-M SH	1404410	1
SACC-M12FR-12SOL-PG 9-M SH	1404413	1
SACC-M12MR-12SOL-PG 9-M SH	1404412	1



Pin assignment of M12 socket, 12-pos.,
A-encoded, view of socket side



Pin assignment of M12 plug, 12-pos.,
A-encoded, view of pin side

Circular plug-in connectors - PLUSCON circular

M12 power plug-in connector, Pg11, screw connection



S-encoded,
3-pos. + PE

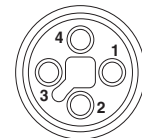


T-encoded,
4-pos.

		Technical Data			Technical Data		
Electrical data							
Rated voltage		630 V		60 V			
Nominal current I_N		12 A		12 A			
Volume resistance		$\leq 3 \text{ m}\Omega$		$\leq 3 \text{ m}\Omega$			
Insulation resistance		$> 10 \text{ G}\Omega$		$> 10 \text{ G}\Omega$			
Material data							
Material contact/contact surface		CuZn/Au		CuZn/Au			
Contact carrier material		PA 46		PA 46			
Pollution degree		3		3			
Degree of protection		IP67		IP67			
Connection method		screw connection		screw connection			
Cable passage		8 mm ... 10 mm		8 mm ... 10 mm			
Connection cross section [mm ²]		0.75 mm ² ... 1.5 mm ²		0.75 mm ² ... 1.5 mm ²			
Temperature data							
Plug/socket	[°C]	-25 ... 85		-25 ... 85			
		Ordering data			Ordering data		
Description		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
M12 plug-in connector , metal, with Pg11 cable gland							
Socket, straight		SACC-M12FSS-3PECON-PG11-M	1404642	1	SACC-M12FST-3PECON-PG11-M	1404644	1
Plug, straight		SACC-M12MSS-3PECON-PG11-M	1404641	1	SACC-M12MST-3PECON-PG11-M	1404643	1



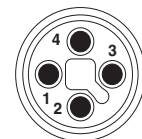
Connector pin assignment of M12 socket, 4-pos., S-encoded, view of socket side



Connector pin assignment of M12 socket, 4-pos., T-encoded, view of socket side



Connector pin assignment of M12 plug, 4-pos., S-encoded, view of pin side



Connector pin assignment of M12 plug, 4-pos., T-encoded, view of pin side

Connection technology for field devices and field cabling - PLUSCON

Signal and power plug-in connectors - PLUSCON circular

M17 compact plug-in connector

- High packing density in a compact product
- Individual marking of plug-in connectors with color rings



Cable plug-in connector, socket assembly



Coupler plug-in connector, pin assembly

Technical Data	
8-pos.	8- + PE-pos.
Rated voltage (III/3)	60 V
Rated current at 25°C	3.6 A

Technical Data		
8-pos.	8- + PE-pos.	17-pos.
Rated voltage (III/3)	630 V	60 V
Rated current at 25°C	14 A	3.6 A

Technical Data		
8-pos.	8- + PE-pos.	17-pos.
Rated voltage (III/3)	630 V	60 V
Rated current at 25°C	14 A	3.6 A

Ordering data	
Order No.	Pcs. / Pkt.
8-pos.	

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
8-pos.		8- + PE-pos.	
17-pos.		17-pos.	

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
8-pos.		8- + PE-pos.	
17-pos.		17-pos.	

Plug-in connector housing , with contact carrier without contacts, for cable diameters:			
3.5 mm ... 5.0 mm	1613370	30	
5.0 mm ... 8.0 mm	1613371	30	
8.0 mm ... 11.0 mm	1613372	30	
11.0 mm ... 12.7 mm	1613452	30	
Crimp contacts , C-HC punched-rolled, Ø 1 mm, 2500 Pcs./roll, crimp range:			
0.06 mm ² ... 0.2 mm ²	1607031	1	
0.2 mm ² ... 0.56 mm ²	1607032	1	
0.75 mm ² ... 1.0 mm ²	1627073	1	
Crimp contact , turned, for single processing, Ø 1.0 mm, crimp range:			
0.06 mm ² ... 0.25 mm ²	1618239	100	
0.34 mm ² ... 0.5 mm ²	1618251	100	
0.5 mm ² ... 1.0 mm ²	1618254	100	
Crimp contact , turned, for single processing, Ø 0.6 mm, crimp range:			
0.06 mm ² ... 0.25 mm ²			1607580 100
0.14 mm ² ... 0.34 mm ²			1607581 100
0.34 mm ² ... 0.50 mm ²			1607582 100

	1613453	30	
	1613454	30	
	1613495	30	
	1613496	30	
	1607031	1	
	1607032	1	
	1627073	1	
	1618239	100	
	1618251	100	
	1618254	100	
			1607580 100
			1607581 100
			1607582 100

	1617799	30	
	1617813	30	
	1617830	30	
	1617834	30	
	1615961	1	
	1615963	1	
	1627072	1	
	1618255	100	
	1618256	100	
	1618261	100	
			1607577 100
			1607578 100
			1607579 100

Accessories	
Description	Type
Color rings , 50 pcs. in set (to be ordered separately)	
green	ST-Z0016
orange	ST-Z0017
black	ST-Z0018

Accessories		
Type	Order No.	Pcs. / Pkt.
	1617993	1
	1618049	1
	1618050	1

Accessories		
Type	Order No.	Pcs. / Pkt.
	1617993	1
	1618049	1
	1618050	1

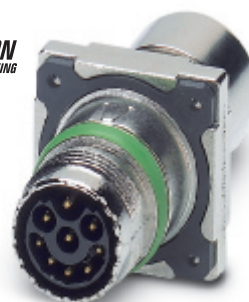


M17 compact plug-in connector

- Easy mounting of the pre-assembled insulators in the plug housing
- Panel feed-throughs suitable for front and rear mounting
- High level of safety, thanks to IP67 protection



Device plug-in connector straight, pin assembly



Panel feed-through, pin assembly

Technical Data

8-pos.	8- + PE-pos.	17-pos.
60 V	630 V	60 V
3.6 A	14 A	3.6 A

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
8-pos.		8- + PE-pos.		17-pos.	

1617950	30	1617951	30	1617949	30
---------	----	---------	----	---------	----

Technical Data

8-pos.	8- + PE-pos.	17-pos.
60 V	630 V	60 V
3.6 A	14 A	3.6 A

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
8-pos.		8- + PE-pos.		17-pos.	

1617925	30	1617935	30	1617863	30
1617929	30	1617936	30	1617872	30
1617932	30	1617937	30	1617873	30
1617933	30	1617948	30	1617874	30

Electrical data
Rated voltage (III/3)
Rated current at 25°C

Description

Device plug-in connector, straight, with contact carrier, without contacts

Panel feed-through, with contact carrier, without contacts, for cable diameters:
3.5 mm ... 5.0 mm
5.0 mm ... 8.0 mm
8.0 mm ... 11.0 mm
11.0 mm ... 12.7 mm

Crimp contacts, C-HC punched-rolled, Ø 1 mm, 2500 Pcs./roll, crimp range:

0.06 mm ² ... 0.2 mm ²	1615961	1	1615961	1
0.2 mm ² ... 0.56 mm ²	1615963	1	1615963	1
0.75 mm ² ... 1.0 mm ²	1627072	1	1627072	1

Crimp contact, turned, for single processing, Ø 1.0 mm, crimp range:

0.06 mm ² ... 0.25 mm ²	1618255	100	1618255	100
0.34 mm ² ... 0.5 mm ²	1618256	100	1618256	100
0.5 mm ² ... 1.0 mm ²	1618261	100	1618261	100

Crimp contact, turned, for single processing, Ø 0.6 mm, crimp range:

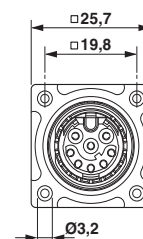
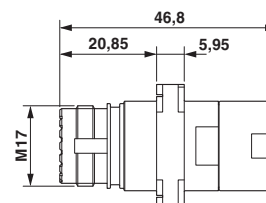
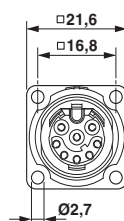
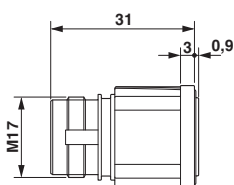
0.06 mm ² ... 0.25 mm ²			1607577	100
0.14 mm ² ... 0.34 mm ²			1607578	100
0.34 mm ² ... 0.50 mm ²			1607579	100

Accessories

Description	Type	Order No.	Pcs. / Pkt.
Color rings , 50 pcs. in set (to be ordered separately)			
green	ST-Z0016	1617993	1
orange	ST-Z0017	1618049	1
black	ST-Z0018	1618050	1
Contact removal tool for contact carriers, device plug-in connectors	ST-Z0001	1607770	1

Accessories

Description	Type	Order No.	Pcs. / Pkt.
Color rings , 50 pcs. in set (to be ordered separately)			
green	ST-Z0016	1617993	1
orange	ST-Z0017	1618049	1
black	ST-Z0018	1618050	1
Contact removal tool for contact carriers, device plug-in connectors			



QUICKON QPD installation system - PLUSCON installation

**Cable connectors,
4+PE-pos., 2.5 mm²**



With two QUICKON nuts



With one QUICKON nut

	Technical Data		Technical Data	
	black	gray	black	gray
Electrical data				
Rated voltage (III/3)	690 V	690 V	690 V	690 V
Rated surge voltage	6 kV	6 kV	6 kV	6 kV
Rated current	20 A	20 A	20 A	20 A
Surge voltage category/pollution degree	III/3	III/3	III/3	III/3
Material data				
Housing material	PA	PA	PA	PA
Contact material	Cu	Cu	Cu	Cu
Contact surface material	silver-plated	silver-plated	silver-plated	silver-plated
Inflammability class according to UL 94	V0	V0	V0	V0
Impact category	IK07	IK07	IK07	IK07
Color	black	gray	black	gray
Degree of protection	IP68/IP69K	IP68/IP69K	IP68/IP69K	IP68/IP69K
Connector data QUICKON connection				
Core insulation	PVC/PE	PVC/PE	PVC/PE	PVC/PE
Structure of individual litz wire/smallest wire diameter	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm
Connection frequency	10	10	10	10
Conductor cross section [mm ²] solid/stranded	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²
Conductor cross section [AWG]	16 ... 14	16 ... 14	16 ... 14	16 ... 14
Temperature data				
Ambient temperature (operation)	-40°C ... 80°C	-40°C ... 80°C	-40°C ... 80°C	-40°C ... 80°C
Temperature when conductor connected	-5°C ... 50°C	-5°C ... 50°C	-5°C ... 50°C	-5°C ... 50°C
	Ordering data		Ordering data	
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	black		gray	
Cable connector, with two QUICKON nuts, for cable diameters:				
6 mm ... 11 mm	1403838	1	1403837	1
9 mm ... 16 mm	1403836	1	1403835	1
Cable connector, with one QUICKON nut, for cable diameters:				
6 mm ... 11 mm			1403834	1
9 mm ... 16 mm			1403831	1
QUICKON nut, for connections up to 2.5 mm², for cable diameters:				
6 mm ... 11 mm			1459663	1
9 mm ... 16 mm			1459647	1
			1403832	1
			1403839	1
			1459650	1
			1459634	1

**Panel feed-throughs,
with litz wire,
4+PE-pos., 2.5 mm²**



With QUICKON nut



Without QUICKON nut

Technical Data

	black	gray
Electrical data		
Rated voltage (III/3)	690 V	690 V
Rated surge voltage	6 kV	6 kV
Rated current	20 A	20 A
Surge voltage category/pollution degree	III/3	III/3
Material data		
Housing material	PA	PA
Contact material	Cu	Cu
Contact surface material	silver-plated	silver-plated
Inflammability class according to UL 94	V0	V0
Impact category	IK07	IK07
Color	black	gray
Degree of protection	IP68/IP69K	IP68/IP69K
Connector data QUICKON connection		
Core insulation	PVC/PE	PVC/PE
Structure of individual litz wire/smallest wire diameter	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm
Connection frequency	10	10
Conductor cross section [mm ²] solid/stranded	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²
Conductor cross section [AWG]	16 ... 14	16 ... 14
Temperature data		
Ambient temperature (operation)	-40°C ... 80°C	-40°C ... 80°C
Temperature when conductor connected	-5°C ... 50°C	-5°C ... 50°C

Technical Data

	black	gray
Electrical data		
Rated voltage (III/3)	690 V	690 V
Rated surge voltage	6 kV	6 kV
Rated current	20 A	20 A
Surge voltage category/pollution degree	III/3	III/3
Material data		
Housing material	PA	PA
Contact material	Cu	Cu
Contact surface material	silver-plated	silver-plated
Inflammability class according to UL 94	V0	V0
Impact category	IK07	IK07
Color	black	gray
Degree of protection	IP68/IP69K	IP68/IP69K
Connector data QUICKON connection		
Core insulation	PVC/PE	PVC/PE
Structure of individual litz wire/smallest wire diameter	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm
Connection frequency	10	10
Conductor cross section [mm ²] solid/stranded	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²
Conductor cross section [AWG]	16 ... 14	16 ... 14
Temperature data		
Ambient temperature (operation)	-40°C ... 80°C	-40°C ... 80°C
Temperature when conductor connected	-5°C ... 50°C	-5°C ... 50°C

Ordering data

Description	Cable length	black		gray	
		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.

Ordering data

Description	Cable length	black		gray	
		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.

Panel feed-through, with M20 x 1.5 mounting flange, with QUICKON nut, for cable diameters:					
6 mm ... 11 mm	0.5 m	1403725	1	1403726	1
6 mm ... 11 mm	1 m	1403727	1	1403728	1
9 mm ... 16 mm	0.5 m	1403731	1	1403732	1
9 mm ... 16 mm	1 m	1403733	1	1403734	1
Panel feed-through, with M25 x 1.5 mounting flange, with QUICKON nut, for cable diameters:					
6 mm ... 11 mm	0.5 m	1582557	1	1582569	1
6 mm ... 11 mm	1 m	1582558	1	1582570	1
9 mm ... 16 mm	0.5 m	1582561	1	1582573	1
9 mm ... 16 mm	1 m	1582562	1	1582574	1
Panel feed-through, with M20 x 1.5 mounting flange, without QUICKON nut					
	0.5 m				
	1 m				
Panel feed-through, with M25 x 1.5 mounting flange, without QUICKON nut					
	0.5 m				
	1 m				
QUICKON nut, for connections up to 2.5 mm², for cable diameters:					
9 mm ... 16 mm					
6 mm ... 11 mm					

QUICKON QPD installation system - PLUSCON installation

Panel feed-throughs, with manual solder/slip-on connection, 4+PE-pos., 2.5 mm²



With QUICKON nut



Without QUICKON nut

	Technical Data		Technical Data	
	black	gray	black	gray
Electrical data				
Rated voltage (III/3)	690 V	690 V	690 V	690 V
Rated surge voltage	6 kV	6 kV	6 kV	6 kV
Surge voltage category/pollution degree	III/3	III/3	III/3	III/3
Material data				
Housing material	PA	PA	PA	PA
Contact material	Cu	Cu	Cu	Cu
Contact surface material	silver-plated	silver-plated	silver-plated	silver-plated
Inflammability class according to UL 94	V0	V0	V0	V0
Impact category	IK07	IK07	IK07	IK07
Color	black	gray	black	gray
Degree of protection	IP68/IP69K	IP68/IP69K	IP68/IP69K	IP68/IP69K
Connector data QUICKON connection				
Core insulation	PVC/PE	PVC/PE	PVC/PE	PVC/PE
Structure of individual litz wire/smallest wire diameter	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm
Connection frequency	10	10	10	10
Conductor cross section [mm ²] solid/stranded	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²
Conductor cross section [AWG]	16 ... 14	16 ... 14	16 ... 14	16 ... 14
Temperature data				
Ambient temperature (operation)	-40°C ... 80°C	-40°C ... 80°C	-40°C ... 80°C	-40°C ... 80°C
Temperature when conductor connected	-5°C ... 50°C	-5°C ... 50°C	-5°C ... 50°C	-5°C ... 50°C
	Ordering data		Ordering data	
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	black		gray	
Panel feed-through, I_N=15 A, with M20 x 1.5 mounting flange, with QUICKON nut, for cable diameters:				
6 mm ... 11 mm	1403729	1	1403730	1
9 mm ... 16 mm	1403735	1	1403736	1
Panel feed-through, I_N=20 A, with M25 x 1.5 mounting flange, with QUICKON nut, for cable diameters:				
6 mm ... 11 mm	1582559	1	1582571	1
9 mm ... 16 mm	1582563	1	1582575	1
Panel feed-through, with mounting flange, without QUICKON nut, connecting thread:				
M20, I _N =15 A			1403741	1
M25, I _N =20 A			1582567	1
QUICKON nut, for connections up to 2.5 mm², for cable diameters:				
6 mm ... 11 mm			1459663	1
9 mm ... 16 mm			1459647	1
			1403742	1
			1582579	1
			1459650	1
			1459634	1

Panel feed-throughs, with QUICKON connection on both sides, 4+PE-pos., 2.5 mm²



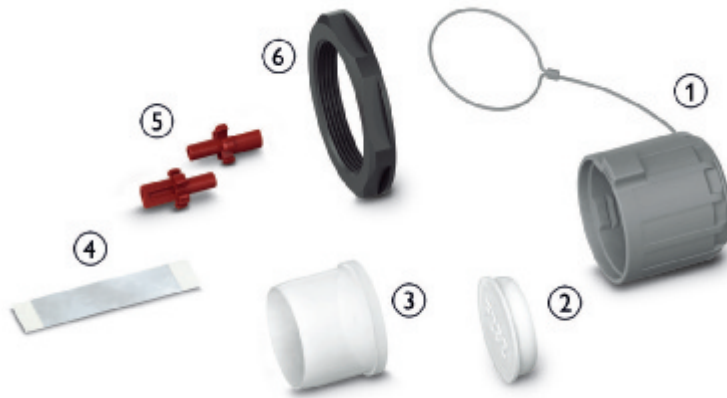
With two QUICKON nuts



With one QUICKON nut

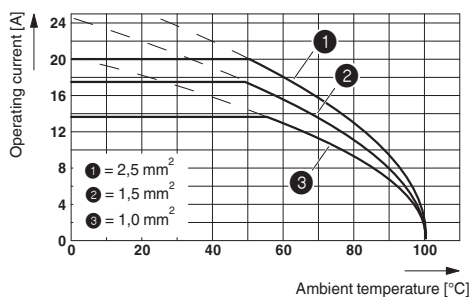
	Technical Data		Technical Data	
	black	gray	black	gray
Electrical data				
Rated voltage (III/3)	690 V	690 V	690 V	690 V
Rated surge voltage	6 kV	6 kV	6 kV	6 kV
Rated current	20 A	20 A	20 A	20 A
Surge voltage category/pollution degree	III/3	III/3	III/3	III/3
Material data				
Housing material	PA	PA	PA	PA
Contact material	Cu	Cu	Cu	Cu
Contact surface material	silver-plated	silver-plated	silver-plated	silver-plated
Inflammability class according to UL 94	V0	V0	V0	V0
Impact category	IK07	IK07	IK07	IK07
Color	black	gray	black	gray
Degree of protection	IP68/IP69K	IP68/IP69K	IP68/IP69K	IP68/IP69K
Connector data QUICKON connection				
Core insulation	PVC/PE	PVC/PE	PVC/PE	PVC/PE
Structure of individual litz wire/smallest wire diameter	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm	VDE 0295 class 1 to 6/ min. 0.15 mm
Connection frequency	10	10	10	10
Conductor cross section [mm ²] solid/stranded	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²	1 mm ² ... 2.5 mm ² / 1 mm ² ... 2.5 mm ²
Conductor cross section [AWG]	16 ... 14	16 ... 14	16 ... 14	16 ... 14
Temperature data				
Ambient temperature (operation)	-40°C ... 80°C	-40°C ... 80°C	-40°C ... 80°C	-40°C ... 80°C
Temperature when conductor connected	-5°C ... 50°C	-5°C ... 50°C	-5°C ... 50°C	-5°C ... 50°C
	Ordering data		Ordering data	
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	black		gray	
Cable connector, with two QUICKON nuts, for cable diameters:				
6 mm ... 11 mm	1403844	1	1403843	1
9 mm ... 16 mm	1403841	1	1403840	1
Cable connector, with one QUICKON nut, for cable diameters:				
6 mm ... 11 mm			1403848	1
9 mm ... 16 mm			1403846	1
QUICKON nut, for connections up to 2.5 mm², for cable diameters:				
6 mm ... 11 mm			1459663	1
9 mm ... 16 mm			1459647	1
			1403847	1
			1403845	1
			1459650	1
			1459634	1

Accessories

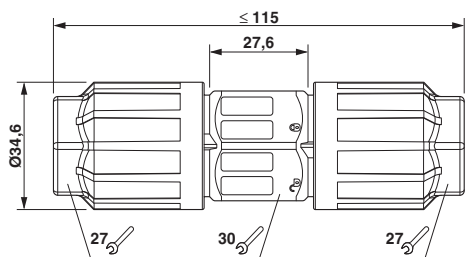


Description	Ordering data		
	Type	Order No.	Pcs. / Pkt.
Protective cap, captive, IP68 ① gray black	QPD QSK GY 5X2,5 FS	1404526	1
	QPD QSK BK 5X2,5 FS	1404525	1
Protective cap made of transparent plastic for 5 x 2.5 mm ² QUICKON connection, IP54 ②	QPD QSK 5X2,5	1404528	10
Protective cap made of transparent plastic for the 5 x 2.5 mm ² plug-in connector, IP50 ③	QPD PSK 5X2,5	1404529	10
	ALU-SB	1404531	100
Shielding tape, aluminum, for the shielded QPD versions ④	CP-QPD 5X2,5	1404530	10
Keying profile, for insertion into the 5 x 2.5 mm ² plug-in connector and QUICKON dome ⑤	Q-MU PG29 BK	1670772	50
Counter nut, (plastic), to lock the contact carrier from the inside of the device ⑥ Pg29/color: black			

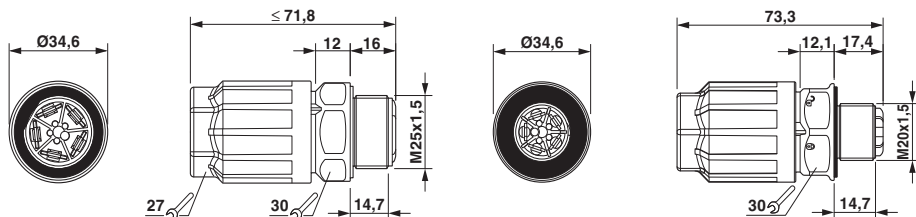
Derating diagram



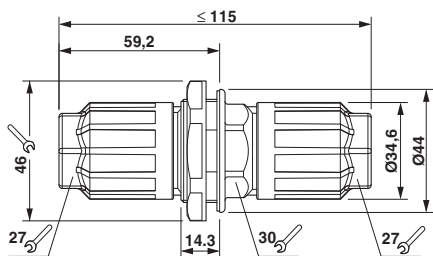
Dimensional drawings: cable connector



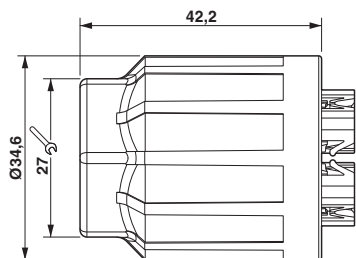
Dimensional drawings: panel feed-through



Dimensional drawings: panel feed-through with QUICKON connection on both sides



Dimensional drawings: QUICKON nuts





Setting up a widespread charging infrastructure in conjunction with the use of renewable energy is an important step toward a mobile future. Special charging plugs are used to establish an electrical connection between the electrical vehicle









and the infrastructure (e.g., a charging station). Internationally applicable plug standards ensure uniform connection for charging stations and vehicles.

The new product range from Phoenix Contact offers reliable solutions for a

consistent charging interface for all applications.

The adjacent matrix provides an overview of the various international standards and plug-in charging systems.

Overview of plug-in charging system

	Type 1/USA	Type 2/Europe	GB/China
AC	 SAE J1772/IEC 62196-2	 IEC 62196-2	 GB part 2
DC	 IEC 62196-3	 IEC 62196-3	 GB part 3/IEC 62196-3
Combined AC/DC system	 SAE J1772/IEC 62196-3	 IEC 62196-3	



The type 2 AC charging system

The AC charging plugs according to IEC 62196-2 enable both 1-phase AC charging as well as the higher-performance 3-phase AC charging with an amperage of 13 to 63 A. This enables charging powers from 3.7 to 43.5 kW. The highest possible level of safety is achieved thanks to an electromechanical lock between the charging plug and the vehicle.



The AC/DC charging system from Phoenix Contact

In collaboration with leading automobile manufacturers, Phoenix Contact is developing a charging system that will enable quick charging of electrical vehicles. This system is capable of DC and AC charging using just one vehicle inlet. The system's compact design and easy handling demonstrate how Phoenix Contact is setting the standards for the quick charging concept of tomorrow.



Customer-specific solutions

Independently of the standards for charging plugs, Phoenix Contact is also developing individual solutions for specific applications. DC charging of large battery units using a replacement battery concept is particularly suitable for commercial vehicles operated by local or municipal authorities, for example.

Charging plug-in connectors – PLUSCON power

Charging cable for electric vehicles

- Convenient handling, thanks to the ergonomic handle design
- Safe and secure, thanks to the electromechanical lock on the charging station and vehicle
- Rugged, thanks to the use of high-quality materials



Load current: 20 A



Load current: 20 A

Notes:
Cable versions on request.
All plugs are provided together with a protective cap.

	Technical Data		Technical Data					
	1-phase	3-phase	1-phase	3-phase				
Standards	IEC 62196-2	IEC 62196-2	IEC 62196-2	IEC 62196-2				
Charging mode	mode 3	mode 3	mode 3	mode 3				
Resistor coding	680 Ω	680 Ω	680 Ω	680 Ω				
Ambient temperature (Operation)	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C				
Insertion/withdrawal cycles	> 10,000	> 10,000	> 10,000	> 10,000				
Type of protection (when plugged in)	IP44	IP44	IP44	IP44				
Cable data								
Cable length	4 m	4 m	4 m	4 m				
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 2.5 mm ² + 1 x 0.5 mm ²				
Cable type	straight	straight	spiraled	spiraled				
	Ordering data				Ordering data			
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Description	1-phase		3-phase		1-phase		3-phase	
Charging cable with vehicle plug (type 2) and plug for the charging station (type 2)								
Outer sheath color: red	1404876	1			1404563	1		
Outer sheath color: black	1405193	1	1404877	1	1405192	1	1404567	1
Charging cable with vehicle plug (type 2) and open cable end								
Outer sheath color: red								
Outer sheath color: black								



Load current: 32 A



Load current: 20 A



Load current: 32 A

Technical Data		Technical Data		Technical Data	
1-phase	3-phase	1-phase	3-phase	1-phase	3-phase
IEC 62196-2 mode 3 220 Ω -30°C ... 50°C	IEC 62196-2 mode 3 220 Ω -30°C ... 50°C	IEC 62196-2 mode 3 680 Ω -30°C ... 50°C	IEC 62196-2 mode 3 680 Ω -30°C ... 50°C	IEC 62196-2 mode 3 220 Ω -30°C ... 50°C	IEC 62196-2 mode 3 220 Ω -30°C ... 50°C
> 10,000 IP44	> 10,000 IP44	> 10,000 IP44	> 10,000 IP44	> 10,000 IP44	> 10,000 IP44
4 m 3 x 6 mm ² + 1 x 0.5 mm ² straight	4 m 5 x 6 mm ² + 1 x 0.5 mm ² straight	4 m 3 x 2.5 mm ² + 1 x 0.5 mm ² spiraled	4 m 5 x 2.5 mm ² + 1 x 0.5 mm ² spiraled	4 m 3 x 6 mm ² + 1 x 0.5 mm ² straight	4 m 5 x 6 mm ² + 1 x 0.5 mm ² straight
Ordering data		Ordering data		Ordering data	
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
1-phase		3-phase		1-phase	
1404568	1	1404569	1		
		1405194	1	1405197	1
		1405195	1		
				1405198	1
					1405199



Assembly



– Insert the stripped PV conductor



– Press down on the spring and snap in



– Tighten the screw connection - and you're done!



SUNCLIX DC device plug-in connectors
– See page 180



SUNCLIX DC plug-in connectors,
molded
– See page 181



SUNCLIX DC plug-in connectors,
2.5 mm² to 16 mm², can be assembled
– See page 182



SUNCLIX Y-distributors
– See page 184



Photovoltaic cables
– See page 185

Release



– Can only be released using a screwdriver

Photovoltaic plug-in connectors - PLUSCON solar

SUNCLIX DC device plug-in connectors

- Quick and easy connection without special tools
- Pre-assembled
- Pre-treated conductor ends (ferrules, part stripping, flat plugs) available on request

Notes:
Further cable types and lengths are available on request.



With 0.13 m litz wire

Technical Data

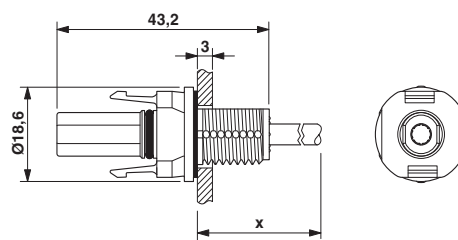
Electrical data	1500 V	1500 V	1500 V
Rated voltage	1500 V	1500 V	1500 V
Nominal current I_N	27 A	40 A	40 A
Degree of protection	IP65/IP68 (2 m/24 h)	IP65/IP68 (2 m/24 h)	IP65/IP68 (2 m/24 h)
Conductor cross section	2.5 mm ²	4 mm ²	6 mm ²
Temperature data			
Ambient temperature (operation)	-40°C ... 85°C	-40°C ... 85°C	-40°C ... 85°C

Ordering data

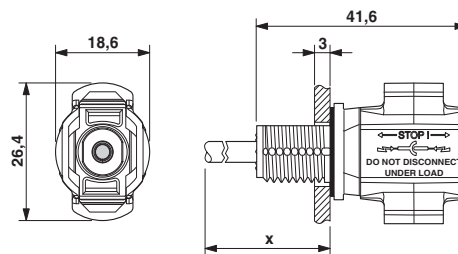
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
DC device plug-in connector						
Socket (+)	1805135	50	1805151	50	1805177	50
Pin (-)	1805148	50	1805164	50	1805180	50

Accessories

Nut for attaching SUNCLIX device plug-in connectors	PV-FT-C NUT BK	1775880	100
Protective cap for SUNCLIX photovoltaic plug-in connector; IP67 protection	PV-C PROTECTION CAP	1785430	100



Dimension: socket (+),
Dimension x = cable length



Dimension: pin (-),
Dimension x = cable length

SUNCLIX DC plug-in connectors, molded

- Cable cross section from 2.5 mm² to 6 mm²
- Voltages up to 1500 V
- IP66/IP68 protection (2 m/24 hour)



Notes:

Other cable types and lengths as well as assembly versions are available on request.

Technical Data

Electrical data			
Rated voltage	1500 V	1500 V	1500 V
Nominal current I _N	27 A	40 A	40 A
Degree of protection	IP66/IP68 (2 m/24 h)	IP66/IP68 (2 m/24 h)	IP66/IP68 (2 m/24 h)
Cable data			
Cable type	PV1-F cables	PV1-F cables	PV1-F cables
Conductor cross section	2.5 mm ²	4 mm ²	6 mm ²
Temperature data			
Ambient temperature (operation)	-40°C ... 85°C	-40°C ... 85°C	-40°C ... 85°C

Ordering data

Description	Cable length	Order No.		Pcs. / Pkt.	
		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.

Photovoltaic cable, assembled with socket (+), molded,
and free cable end, color: black, TÜV/VDE

0.65 m	1459919	1			
1 m	1459016	1	1459197	1	1459359
1.1 m	1459029	1	1459935	1	1459951
1.2 m	1459032	1	1459207	1	1459362
1.3 m	1459045	1	1459210	1	1459375
1.4 m	1459058	1	1459223	1	1459388
1.5 m	1459061	1	1459236	1	1459391

Photovoltaic cable, assembled with pin (-), molded,
and free cable end, color: black, TÜV/VDE

0.65 m	1459922	1			
1 m	1459074	1	1459249	1	1459401
1.1 m	1459087	1	1459948	1	1459964
1.2 m	1459090	1	1459252	1	1459414
1.3 m	1459100	1	1459265	1	1459427
1.4 m	1459113	1	1459278	1	1459430
1.5 m	1459126	1	1459281	1	1459443

Accessories

Protective cap for SUNCLIX photovoltaic plug-in connector;
IP67 protection

PV-C PROTECTION CAP	1785430	100
----------------------------	---------	-----

Connection technology for field devices and field cabling - PLUSCON

Photovoltaic plug-in connectors - PLUSCON solar

SUNCLIX DC plug-in connectors

- Quick and easy connection without special tools
- Reliable and long-term stable contacting of the conductors, thanks to proven spring technology



SUNCLIX, 1100 V,
2.5 to 6 mm²



SUNCLIX, 1500 V,
2.5 to 6 mm²



Technical Data

Electrical data
Rated voltage
Nominal current I _N
Degree of protection
Connection method
Connection capacity
Temperature data
Ambient temperature (operation)

1100 V
40 A
IP65/IP68 (2 m/24 h)
spring-cage connection
2.5 mm ² ... 6 mm ²
-40°C ... 85°C

Ordering data

Description
DC plug-in connectors
Socket (+)
Pin (-)

Type	Order No.	Pcs. / Pkt.
PV-CF-S 2,5-6 (+)	1774674	50
PV-CM-S 2,5-6 (-)	1774687	50

Accessories

Protective cap for SUNCLIX photovoltaic plug-in connector; IP67 protection
Filler plug for protection against dust and humidity
Screwdriver
Stripping tool, for standard 2.5, 4, and 6 mm ² solar cables, with 15 mm length stop, for SUNCLIX field plugs

PV-C PROTECTION CAP
PV-C PLUG
SZF 1-0,6X3,5
WIREFOX-D SR 6-1

Technical Data

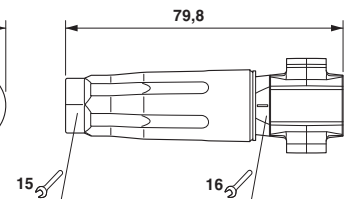
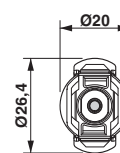
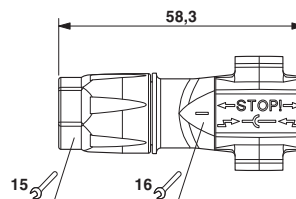
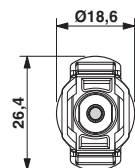
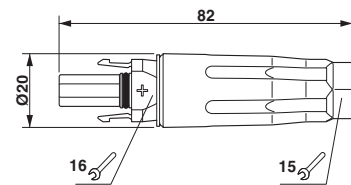
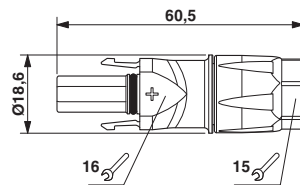
1500 V
40 A
IP65/IP68 (2 m/24 h)
spring-cage connection
2.5 mm ² ... 6 mm ²
-40°C ... 85°C

Ordering data

Type	Order No.	Pcs. / Pkt.
PV-C1F-S 2,5-6 (+)	1789821	50
PV-C1M-S 2,5-6 (-)	1789834	50

Accessories

PV-C PROTECTION CAP
PV-C PLUG
SZF 1-0,6X3,5
WIREFOX-D SR 6-1





**SUNCLIX, 1500 V,
6 to 16 mm²**

Technical Data

1500 V
65 A
IP65/IP68 (2 m/24 h)
spring-cage connection
6 mm² ... 16 mm²

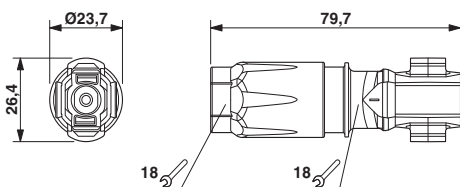
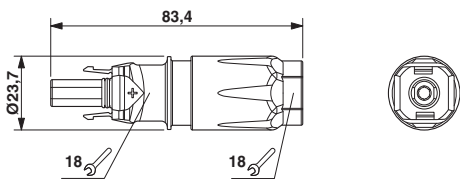
-40°C ... 85°C

Ordering data

Type	Order No.	Pcs. / Pkt.
PV-CF-S 6-16 (+)	1790784	25
PV-CM-S 6-16 (-)	1790797	25

Accessories

PV-C PROTECTION CAP	1785430	100
PV-C PLUG	1775631	200
SZF 1-0,6X3,5	1204517	10
WIREFOX-D SR 6-1	1212511	1



Connection technology for field devices and field cabling - PLUSCON

Photovoltaic plug-in connectors - PLUSCON solar

SUNCLIX DC accessories

Y-distributors

- Customer-specific configurations on request
- Variable cable lengths, number of branches, cable cross section, and processing of free cable ends

DC test plugs

- Can be released without tools
- For test applications with high insertion/withdrawal cycles

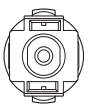
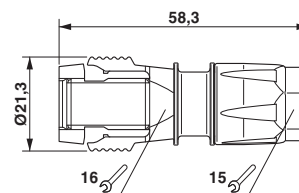
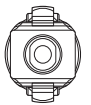
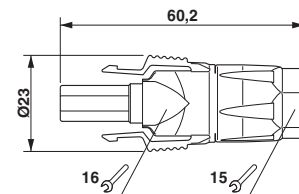


Y-distributor



DC test plug

	Technical Data		Technical Data	
	4 mm ²	6 mm ²	Socket (+)	Pin (-)
Electrical data				
Rated voltage	1100 V	1100 V	1000 V	1000 V
Nominal current I _N	40 A	40 A	40 A	40 A
Degree of protection	IP65/IP68	IP65/IP68	IP20	IP20
Conductor cross section	4 mm ²	6 mm ²	10 mm ²	10 mm ²
Insertion/withdrawal cycles	-	-	> 2000	> 2000
Temperature data				
Ambient temperature (operation)	-40°C ... 90°C	-40°C ... 90°C	-40°C ... 85°C	-40°C ... 85°C
	Ordering data			
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Description	4 mm ²		6 mm ²	
Y-distributor, length of each individual cable: 0.12 m				
Pin (-) to 2 x socket (+)	1795019	10	1787726	10
Socket (+) to 2 x pin (-)	1795022	10	1787739	10
DC test plug, can be released without tools, for test applications with high insertion/withdrawal cycles				
			1780451	50
				1780464
				50



Solar cables

- Suitable for fixed and flexible routing
- Insulating and sheath material offers excellent resistance to weather, UV, and wear
- PV1-F cable certified by TÜV and VDE



Technical Data			
Temperature data			
Ambient temperature (operation)	-40°C ... 90°C		
Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Solar cable, tin-plated single litz wires, 100 m ring, cross section:			
2.5 mm ²	PV-1P-100,0/S01-2,5	1459509	1
4 mm ²	PV-1P-100,0/S02-4,0	1459511	1
6 mm ²	PV-1P-100,0/S03-6,0	1459524	1
10 mm ²	PV-1P-100,0/S04-10,0	1459537	1
Solar cable, tin-plated single litz wires, 500 m drum, cross section:			
2.5 mm ²	PV-1P-500,0/S01-2,5	1459540	1
4 mm ²	PV-1P-500,0/S02-4,0	1787700	1
6 mm ²	PV-1P-500,0/S03-6,0	1787713	1
10 mm ²	PV-1P-500,0/S04-10,0	1459553	1

Connection technology for field devices and field cabling - PLUSCON

Sensor/actuator cabling - PLUSCON field

**M8 Y cable,
3-pos.**

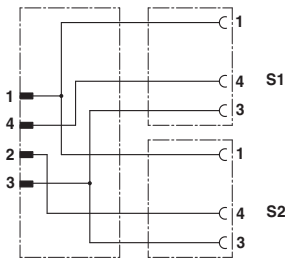
M8 Y plug



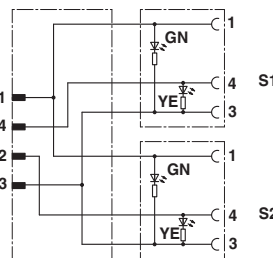
Ordering data

Free end	Order No.
	1.5 m 1458622 3 m 1458635 5 m 1458648 10 m 1458651
M8 socket, straight	
	0.3 m 1458664 0.6 m 1458677 1.5 m 1458680 3 m 1458693
M8 socket, angled	
	0.3 m 1458703 0.6 m 1458716 1.5 m 1458729 3 m 1458732
M8 socket, angled, with 2 LEDs	
	0.3 m 1458745 0.6 m 1458758 1.5 m 1458761 3 m 1458774

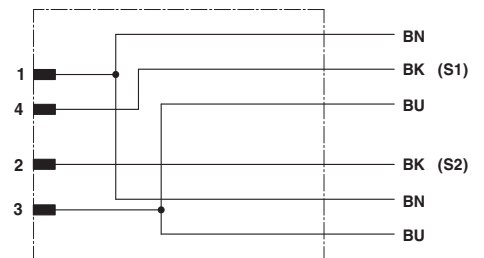
Cable description	Cable type	Color coding	Pin assignment, 3-pos.	
			Plug	Socket
PUR, halogen-free - black	PUR	BN	1	1
		BK	2 + 4	4
		BU	3	3



Contact assignment of the M8 plug and the M8 sockets



Contact assignment of the M8 plug and the M8 sockets, with LEDs



Contact assignment of the M8 Y plug

	Technical Data	
	M8 3-pos.	M8 3-pos., with LEDs
Nominal current I_N [A]	4	4
Rated voltage [V]	30	24
Volume resistance	$\leq 5 \text{ m}\Omega$	$\leq 5 \text{ m}\Omega$
Contact material	CuSn	CuSn
Contact surface material	Ni/Au	Ni/Au
Material of grip	TPU, hardly inflammable, self-extinguishing	TPU, hardly inflammable, self-extinguishing
Material of knurls	zinc die-cast, nickel-plated	zinc die-cast, nickel-plated
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104
Degree of protection	IP65/67	IP65/67
Temperature data		
Plug/socket [°C]	-25 ... 90	-25 ... 90

M8 SAC cable, 5-pos., B-encoded

Free end



M8 plug



Ordering data

Ordering data

Ordering data

Free end	Order No.	Ordering data	Order No.	Ordering data	Order No.
		1.5 m	1404461	1.5 m	1404465
		3 m	1404462	3 m	1404466
		5 m	1404463	5 m	1404467
		10 m	1404464	10 m	1404468
M8 socket, straight 		1.5 m	1404470	0.3 m	1404479
		3 m	1404471	0.6 m	1404480
		5 m	1404473	1.5 m	1404481
		10 m	1404474	3 m	1404482
M8 socket, angled 		1.5 m	1404475		
		3 m	1404476		
		5 m	1404477		
		10 m	1404478		

Cable description	Cable type	Color coding	Pin assignment
PUR, halogen-free - black	115	BN	1
		WH	2
		BK	4
		BU	3
		GY	5

Technical Data

		M8 5-pos.
Nominal current I_N	[A]	1.5
Rated voltage	[V]	30
Volume resistance		≤ 5 mΩ
Contact material		CuSn
Contact surface material		Ni/Au
Material of grip		TPU, hardly inflammable, self-extinguishing
Material of knurls		zinc die-cast, nickel-plated
M8 circular plug-in connector according to:		IEC 61076-2-104
Degree of protection		IP65/67
Temperature data		
Plug/socket	[°C]	-25 ... 90

Connection technology for field devices and field cabling - PLUSCON

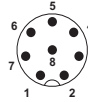
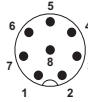
Sensor/actuator cabling - PLUSCON field

**M8 SAC cable,
8-pos.,
unshielded**

Free end



M8 plug



Ordering data

Ordering data

Ordering data

Free end



Order No.

Order No.

Order No.

1.5 m

1404178

1.5 m

1404182

3 m

1404180

3 m

1404186

5 m

1404181

5 m

1404185

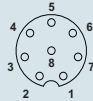
10 m

1404179

10 m

1404183

M8 socket, straight



1.5 m

1404187

0.3 m

1404196

3 m

1404188

0.6 m

1404198

5 m

1404189

1.5 m

1404199

10 m

1404190

3 m

1404200

M8 socket, angled



1.5 m

1404191

0.3 m

1404201

3 m

1404192

0.6 m

1404202

5 m

1404193

1.5 m

1404203

10 m

1404194

3 m

1404204

Cable description

Cable type

Color coding

Pin assignment

PUR, halogen-free - black

PUR

WH

1

BN

2

GN

3

YE

4

GY

5

PK

6

BU

7

RD

8

Technical Data

**M8
8-pos.**

Nominal current I_N

[A]

1.5

Rated voltage

[V]

30

Volume resistance

$\leq 5 \text{ m}\Omega$

Contact material

CuSn

Contact surface material

Ni/Au

Material of grip

TPU, hardly inflammable,
self-extinguishing

Material of knurls

zinc die-cast, nickel-plated

M8 circular plug-in connector according to:

IEC 61076-2-104

Degree of protection

IP65/67

Temperature data

Plug/socket

[°C]

-25 ... 85

**M8 SAC cable,
8-pos.,
shielded**

Free end

M8 plug



Ordering data

Ordering data

Ordering data

Free end

Order No.

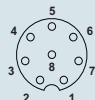
Order No.

Order No.



1.5 m	1404137
3 m	1404140
5 m	1404141
10 m	1404138

M8 socket, straight



1.5 m	1404147	0.3 m	1404133
3 m	1404148	0.6 m	1404134
5 m	1404149	1.5 m	1404135
10 m	1404150	3 m	1404136

Cable description	Cable type	Color coding	Pin assignment
PUR, halogen-free - black	PUR	WH	1
		BN	2
		GN	3
		YE	4
		GY	5
		PK	6
		BU	7
		RD	8

Technical Data

		M8 8-pos.
Nominal current I _N	[A]	1.5
Rated voltage	[V]	30
Volume resistance		≤ 5 mΩ
Contact material		CuSn
Contact surface material		Ni/Au
Material of grip		TPU, hardly inflammable, self-extinguishing
Material of knurls		zinc die-cast, nickel-plated
M8 circular plug-in connector according to:		IEC 61076-2-104
Degree of protection		IP65
Temperature data		
Plug/socket	[°C]	-25 ... 85

Connection technology for field devices and field cabling - PLUSCON

Sensor/actuator cabling - PLUSCON field

M12 power cable, shielded, suitable for trailing cables, S-encoded, 3-pos. + PE

Free end



M12 SPEEDCON plugs



Ordering data

Ordering data

Ordering data

Free end

Order No.

Order No.

Order No.



1.5 m	1424104	1.5 m	1424108
3 m	1424105	3 m	1424109
5 m	1424245	5 m	1424110
10 m	1424107	10 m	1424111

M12-SPEEDCON socket, straight



1.5 m	1424096
3 m	1424097
5 m	1424098
10 m	1424099

M12-SPEEDCON socket, angled



1.5 m	1424100
3 m	1424101
5 m	1424102
10 m	1424103

Cable description	Cable type	Color coding	Pin assignment
PUR, halogen-free - orange	PUR	BK1 1	1
		BK2 2	2
		BK3 3	3
		GNYE	PE

Technical Data

		M12
Nominal current I_N	[A]	12
Rated voltage	[V]	630
Volume resistance		$\leq 3 \text{ m}\Omega$
Material contact M12		CuZn
Material contact surface M12		Au
Material handle M12		TPU
Material of knurls		zinc die-cast, nickel-plated
Degree of protection		IP67
Temperature data		
Cable, fixed installation	[°C]	-40 ... 90
Cable, flexible installation	[°C]	-30 ... 90
Plug/socket	[°C]	-25 ... 85

M12 power cable, shielded, suitable for trailing cables, T-encoded, 4-pos.



Ordering data Ordering data Ordering data

Free end	Order No.	Order No.	Order No.	Order No.		
		1.5 m	1424120	1.5 m	1424124	
			3 m	1424121	3 m	1424125
			5 m	1424122	5 m	1424126
			10 m	1424123	10 m	1424127
M12-SPEEDCON socket, straight 		1.5 m	1424112			
		3 m	1424113			
		5 m	1424114			
		10 m	1424115			
M12-SPEEDCON socket, angled 		1.5 m	1424116			
		3 m	1424117			
		5 m	1424118			
		10 m	1424128			

Cable description	Cable type	Color coding	Pin assignment
PUR, halogen-free - black	PUR	BN	1
		WH	2
		BK	4
		BU	3

		Technical Data
		M12
Nominal current I_N	[A]	12
Rated voltage	[V]	60
Volume resistance		$\leq 3 \text{ m}\Omega$
Material contact M12		CuZn
Material contact surface M12		Au
Material handle M12		TPU, hardly inflammable, self-extinguishing
Material of knurls		zinc die-cast, nickel-plated
Degree of protection		IP67
Temperature data		
Cable, fixed installation	[°C]	-40 ... 90
Cable, flexible installation	[°C]	-30 ... 90
Plug/socket	[°C]	-25 ... 85

Sensor/actuator cabling - PLUSCON field

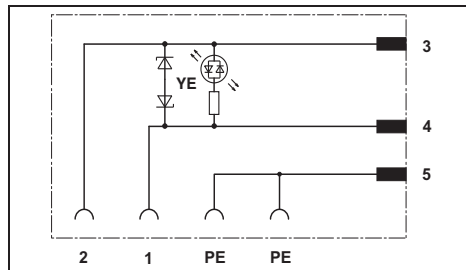
Valve plug adapters with M12 SPEEDCON plug



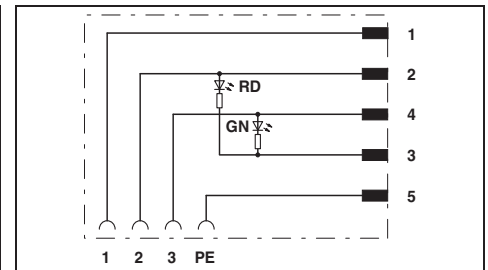
Valve plug type A



Valve plug, AD design, pressure switch



Technical Data



Technical Data

Technical data

Electrical data according to IEC 61076-2-101

Nominal current I_N	4 A
Nominal voltage U_N	24 V AC/DC
Cut-off peak	≤ 55 V
Status display	yellow LED

Material data

Material housing valve plug	TPU
Contact material M12 plug	CuSn
Contact surface material M12 plug	Ni/Au
Contact material valve plugs	CuSn
Contact surface material valve plugs	Sn
Inflammability class according to UL 94	HB

Mechanical data

M12 circular plug-in connector according to:	IEC 61076-2-101
Valve plug according to:	EN 175301-803
Degree of protection	IP65/IP67/IP69K

Temperature data

Ambient temperature (operation)	-25°C ... 85°C (valve plug)
---------------------------------	-----------------------------

Nominal current I_N	4 A
Nominal voltage U_N	24 V AC/DC
Cut-off peak	-
Status display	2 LEDs

Material housing valve plug	TPU
Contact material M12 plug	CuSn
Contact surface material M12 plug	Ni/Au
Contact material valve plugs	CuSn
Contact surface material valve plugs	Sn
Inflammability class according to UL 94	HB

M12 circular plug-in connector according to:	IEC 61076-2-101
Valve plug according to:	-
Degree of protection	IP65/IP67/IP69K

Ambient temperature (operation)	-25°C ... 85°C (valve plug)
---------------------------------	-----------------------------

Ordering data

Description	Type	Order No.	Pcs./ Pkt.
Valve plug design A , PE bridged, 18 mm contact spacing			
- Vertical M12 SPEEDCON plug	SAC-3P-MS/A-1L-Z SCO	1458525	1
- Horizontal M12 SPEEDCON plug	SAC-3P-MR/A-1L-Z SCO	1458538	1
Valve plug design AD , 18 mm contact spacing			
- Vertical M12 SPEEDCON plug			
- Horizontal M12 SPEEDCON plug			
Valve plug type B , 10 mm contact spacing			
- Vertical M12 SPEEDCON plug			
- Horizontal M12 SPEEDCON plug			
Valve plug type BI , 11 mm contact spacing			
- Vertical M12 SPEEDCON plug			
- Horizontal M12 SPEEDCON plug			
DESINA valve plug type A , 18 mm contact spacing			
- Vertical M12 SPEEDCON plug			

Ordering data

Description	Type	Order No.	Pcs./ Pkt.
Valve plug design AD , 18 mm contact spacing			
- Vertical M12 SPEEDCON plug	SAC-5P-MS/AD-2L SCO	1458596	1
- Horizontal M12 SPEEDCON plug	SAC-5P-MR/AD-2L SCO	1458606	1



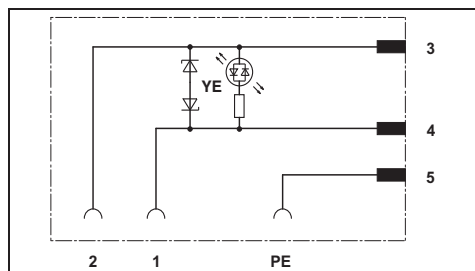
Valve plug type B



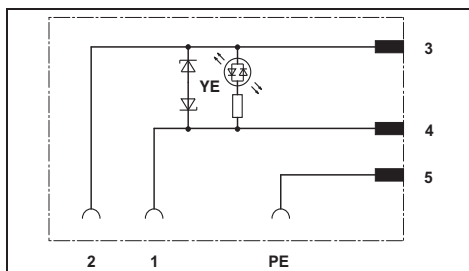
Valve plug type BI



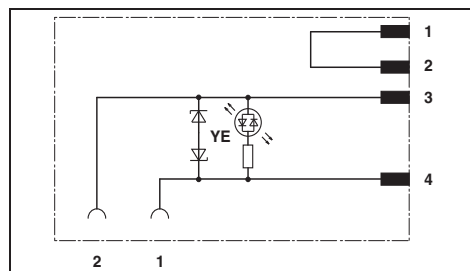
DESINA valve plug type A



Technical Data



Technical Data



Technical Data

4 A
24 V AC/DC
≤ 55 V
yellow LED

TPU
CuSn
Ni/Au
CuSn
Sn
HB

IEC 61076-2-101
EN 175301-803
IP65/IP67/IP69K

-25°C ... 85°C (valve plug)

4 A
24 V AC/DC
≤ 55 V
yellow LED

TPU
CuSn
Ni/Au
CuSn
Sn
HB

IEC 61076-2-101
-
IP65/IP67/IP69K

-25°C ... 85°C (valve plug)

4 A
24 V AC/DC
≤ 55 V
yellow LED

TPU
CuSn
Ni/Au
CuSn
Sn
HB

IEC 61076-2-101
EN 175301-803
IP65/IP67/IP69K

-25°C ... 85°C (valve plug)

Ordering data

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/B-1L-Z SCO	1458541	1
SAC-3P-MR/B-1L-Z SCO	1458554	1

Ordering data

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/BI-1L-Z SCO	1458567	1
SAC-3P-MR/BI-1L-Z SCO	1458570	1

Ordering data

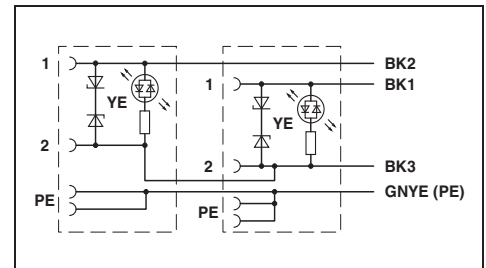
Type	Order No.	Pcs. / Pkt.
SAC-4P-MS/A-1L-Z D SCO	1458583	1

Sensor/actuator cabling - PLUSCON field

Pre-assembled cables,
valve plugs with Z diode,
design A



Type A



Technical Data

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I_N	4 A
Volume resistance	$\leq 5 \text{ m}\Omega$
Material data	
Material contact valve plug	CuSn
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Valve plug according to:	EN 175301-803
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	-25 ... 85 [°C]

Ordering data

Description	Cable length	Type	Order No.	Pcs./ Pkt.
Pre-assembled cable, 2 valve plugs leading to free end, valve plug distance: 10 cm	1.5 m	SAC- 1,5/0,1-116/2XA-1L-Z	1457982	1
	3 m	SAC- 3,0/0,1-116/2XA-1L-Z	1457995	1
	5 m	SAC- 5,0/0,1-116/2XA-1L-Z	1458004	1
	10 m	SAC-10,0/0,1-116/2XA-1L-Z	1458017	1
Pre-assembled cable, 2 valve plugs leading to free end, valve plug distance: 15 cm	1.5 m	SAC- 1,5/0,15-116/2XA-1L-Z	1458020	1
	3 m	SAC- 3,0/0,15-116/2XA-1L-Z	1458033	1
	5 m	SAC- 5,0/0,15-116/2XA-1L-Z	1458046	1
	10 m	SAC-10,0/0,15-116/2XA-1L-Z	1458059	1
Pre-assembled cable, 2 valve plugs leading to free end, valve plug distance: 20 cm	1.5 m	SAC- 1,5/0,2-116/2XA-1L-Z	1458062	1
	3 m	SAC- 3,0/0,2-116/2XA-1L-Z	1458075	1
	5 m	SAC- 5,0/0,2-116/2XA-1L-Z	1458088	1
	10 m	SAC-10,0/0,2-116/2XA-1L-Z	1458091	1

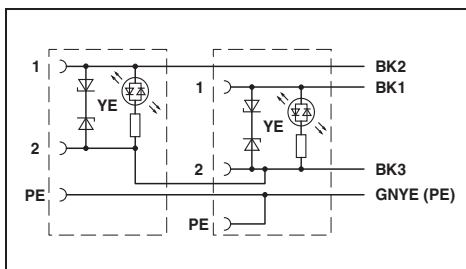
Pre-assembled cables, valve plugs with Z diode, design B, BI



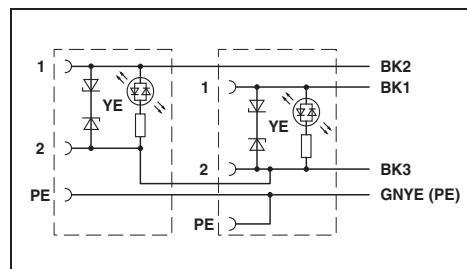
Type B



Type BI



Technical Data



Technical Data

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I _N	4 A
Volume resistance	≤ 5 mΩ
Material data	
Material contact valve plug	CuSn
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Valve plug according to:	EN 175301-803
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	[-25 ... 85] °C

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I _N	4 A
Volume resistance	≤ 5 mΩ
Material data	
Material contact valve plug	CuSn
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Valve plug according to:	-
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	-25 ... 85

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I _N	4 A
Volume resistance	≤ 5 mΩ
Material data	
Material contact valve plug	CuSn
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Valve plug according to:	-
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	-25 ... 85

Ordering data

Ordering data

Description	Cable length	Type	Order No.	Pcs. / Pkt.
Pre-assembled cable, 2 valve plugs leading to free end, valve plug distance: 10 cm	1.5 m	SAC- 1,5/0,1-116/2XB-1L-Z	1458169	1
	3 m	SAC- 3,0/0,1-116/2XB-1L-Z	1458172	1
	5 m	SAC- 5,0/0,1-116/2XB-1L-Z	1458185	1
	10 m	SAC-10,0/0,1-116/2XB-1L-Z	1458198	1
Pre-assembled cable, 2 valve plugs leading to free end, valve plug distance: 15 cm	1.5 m	SAC- 1,5/0,15-116/2XB-1L-Z	1458208	1
	3 m	SAC- 3,0/0,15-116/2XB-1L-Z	1458211	1
	5 m	SAC- 5,0/0,15-116/2XB-1L-Z	1458224	1
	10 m	SAC-10,0/0,15-116/2XB-1L-Z	1458237	1
Pre-assembled cable, 2 valve plugs leading to free end, valve plug distance: 20 cm	1.5 m	SAC- 1,5/0,2-116/2XB-1L-Z	1458240	1
	3 m	SAC- 3,0/0,2-116/2XB-1L-Z	1458253	1
	5 m	SAC- 5,0/0,2-116/2XB-1L-Z	1458266	1
	10 m	SAC-10,0/0,2-116/2XB-1L-Z	1458279	1

Type	Order No.	Pcs. / Pkt.
SAC- 1,5/0,1-116/2XB-1L-Z	1458169	1
SAC- 3,0/0,1-116/2XB-1L-Z	1458172	1
SAC- 5,0/0,1-116/2XB-1L-Z	1458185	1
SAC-10,0/0,1-116/2XB-1L-Z	1458198	1
SAC- 1,5/0,15-116/2XB-1L-Z	1458208	1
SAC- 3,0/0,15-116/2XB-1L-Z	1458211	1
SAC- 5,0/0,15-116/2XB-1L-Z	1458224	1
SAC-10,0/0,15-116/2XB-1L-Z	1458237	1
SAC- 1,5/0,2-116/2XB-1L-Z	1458240	1
SAC- 3,0/0,2-116/2XB-1L-Z	1458253	1
SAC- 5,0/0,2-116/2XB-1L-Z	1458266	1
SAC-10,0/0,2-116/2XB-1L-Z	1458279	1

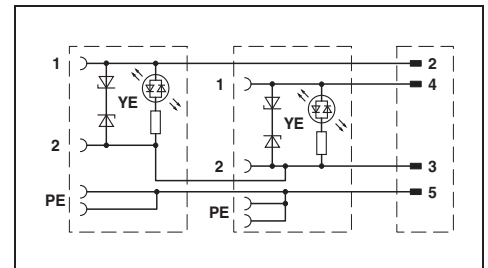
Type	Order No.	Pcs. / Pkt.
SAC- 1,5/0,1-116/2XBI-1L-Z	1458347	1
SAC- 3,0/0,1-116/2XBI-1L-Z	1458350	1
SAC- 5,0/0,1-116/2XBI-1L-Z	1458363	1
SAC-10,0/0,1-116/2XBI-1L-Z	1458376	1
SAC- 1,5/0,15-116/2XBI-1L-Z	1458389	1
SAC- 3,0/0,15-116/2XBI-1L-Z	1458392	1
SAC- 5,0/0,15-116/2XBI-1L-Z	1458402	1
SAC-10,0/0,15-116/2XBI-1L-Z	1458415	1
SAC- 1,5/0,2-116/2XBI-1L-Z	1458428	1
SAC- 3,0/0,2-116/2XBI-1L-Z	1458431	1
SAC- 5,0/0,2-116/2XBI-1L-Z	1458444	1
SAC-10,0/0,2-116/2XBI-1L-Z	1458457	1

Sensor/actuator cabling - PLUSCON field

Double valve plug-in connector with Z diode, design A



Type A



Technical Data

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I_N	4 A
Volume resistance	$\leq 5 \text{ m}\Omega$
Material data	
Material contact M12	CuSn
Material contact valve plug	CuSn
Material contact surface M12	Ni/Au
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	$^{\circ}\text{C}$ -25 ... 85

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Double valve plug-in connector , plug distance: 10 cm, valve plug leading to valve plug adapter with: - Vertical M12 SPEEDCON plug - Horizontal M12 SPEEDCON plug	SAC-MS/0,1-116/2XA-1L-Z SCO SAC-MR/0,1-116/2XA-1L-Z SCO	1458101 1458130	1 1
Double valve plug-in connector , plug distance: 15 cm, valve plug leading to valve plug adapter with: - Vertical M12 SPEEDCON plug - Horizontal M12 SPEEDCON plug	SAC-MS/0,15-116/2XA-1L-Z SCO SAC-MR/0,15-116/2XA-1L-Z SCO	1458114 1458143	1 1
Double valve plug-in connector , plug distance: 20 cm, valve plug leading to valve plug adapter with: - Vertical M12 SPEEDCON plug - Horizontal M12 SPEEDCON plug	SAC-MS/0,2-116/2XA-1L-Z SCO SAC-MR/0,2-116/2XA-1L-Z SCO	1458127 1458156	1 1

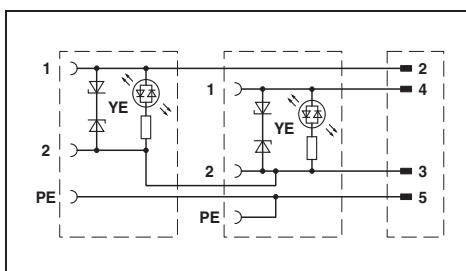
Double valve plug-in connector with Z diode, design B, BI



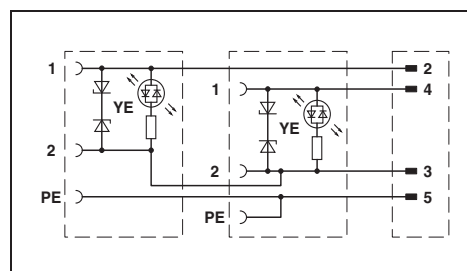
Type B



Type BI



Technical Data



Technical Data

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I _N	4 A
Volume resistance	≤ 5 mΩ
Material data	
Material contact M12	CuSn
Material contact valve plug	CuSn
Material contact surface M12	Ni/Au
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	-25 ... 85 [°C]

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I _N	4 A
Volume resistance	≤ 5 mΩ
Material data	
Material contact M12	CuSn
Material contact valve plug	CuSn
Material contact surface M12	Ni/Au
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	-25 ... 85 [°C]

Electrical data	
Rated voltage	24 V AC/DC
Nominal current I _N	4 A
Volume resistance	≤ 5 mΩ
Material data	
Material contact M12	CuSn
Material contact valve plug	CuSn
Material contact surface M12	Ni/Au
Material contact surface valve plug	Sn
Material housing valve plug	TPU
Mechanical data	
Degree of protection	IP65/IP67/IP69K
Temperature data	
Valve plugs	-25 ... 85 [°C]

Ordering data

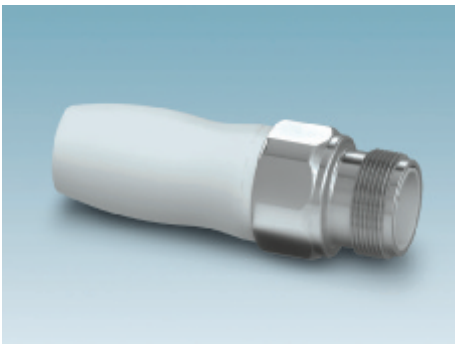
Ordering data

Ordering data

Description
Double valve plug-in connector , plug distance: 10 cm, valve plug leading to valve plug adapter with: - Vertical M12 SPEEDCON plug - Horizontal M12 SPEEDCON plug
Double valve plug-in connector , plug distance: 15 cm, valve plug leading to valve plug adapter with: - Vertical M12 SPEEDCON plug - Horizontal M12 SPEEDCON plug
Double valve plug-in connector , plug distance: 20 cm, valve plug leading to valve plug adapter with: - Vertical M12 SPEEDCON plug - Horizontal M12 SPEEDCON plug

Type	Order No.	Pcs. / Pkt.
SAC-MS/0,1-116/2XB-1L-Z SCO	1458282	1
SAC-MR/0,1-116/2XB-1L-Z SCO	1458318	1
SAC-MS/0,15-116/2XB-1L-Z SCO	1458295	1
SAC-MR/0,15-116/2XB-1L-Z SCO	1458321	1
SAC-MS/0,2-116/2XB-1L-Z SCO	1458305	1
SAC-MR/0,2-116/2XB-1L-Z SCO	1458334	1

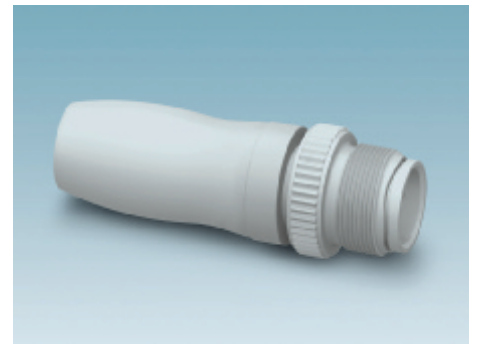
Type	Order No.	Pcs. / Pkt.
SAC-MS/0,1-116/2XBI-1L-Z SCO	1458460	1
SAC-MR/0,1-116/2XBI-1L-Z SCO	1458499	1
SAC-MS/0,15-116/2XBI-1L-Z SCO	1458473	1
SAC-MR/0,15-116/2XBI-1L-Z SCO	1458509	1
SAC-MS/0,2-116/2XBI-1L-Z SCO	1458486	1
SAC-MR/0,2-116/2XBI-1L-Z SCO	1458512	1



Hygienically designed M12 plug-in connectors have knurls made of stainless steel 1.4404 and a particularly smooth handle design. They therefore make it impossible for residual food material to accumulate in the zone which makes contact with the product.



Hygienically designed shielded versions are available for areas subject to high levels of electromagnetic interference. The choice of materials for these versions is also ideally suited to the zone which makes contact with the product.



The standard design M12 plug-in connectors are equipped with a plastic knurl and have a smooth and easy-to-clean surface. The plastic materials are selected and the cables are optimally tailored to suit the special requirements in spray zones.

M12 distributors with stainless steel housing

The housing of the sensor/actuator boxes for the food industry is made of 1.4404 high-grade steel. The high-grade steel distributor, which is provided with spacers, can be easily cleaned from all sides. The master cable sheath is made of PVC. This material is listed with the Food and Drug Administration. This means that the PVC does not present a hazard if it comes into contact with food.

The distributors fulfill IP69K protection. The program includes double-occupied boxes with a 5 and 10 m long master cable.

Notes:
For circuit diagrams, see PLUSCON 2011 catalog.
For pin assignment, see PLUSCON 2011 catalog.



With master cable

Electrical data	
Rated voltage	24 V DC
Rated current for each I/O signal	2 A
Rated current per slot	4 A
Total rated current	12 A
Housing material	stainless steel 1.4404
Degree of protection according to IEC 60529/EN 60529	IP65/IP67/IP69K
Ambient temperature (operation)	-30°C ... 80°C
Ambient temperature of master cable	
Fixed installation [°C]	-40 ... 90
Flexible installation [°C]	-5 ... 80

Technical Data

Rated voltage	24 V DC
Rated current for each I/O signal	2 A
Rated current per slot	4 A
Total rated current	12 A
Housing material	stainless steel 1.4404
Degree of protection according to IEC 60529/EN 60529	IP65/IP67/IP69K
Ambient temperature (operation)	-30°C ... 80°C

Description	Cable length
Sensor/actuator box with stainless steel housing , eight M12 slots, 5-pos., with status indicator and permanently connected PVC master cable	5 m
	10 m

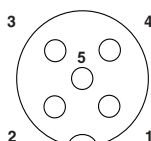
Ordering data

Type	Order No.	Pcs. / Pkt.
SACB-8/16-L- 5,0PVC FB	1555541	1
SACB-8/16-L-10,0PVC FB	1555554	1

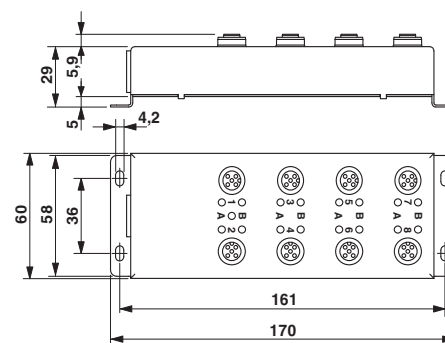
M12 screw plug made of high-grade steel For unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type plug-in connectors for the food industry
Torque screwdriver With preset torque of 0.4 Nm and 4 mm hexagonal drive
Nut For assembling M12 plug-in connectors with hexagonal high-grade steel knurl, with 4 mm hexagonal drive

Accessories

PROT-M12 FB	1555538	5
TSD 04 SAC	1208429	1
SAC BIT M12-W14	1212513	1



Connector pin assignment for M12 socket, 5-pos.

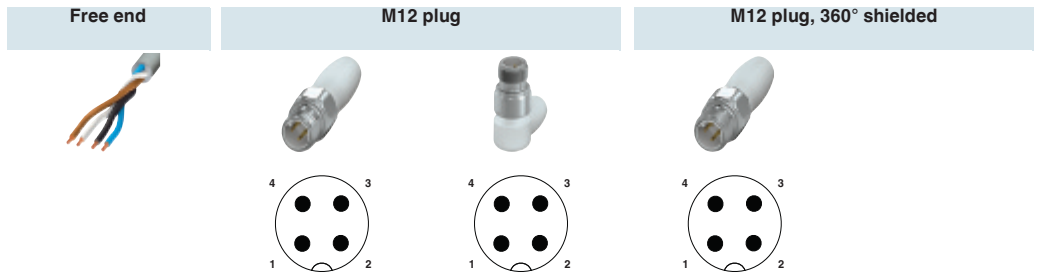







Dimensional drawing

Connection technology for field devices and field cabling - PLUSCON

Sensor/actuator cabling for the food industry - PLUSCON field

**M12 SAC cable,
4-pos., hygienic design,
stainless steel**

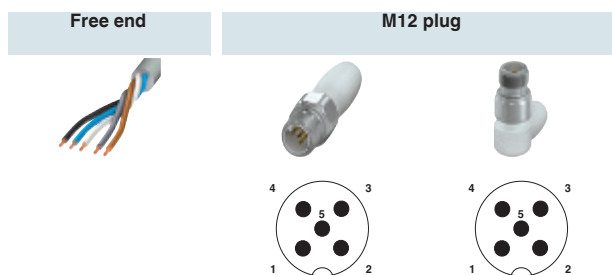


	Ordering data	Ordering data	Ordering data	Ordering data	Ordering data	
Free end	Order No.	Order No.	Order No.	Order No.	Order No.	
	1.5 m	1403947	1.5 m	1403952	1.5 m	1403981
	3 m	1403948	3 m	1403953	3 m	1403982
	5 m	1403949	5 m	1403954	5 m	1403983
	10 m	1403951	10 m	1403955	10 m	1403984
M12 socket, straight						
	1.5 m	1403956	0.3 m	1403968		
	3 m	1403957	0.6 m	1403969		
	5 m	1403958	1.5 m	1403970		
	10 m	1403959	3 m	1403971		
M12 socket, angled						
	1.5 m	1403960	0.3 m	1403972		
	3 m	1403961	0.6 m	1403973		
	5 m	1403962	1.5 m	1403974		
	10 m	1403963	3 m	1403975		
M12 socket, angled, with 3 LEDs						
	1.5 m	1403964	0.3 m	1403976		
	3 m	1403965	0.6 m	1403977		
	5 m	1403966	1.5 m	1403978		
	10 m	1403967	3 m	1403979		
M12 socket, straight, 360° shielded						
	1.5 m	1403985	0.3 m	1403990		
	3 m	1403986	0.6 m	1403991		
	5 m	1403987	1.5 m	1403992		
	10 m	1403989	3 m	1403993		

Cable description	Cable type	Color coding	Pin assignment
PP - gray (RAL 7035)	PP	BN	1
		WH	2
		BK	4
		BU	3

	Technical Data	Technical Data	Technical Data
	M12 4-pos.	M12 4-pos., shielded	M12 4-pos., with LED
Nominal current I _N	4 [A]	4	4
Rated voltage	250 [V]	250	24
Volume resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Contact material	CuSn	CuSn	CuSn
Contact surface material	Ni/Au	Ni/Au	Ni/Au
Material of grip	PP	PP	PP
Material of knurls	high-grade steel	high-grade steel	high-grade steel
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Degree of protection	IP65/IP68/IP69K	IP65/IP68/IP69K	IP65/IP68/IP69K
Temperature data			
Plug/socket	-40 ... 105 [°C]	-40 ... 105	-40 ... 105

M12 SAC cable, 5-pos., hygienic design, stainless steel



Ordering data

Free end	Order No.	Order No.	Order No.
	1.5 m	1404039	1.5 m 1404044
	3 m	1404041	3 m 1404046
	5 m	1404042	5 m 1404047
	10 m	1404043	10 m 1404048
M12 socket, straight 	1.5 m	1404049	0.3 m 1404063
	3 m	1404050	0.6 m 1404064
	5 m	1404051	1.5 m 1404065
	10 m	1404052	3 m 1404066
M12 socket, angled 	1.5 m	1404053	0.3 m 1404067
	3 m	1404054	0.6 m 1404068
	5 m	1404055	1.5 m 1404069
	10 m	1404056	3 m 1404070
M12 socket, angled, with 3 LEDs 	1.5 m	1404057	0.3 m 1404071
	3 m	1404059	0.6 m 1404072
	5 m	1404060	1.5 m 1404073
	10 m	1404062	3 m 1404550

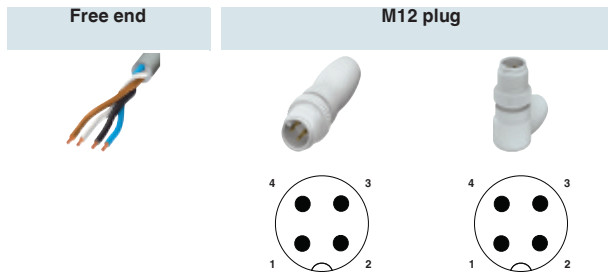
Cable description	Cable type	Color coding	Pin assignment
PP - gray (RAL 7035)	PP	BN	1
		WH	2
		BK	4
		BU	3
		GY	5

		Technical Data	Technical Data
		M12 5-pos.	M12 5-pos., with LED
Nominal current I_N	[A]	4	4
Rated voltage	[V]	60	24
Volume resistance		$\leq 5 \text{ m}\Omega$	$\leq 5 \text{ m}\Omega$
Contact material		CuSn	CuSn
Contact surface material		Ni/Au	Ni/Au
Material of grip		PP	PP
Material of knurls		high-grade steel	high-grade steel
M12 circular plug-in connector according to:		IEC 61076-2-101	IEC 61076-2-101
Degree of protection		IP65/IP68/IP69K	IP65/IP68/IP69K
Temperature data			
Plug/socket	[°C]	-40 ... 105	-40 ... 105

Connection technology for field devices and field cabling - PLUSCON

Sensor/actuator cabling for the food industry - PLUSCON field

**M12 SAC cable,
4-pos.,
plastic**

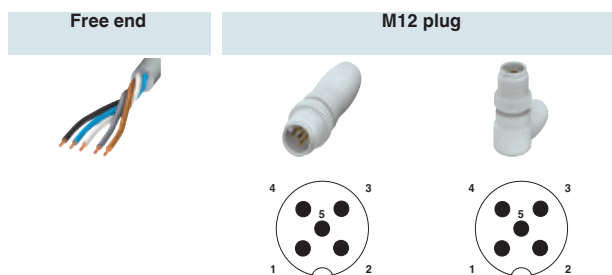


	Ordering data		Ordering data		Ordering data	
Free end	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
		1.5 m	1404002	1.5 m	1404006	
		3 m	1404003	3 m	1404007	
		5 m	1404004	5 m	1404008	
		10 m	1404005	10 m	1404009	
M12 socket, straight						
		1.5 m	1404010	0.3 m	1404023	
		3 m	1404011	0.6 m	1404024	
		5 m	1404012	1.5 m	1404025	
		10 m	1404013	3 m	1404026	
M12 socket, angled						
		1.5 m	1404014	0.3 m	1404027	
		3 m	1404015	0.6 m	1404028	
		5 m	1404017	1.5 m	1404030	
		10 m	1404018	3 m	1404031	
M12 socket, angled, with 3 LEDs						
		1.5 m	1404019	0.3 m	1404033	
		3 m	1404020	0.6 m	1404034	
		5 m	1404021	1.5 m	1404035	
		10 m	1404022	3 m	1404036	

Cable description	Cable type	Color coding	Pin assignment
PP - gray (RAL 7035)	PP	BN	1
		WH	2
		BK	4
		BU	3

		Technical Data	
		M12 4-pos.	M12 4-pos., with LED
Nominal current I_N	[A]	4	4
Rated voltage	[V]	250	24
Volume resistance		$\leq 5 \text{ m}\Omega$	$\leq 5 \text{ m}\Omega$
Contact material		CuSn	CuSn
Contact surface material		Ni/Au	Ni/Au
Material of grip		PP	PP
Material of knurls		PP	PP
M12 circular plug-in connector according to:		IEC 61076-2-101	IEC 61076-2-101
Degree of protection		IP65/IP68/IP69K	IP65/IP68/IP69K
Temperature data			
Plug/socket	[°C]	-40 ... 105	-40 ... 105

M12 SAC cable, 5-pos., plastic

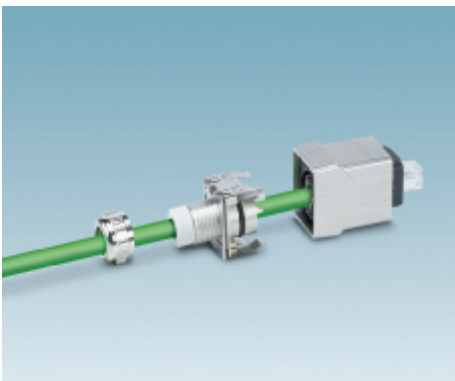
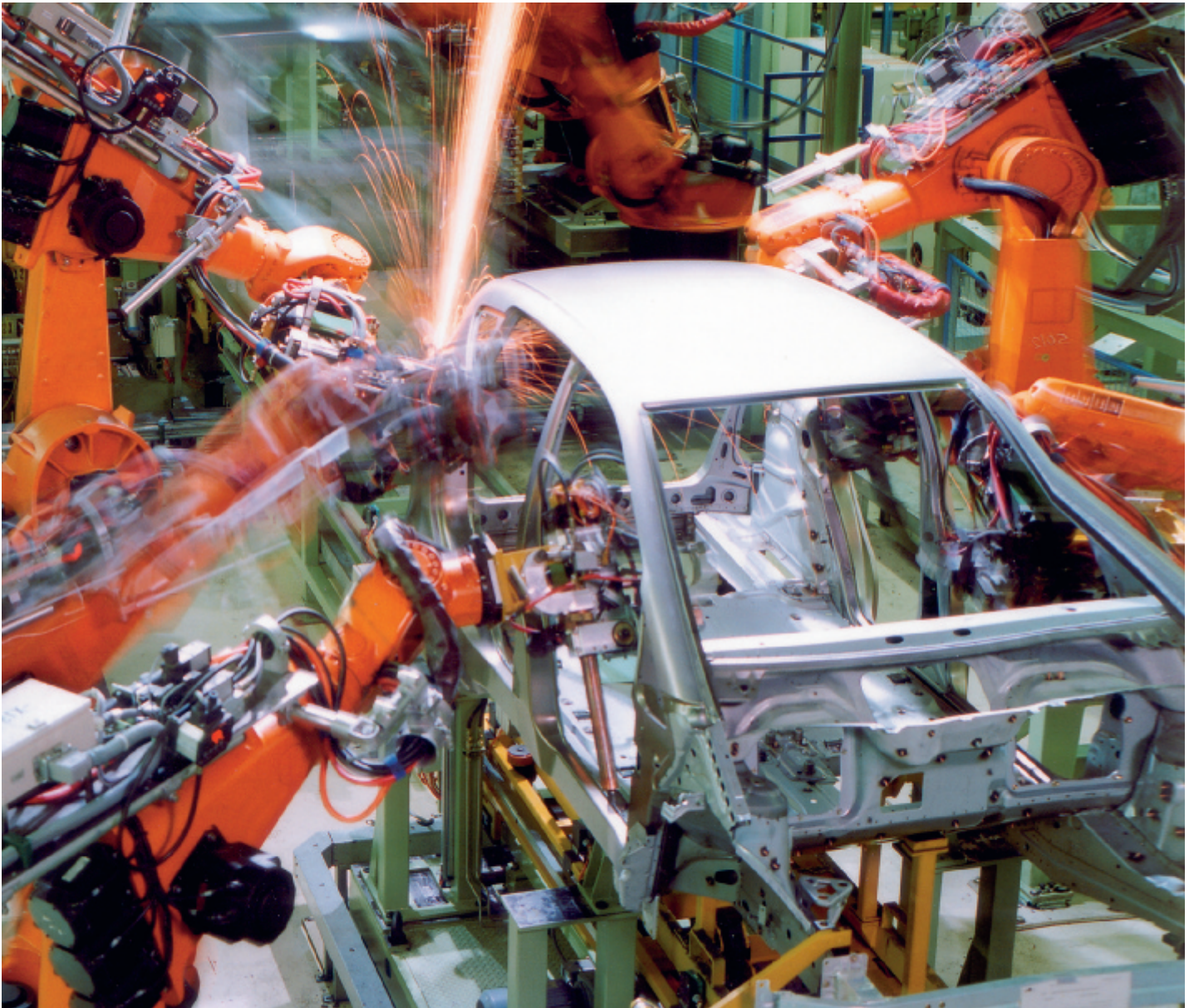


Ordering data Ordering data Ordering data

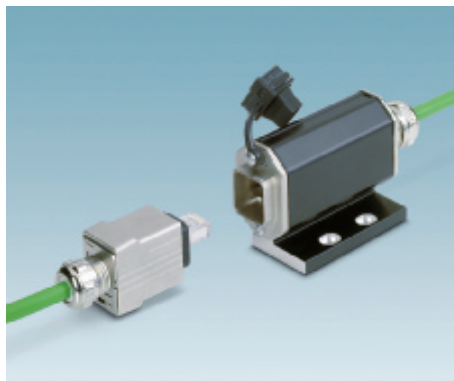
Free end	Order No.	Order No.	Order No.
	1.5 m	1404075	1.5 m 1404079
	3 m	1404076	3 m 1404080
	5 m	1404077	5 m 1404081
	10 m	1404078	10 m 1404082
M12 socket, straight 	1.5 m	1404083	0.3 m 1404097
	3 m	1404084	0.6 m 1404098
	5 m	1404085	1.5 m 1404099
	10 m	1404086	3 m 1404101
M12 socket, angled 	1.5 m	1404088	0.3 m 1404102
	3 m	1404089	0.6 m 1404103
	5 m	1404091	1.5 m 1404104
	10 m	1404092	3 m 1404105
M12 socket, angled, with 3 LEDs 	1.5 m	1404093	0.3 m 1404106
	3 m	1404094	0.6 m 1404107
	5 m	1404095	1.5 m 1404108
	10 m	1404096	3 m 1404109

Cable description	Cable type	Color coding	Pin assignment
PP - gray (RAL 7035)	PP	BN	1
		WH	2
		BK	4
		BU	3
		GY	5

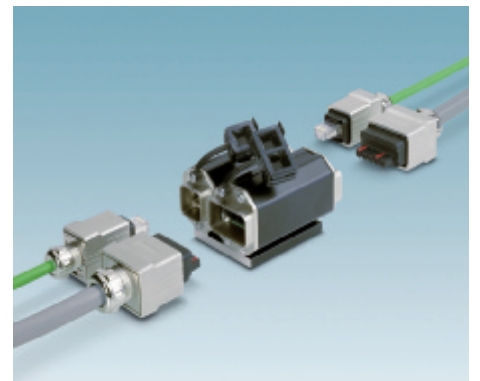
		Technical Data	Technical Data
		M12 5-pos.	M12 5-pos., with LED
Nominal current I_N	[A]	4	4
Rated voltage	[V]	60	24
Volume resistance		$\leq 5 \text{ m}\Omega$	$\leq 5 \text{ m}\Omega$
Contact material		CuSn	CuSn
Contact surface material		Ni/Au	Ni/Au
Material of grip		PP	PP
Material of knurls		PP	PP
M12 circular plug-in connector according to:		IEC 61076-2-101	IEC 61076-2-101
Degree of protection		IP65/IP68/IP69K	IP65/IP68/IP69K
Temperature data			
Plug/socket	[°C]	-40 ... 105	-40 ... 105



The EMC-protected installation concept facilitates easy and EMC-safe cabling with hose packs from the control cabinet to the robot head based on the cabling guidelines for PROFINET.



The integrated installation system significantly reduces assembly effort and consists of cascadable individual components that are coordinated with one another for flexible connection of the hose packs.



Particularly in the field of welding robots or conveyer systems, it is important to use a consistent shielding concept for installation in order to prevent interference on the data cables.

Copper-based, EMC-safe installation systems



RJ45 plug-in connector,
push-pull



Push-pull robot interface,
with RJ45 and power inserts

	Technical Data			Technical Data		
Electrical data	VS-PPC-C1-MNNA-...-EMC			VS-MP-PPC/CG-10G		
Transmission characteristics (category)	CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)			CAT6 _A		
Material data	zinc die-cast			aluminum alloy		
Housing material	V0			-		
Inflammability class according to UL 94	IDC fast connection			-		
Connection data	22 ... 22 (solid)			-		
Connection method	5 mm ... 8 mm			5 mm ... 8 mm (Data cable gland)		
Connection cross section AWG	≥ 500			> 1000 (data)		
Cable cross section						
Insertion/withdrawal cycles						
Temperature data						
Ambient temperature (operation)	-40°C ... 70°C			-40°C ... 70°C		
	Ordering data			Ordering data		
Description	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
RJ45 plug-in connector , IP67, metal housing, push/pull interlocking, 1 Gbps, QUICKON fast connection technology, for 1-wire and 7-wire conductors AWG 26 ... 24						
4-pos.	VS-PPC-C1-MNNA-4Q5-EMC	1403366	1			
8-pos.	VS-PPC-C1-MNNA-8Q5-EMC	1403367	1			
Multi-port power and data connection : push-pull power and RJ45, 10 Gbps, for passive PROFINET cabling to robots, including mounting foot, for cable diameters:						
5 mm ... 8 mm				VS-MP-PPC/CG-PO/10G	1403682	1
7 mm ... 10.5 mm				VS-MP-PPC/CG-XL-PO/10G	1403688	1
Multi-port data connection : push-pull RJ45, 10 Gbps, for passive PROFINET cabling to robots, including mounting foot, for cable diameters:						
5 mm ... 8 mm				VS-MP-PPC/CG-10G	1403678	1
7 mm ... 10.5 mm				VS-MP-PPC/CG-XL-10G	1403686	1
Multi-port power connection : push-pull power, for passive PROFINET cabling to robots, including mounting foot						
				VS-MP-PPC/CG-PO	1403681	1
Multi-port power coupling : for passive PROFINET cabling to robots, including mounting foot						
				VS-MP-PPC/PPC-PO	1403684	1
Multi-port data coupling : for passive PROFINET cabling to robots, including mounting foot						
				VS-MP-PPC/PPC-1G	1403685	1
	Accessories			Accessories		
Protective cover , IP65, with push/pull locking, for covering the contact insert in the push/pull connector for RJ45 and SCRJ, plastic	VS-PPC-F1-PC-POBK	1405316	1			
Snap-on cap , with additional snap-lock, IP65/IP67, for the panel mounting frame, push-pull locking				VS-PPC-C1-PC-ROBK-L	1405293	1
Snap-on cap , with additional snap-lock, IP65/IP67, for the Power panel mounting frame, push-pull locking				VS-PPC-C2-PC-ROBK-L	1405303	1
Stripping tool , for multiple-stage repositioning of shielded conductors	VS-CABLE-STRIP-VARIO	1657407	1	VS-CABLE-STRIP-VARIO	1657407	1

Installation system for fiber optics

**PROFI
NET**



Push-pull robot interface
with fiber optics and power inserts

**PROFI
NET**



Push-pull robot interface
with fiber optics inserts

	Technical Data			Technical Data		
Material data	VS-MP-PPC/CG-PO/FO	VS-MP-PPC/CG-PO		VS-MP-PPC/CG-FO		
Housing material	aluminum alloy	aluminum alloy		aluminum alloy		
Connection data						
Connection profile	data/power: SCRJ/5-pos.	power: 5-pos.		data: SCRJ		
Insertion/withdrawal cycles	≥ 500 (data) // ≤ 100 (power)	≤ 100 (power)		≥ 500 (data)		
Temperature data						
Ambient temperature (operation)	-40°C ... 70°C	-40°C ... 70°C		-40°C ... 70°C		
	Ordering data			Ordering data		
Description	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Multi-port power and data connection: push-pull power and SCRJ, for passive PROFINET cabling to robots, including mounting foot, for cable diameters: 5 mm ... 8 mm 7 mm ... 10.5 mm	VS-MP-PPC/CG-PO/FO	1404321	1			
	VS-MP-PPC/CG-XL-PO/FO	1404325	1			
Multi-port data connection: push-pull SCRJ, for passive PROFINET cabling to robots, including mounting foot, for cable diameters: 5 mm ... 8 mm 7 mm ... 10.5 mm				VS-MP-PPC/CG-FO	1404319	1
				VS-MP-PPC/CG-XL-FO	1404324	1
Multi-port power connection: push-pull power, for passive PROFINET cabling to robots, including mounting foot						
	VS-MP-PPC/CG-PO	1403681	1			
Multi-port power coupling: for passive PROFINET cabling to robots, including mounting foot						
	VS-MP-PPC/PPC-PO	1403684	1			
	Accessories			Accessories		
Snap-on cap, with additional snap-lock, IP65/IP67, for the panel mounting frame, push-pull locking	VS-PPC-C1-PC-ROBK-L	1405293	1			
	VS-PPC-C2-PC-ROBK-L	1405303	1			
Stripping tool, for multiple-stage repositioning of shielded conductors	VS-CABLE-STRIP-VARIO	1657407	1	VS-CABLE-STRIP-VARIO	1657407	1

Bulkhead, M12-flush-type plug for CAT6_A and hybrid plug-in connectors



Ethernet



M12/RJ45 bulkhead for 10 Gbps



M12 panel feed-through and flush-type plug-in connector for 10 Gbps and hybrid plug-in connector

Technical Data

	VS-BH-M12FSX-10G-RJ45/...
Electrical data	
Nominal voltage U _N	60 V
Nominal current I _N	0.5 A
Transmission characteristics (category)	CAT6 _A
Contact material	copper alloy
Material of grip	PA
Inflammability class according to UL 94	V0
Connection method	-
Insertion/withdrawal cycles	≥ 100
Temperature data	
Plug/socket	[°C] -25 ... 85

Technical Data

	VS-FSBPXS-OE-94F...	SACC-CI-M12FSY-8CON-L90
Electrical data		
Nominal voltage U _N	48 V	30 V (power and data)
Nominal current I _N	0.5 A	0.5 A (data)/6 A (power)
Transmission characteristics (category)	CAT6 _A	CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)
Contact material	CuZn	CuZn
Material of grip	zinc die-cast, nickel-plated	-
Inflammability class according to UL 94	V0	V0
Connection method	-	solder connection
Insertion/withdrawal cycles	≥ 100	≥ 100
Temperature data		
Plug/socket	-40 ... 90	-40 ... 85

Ordering data

Description	Cable length	Type	Order No.	Pcs. / Pkt.
Control cabinet feed-through , M12, 8-pos., to RJ45 socket				
Socket exit 90°				
Assembled Ethernet cable , CAT6 _A , shielded, 4-pair, 26° AWG stranded (7-wire), RAL 5021 (water blue), M12 flush-type socket, rear/screw mounting with M16 fastening thread to free cable end		VS-BH-M12FSX-10G-RJ45/90	1404548	1
	0.5 m			
	1 m			
	2 m			
	5 m			
Flush-type socket , CAT6 _A , Ethernet, one-piece, 8-pos., M12 SPEEDCON, with straight solder connection, rear/screw mounting with:				
Pg9 fastening thread				
M16 fastening thread				
Contact carrier CAT6 _A , ETHERNET, 8-pos., rear mounting, with angled solder connection				
Hybrid contact carrier , ETHERNET, 8-pos., rear/screw mounting, with angled solder connection				

Ordering data

Description	Cable length	Type	Order No.	Pcs. / Pkt.
Assembled Ethernet cable , CAT6 _A , shielded, 4-pair, 26° AWG stranded (7-wire), RAL 5021 (water blue), M12 flush-type socket, rear/screw mounting with M16 fastening thread to free cable end				
	0.5 m	VS-FSBPXS-OE-94F/0,5	1424135	1
	1 m	VS-FSBPXS-OE-94F/1,0	1424148	1
	2 m	VS-FSBPXS-OE-94F/2,0	1424151	1
	5 m	VS-FSBPXS-OE-94F/5,0	1424164	1
Flush-type socket , CAT6 _A , Ethernet, one-piece, 8-pos., M12 SPEEDCON, with straight solder connection, rear/screw mounting with:				
Pg9 fastening thread		SACC-DSI-FSX-8CON-PG9-L180 SCO	1404741	1
M16 fastening thread		SACC-DSI-FSX-8CON-M16-L180 SCO	1424177	20
Contact carrier CAT6 _A , ETHERNET, 8-pos., rear mounting, with angled solder connection				
Hybrid contact carrier , ETHERNET, 8-pos., rear/screw mounting, with angled solder connection				
		SACC-CI-M12FSX-8CON-L90	1424180	20
		SACC-CI-M12FSY-8CON-L90	1424193	20



Front plates

		Technical Data		
Material data				
Housing material		PBT		
Mechanical data				
Degree of protection		IP20		
Temperature data				
Ambient temperature (operation)		-10°C ... 60°C		
		Ordering data		
Description		Type	Order No.	Pcs. / Pkt.
Front plate , with the following contact inserts:				
D-SUB9		SI-FP-D1A	1404501	1
D-SUB9, D-SUB9-BP		SI-FP-D1D-D1E	1404509	1
2 x D-SUB9		SI-FP-2D1D	1404510	1
D-SUB9, D-SUB9, RJ45		SI-FP-R1A-D1A-D1C	1404507	1
D-SUB9, RJ45		SI-FP-R1A-D1A	1404496	1
D-SUB9, D-SUB25, RJ45		SI-FP-R1A-D1B-D3B	1404502	1
D-SUB9, RJ45, USB with 0.7 m cable		SI-FP-R1A-D1B-U1A/0,7	1404504	1
D-SUB9 BP, RJ45		SI-FP-R1A-D1E	1404500	1
RJ45, RJ12, 2 x USB		SI-FP-R1A-R2A-2U1A	1404503	1
RJ45, USB		SI-FP-R1A-U1A	1404499	1
RJ45, USB with 0.7 m cable		SI-FP-R1A-U1A/0,7	1404512	1
D-SUB9, RJ45, USB		SI-FP-R1A-U1A-D1A	1404497	1
D-SUB9, RJ45, USB		SI-FP-R1A-U1A-D1B	1404495	1
2 x RJ45, USB		SI-FP-2R1A-U1A	1404506	1
USB		SI-FP-U1A	1404505	1
Socket inserts				
RJ45				
USB with 0.6 m cable				
USB with 1.0 m cable				
Programming interface for HEAVYCON panel mounting base, with:				
2 x RJ45 gender changers				
2 x USB (A), D-SUB15				
RJ45				
RJ45, RJ11				
RJ45, socket insert USA				
RJ45, socket insert USA 3A				
USB (A)				



Socket insert



Programming interfaces

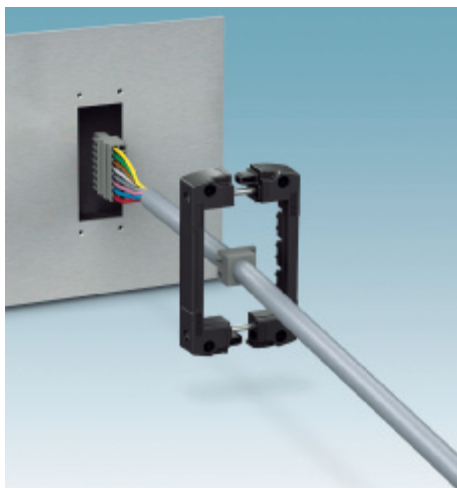
Technical Data			Technical Data		
PA			aluminum, die-cast		
IP65			IP54		
-10°C ... 60°C			-35°C ... 65°C		
Ordering data			Ordering data		
Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
SI-SES-R1A	1404513	1			
SI-SES-U1A/0,6	1404514	1			
SI-SES-U1A/1	1404515	1			
			SI-PP-2R1A	1404520	1
			SI-PP-2U1A-D2A	1404519	1
			SI-PP-R1A	1404517	1
			SI-PP-R1A-R3A	1404521	1
			SI-PP-R1A-S0A	1404516	1
			SI-PP-R1A-S0B	1404518	1
			SI-PP-U1A	1404522	1



Saves space and costs

The cable entry system (CES) allows a variety of cables and protective hoses to be inserted into control cabinets, distributor boxes or devices using a water and dust-proof technology where space is at a premium.

– Protective hoses, see page 124



Split sealing frame with metal reinforcement

Since the sealing frames can be split, it is possible to guide pre-assembled plug-in connectors through panel cutouts and subsequently seal with a high degree of protection and reduce the strain according to DIN EN 50262. Thanks to the integrated metal reinforcements of the plastic frames, only two locking elements (screws or latches) are required on the front.



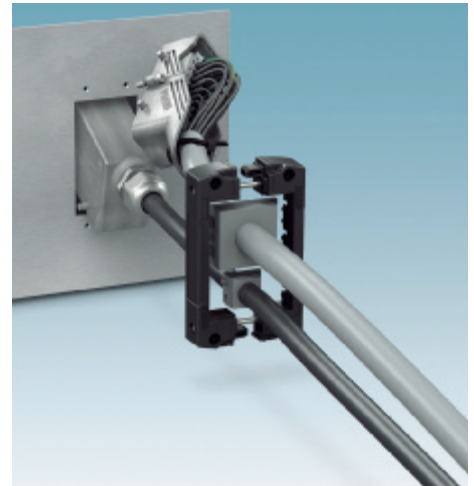
Variable mounting options

The CES sealing frames can be directly mounted on standard panel cutouts (e.g., Rittal) for industrial plug-in connectors. Snap-up frames are available to simplify on-site installation.



Optional latch

Sealing frames with screw and locking latches are available. The locking latch does not require any tools, which makes it really quick and easy to use, even in places that are difficult to access.



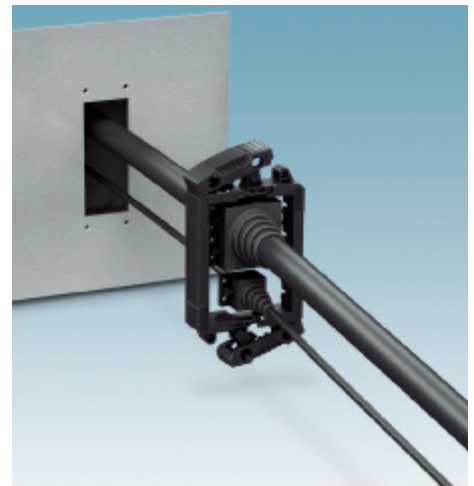
Also for industrial plug-in connectors

Due to a widening of the standard Rittal cutouts from 35 to 51 mm, even wide rectangular industrial plug-in connectors for double locking latches and plug assembly frames can be swiveled through mounting panels and sealed and provided with strain relief using the CES.



Plastic vs. rubber sleeves

The gray thermoplastic sleeves exhibit a low level of flammability according to UL 94 V0 and are highly resistant to acids and lyes. The black rubber sleeves (NBR) perform significantly better in the long term, particularly in the event of temperature fluctuations. They are also resistant to oils, fuels, and grease, and are halogen free.



Faster installation and a reliable seal

It only takes two cone sleeves to seal any cable diameter within the range 2 to 24 mm. The cone sleeves are cut to the relevant length and pushed onto the cables before the plug-in connectors are assembled. There is no longer any need to select corresponding slotted grommets on site, which can be a time-consuming process, and the sealing reliability has been significantly improved for ratings up to IP65. Cable binders can be used to further enhance the long-term strain relief provided by the cone sleeves.

Sealing frames for cable sleeves



- Sealing frame with integrated metal reinforcement to protect against deformation
- Only two locking elements are required (screws or latch)
- Suitable for standard panel cutouts (e.g., Rittal)
- Snap-up frame for simplifying on-site installation
- Sealing frame with convenient locking latch for tool-free actuation
- Marking for cable sleeve location on the underside of the frame

Notes:
 For dimensional drawings, see page 219.
 If the panel cutout width is 51 mm, HC industrial plug-in connectors and CIF plug assembly frames can also be fed through the panel using the cable entry system (CES).



Sealing frame with locking latch

General data

Material	PA
Degree of protection	IP54
Torque	-
Inflammability class according to UL 94	V0
Temperature range	-40 ... 120 [°C]

Technical Data

Technical Data		
Material: PA		
Degree of protection: IP54		
Torque: -		
Inflammability class according to UL 94: V0		
Temperature range: -40 ... 120 [°C]		

Description

Sealing frame, including flat gasket, for accommodating cable sleeves, **for standard cutout:**
 B10 (cutout: 35 mm x 65 mm)
 B16 (cutout: 35 mm x 86 mm)
 B24 (cutout: 35 mm x 113 mm)

Snap-up frame, including integrated seal for mounting panel, for accommodating sealing frames, **for standard cutouts:**
 B10 (cutout: 35 mm x 65 mm)
 B16 (cutout: 35 mm x 86 mm)
 B24 (cutout: 35 mm x 113 mm)

Locking plate, metal, locks an unused snap-up frame, transport protection, **for standard cutouts:**

B10
 B16
 B24

Ordering data

Type	Order No.	Pcs. / Pkt.
CES-B10-HFFS-PLBK	0801663	1
CES-B16-HFFS-PLBK	0801662	1
CES-B24-HFFS-PLBK	0801661	1

Flat gasket, for sealing frame with standard cutout:

B10 (cutout: 35 mm x 65 mm)
 B16 (cutout: 35 mm x 86 mm)
 B24 (cutout: 35 mm x 113 mm)
M4 replacement screw, with 4 mm Allen screw head, for sealing frame with screw locking

Bit screwdriver, with 1/4" quick-action chuck, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic

Screw bit, hexagonal, E6.3-1/4" drive, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

Size: hex 4 x 50 mm

Accessories

Type	Order No.	Pcs. / Pkt.
CES-B10-WRG-BK	0801725	10
CES-B16-WRG-BK	0801726	10
CES-B24-WRG-BK	0801727	10



Sealing frame with screw locking



Snap-up frame



Locking plates

Technical Data
PA
IP54/IP65 (when using a CES-SRC../CES-LRC.. cone sleeve and a cable binder)
2 Nm ... 4 Nm (Locking screw)
V0
-40 ... 120

Technical Data
PA
IP54/IP65 (when using a CES-B...-SFFS-PLBK sealing frame with screw locking and a cone sleeve with cable binder)
-
V0
-20 ... 80

Technical Data
steel, galvanized
-
-
-
-

Ordering data		
Type	Order No.	Pcs. / Pkt.
CES-B10-SFFS-PLBK	0801660	1
CES-B16-SFFS-PLBK	0801659	1
CES-B24-SFFS-PLBK	0801658	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
CES-B10-SF-PLBK	0801655	10
CES-B16-SF-PLBK	0801651	10
CES-B24-SF-PLBK	0801647	10

Ordering data		
Type	Order No.	Pcs. / Pkt.
CES-B10-SFC-M	0801645	10
CES-B16-SFC-M	0801642	10
CES-B24-SFC-M	0801641	10

Accessories		
Type	Order No.	Pcs. / Pkt.
CES-B10-WRG-BK	0801725	10
CES-B16-WRG-BK	0801726	10
CES-B24-WRG-BK	0801727	10
CES-SFFS-H	0801728	50
SF-M BH	1212070	1
SF-BIT-HEX 4-50	1212648	5

Accessories		
Type	Order No.	Pcs. / Pkt.

Accessories		
Type	Order No.	Pcs. / Pkt.

CES cable entry system - PLUSCON cabinet

Cable sleeves, rubber

- Significantly improved long-term performance
- Resistant to oil, fuels, and grease
- Halogen-free

Notes:
The CES cable entry system was developed according to DIN EN 50262 (cable glands for electrical installations).
The cable sleeves must be mounted in accordance with the mounting instructions provided.
For corresponding cable binders with a width of 2.6 mm for the small cone-shaped cable sleeve and for those with a width of 3.6 mm for the large cone-shaped cable sleeve, see from page 146.



Cable sleeves, small



Cable sleeves, large

General data		Technical Data			Technical Data		
Material		NBR			NBR		
Inflammability class according to UL 94		-			-		
Temperature range	[°C]	-40 ... 80			-40 ... 80		
Description		Ordering data			Ordering data		
	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Cone-shaped cable sleeves , IP65 in sealing frames with screw locking and cable binders, IP54 in sealing frames with locking latch. For cables with a diameter of:							
2 - 11 mm	black	CES-SRC-BK	0801718	10	CES-LRC-BK	0801719	10
7 - 24 mm	black						
Cable sleeves, IP65, without bore hole , can be used in sealing frames with locking latch and screw locking							
	black	CES-SRG-BK	0801670	1	CES-LRG-BK	0801671	1
Cable sleeves, IP54, small, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:							
1 - 2 mm	black	CES-SRG-BK-2	0801635	10			
2 - 3 mm	black	CES-SRG-BK-3	0801633	10			
3 - 4 mm	black	CES-SRG-BK-4	0801632	10			
4 - 5 mm	black	CES-SRG-BK-5	0801630	10			
5 - 6 mm	black	CES-SRG-BK-6	0801628	10			
6 - 7 mm	black	CES-SRG-BK-7	0801627	10			
7 - 8 mm	black	CES-SRG-BK-8	0801625	10			
8 - 9 mm	black	CES-SRG-BK-9	0801622	10			
9 - 10 mm	black	CES-SRG-BK-10	0801620	10			
10 - 11 mm	black	CES-SRG-BK-11	0801618	10			
11 - 12 mm	black	CES-SRG-BK-12	0801617	10			
12 - 13 mm	black	CES-SRG-BK-13	0801616	10			
13 - 14 mm	black	CES-SRG-BK-14	0801615	10			
Cable sleeves, IP54, large, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:							
14 - 15 mm	black				CES-LRG-BK-15	0801619	10
15 - 16 mm	black				CES-LRG-BK-16	0801621	10
16 - 17 mm	black				CES-LRG-BK-17	0801624	10
17 - 18 mm	black				CES-LRG-BK-18	0801626	10
18 - 19 mm	black				CES-LRG-BK-19	0801629	10
19 - 20 mm	black				CES-LRG-BK-20	0801631	10
20 - 21 mm	black				CES-LRG-BK-21	0801634	10
21 - 22 mm	black				CES-LRG-BK-22	0801637	10
22 - 23 mm	black				CES-LRG-BK-23	0801638	10
23 - 24 mm	black				CES-LRG-BK-24	0801639	10
24 - 25 mm	black				CES-LRG-BK-25	0801640	10
25 - 26 mm	black				CES-LRG-BK-26	0801643	10
26 - 27 mm	black				CES-LRG-BK-27	0801644	10
27 - 28 mm	black				CES-LRG-BK-28	0801646	10
28 - 29 mm	black				CES-LRG-BK-29	0801648	10
29 - 30 mm	black				CES-LRG-BK-30	0801650	10
30 - 31 mm	black				CES-LRG-BK-31	0801653	10
31 - 32 mm	black				CES-LRG-BK-32	0801654	10
32 - 33 mm	black				CES-LRG-BK-33	0801656	10
Accessories		Accessories			Accessories		
Electrician's scissors , high-performance cutting, thanks to micro-serrated cutting area		CUTFOX-ES	1212621	1	CUTFOX-ES	1212621	1

Cable sleeves, rubber, special formats

- Significantly improved long-term performance
- Resistant to oil, fuels, and grease
- Halogen-free

Notes:
The CES cable entry system was developed according to DIN EN 50262 (cable glands for electrical installations).
The cable sleeves must be mounted in accordance with the mounting instructions provided.



Cable sleeves, small, with several bore holes



Cable sleeves, small, for AS interface cables

		Technical Data			Technical Data		
General data							
Material		NBR			NBR		
Inflammability class according to UL 94		-			-		
Temperature range	[°C]	-40 ... 80			-40 ... 80		
		Ordering data			Ordering data		
Description	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Cable sleeves, IP54, with 2 bore holes, small, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:							
2 x 4 mm ... 5 mm	black	CES-SRG-BK-2X5	0801657	10			
2 x 5 mm ... 6 mm	black	CES-SRG-BK-2X6	0801664	10			
Cable sleeves, IP54, with 4 bore holes, small, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:							
4 x 2 mm ... 3 mm	black	CES-SRG-BK-4X3	0801665	10			
4 x 3 mm ... 4 mm	black	CES-SRG-BK-4X4	0801666	10			
Cable sleeve, IP54, slotted, for one AS-Interface cable							
	black				CES-SRG-BK-1ASI-L	0801667	10
Cable sleeve, IP54, slotted, for two AS-Interface cables, cable arrangement: LL							
	black				CES-SRG-BK-2ASI-LL	0801669	10
Cable sleeve, IP54, slotted, for two AS-Interface cables, cable arrangement: LR							
	black				CES-SRG-BK-2ASI-LR	0801668	10

CES cable entry system - PLUSCON cabinet

Cable sleeves, thermoplastics

- Thermoplastic sleeves exhibit a low level of flammability according to UL 94 V0
- They have a high level of resistance to acids and lyes

Notes:
The CES cable entry system was developed according to DIN EN 50262 (cable glands for electrical installations).
The cable sleeves must be mounted in accordance with the mounting instructions provided.



Cable sleeves, small



Cable sleeves, large

General data			Technical Data			Technical Data		
Material			SEBS			SEBS		
Inflammability class according to UL 94			V0			V0		
Temperature range	[°C]		-40 ... 80			-40 ... 80		
Description			Ordering data			Ordering data		
	Color		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Cable sleeves, IP54, small, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:								
1 - 2 mm	gray		CES-STPG-GY-2	0801672	10			
2 - 3 mm	gray		CES-STPG-GY-3	0801673	10			
3 - 4 mm	gray		CES-STPG-GY-4	0801674	10			
4 - 5 mm	gray		CES-STPG-GY-5	0801675	10			
5 - 6 mm	gray		CES-STPG-GY-6	0801676	10			
6 - 7 mm	gray		CES-STPG-GY-7	0801677	10			
7 - 8 mm	gray		CES-STPG-GY-8	0801679	10			
8 - 9 mm	gray		CES-STPG-GY-9	0801680	10			
9 - 10 mm	gray		CES-STPG-GY-10	0801682	10			
10 - 11 mm	gray		CES-STPG-GY-11	0801683	10			
11 - 12 mm	gray		CES-STPG-GY-12	0801684	10			
12 - 13 mm	gray		CES-STPG-GY-13	0801685	10			
13 - 14 mm	gray		CES-STPG-GY-14	0801686	10			
Cable sleeves, IP54, large, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:								
14 - 15 mm	gray					CES-LTPG-GY-15	0801687	10
15 - 16 mm	gray					CES-LTPG-GY-16	0801688	10
16 - 17 mm	gray					CES-LTPG-GY-17	0801689	10
17 - 18 mm	gray					CES-LTPG-GY-18	0801690	10
18 - 19 mm	gray					CES-LTPG-GY-19	0801691	10
19 - 20 mm	gray					CES-LTPG-GY-20	0801692	10
20 - 21 mm	gray					CES-LTPG-GY-21	0801693	10
21 - 22 mm	gray					CES-LTPG-GY-22	0801695	10
22 - 23 mm	gray					CES-LTPG-GY-23	0801696	10
23 - 24 mm	gray					CES-LTPG-GY-24	0801697	10
24 - 25 mm	gray					CES-LTPG-GY-25	0801698	10
25 - 26 mm	gray					CES-LTPG-GY-26	0801699	10
26 - 27 mm	gray					CES-LTPG-GY-27	0801700	10
27 - 28 mm	gray					CES-LTPG-GY-28	0801701	10
28 - 29 mm	gray					CES-LTPG-GY-29	0801702	10
29 - 30 mm	gray					CES-LTPG-GY-30	0801703	10
30 - 31 mm	gray					CES-LTPG-GY-31	0801705	10
31 - 32 mm	gray					CES-LTPG-GY-32	0801706	10
32 - 3 mm	gray					CES-LTPG-GY-33	0801707	10
Cable sleeves, IP65, without bore hole , can be used in sealing frames with locking latch and screw locking								
	gray		CES-STPG-GY	0801715	10	CES-LTPG-GY	0801716	10

Cable sleeves, thermoplastics, special formats

- Thermoplastic sleeves exhibit a low level of flammability according to UL 94 V0
- They have a high level of resistance to acids and lyes

Notes:
The CES cable entry system was developed according to DIN EN 50262 (cable glands for electrical installations).
The cable sleeves must be mounted in accordance with the mounting instructions provided.



Cable sleeves, small, with several bore holes



Cable sleeves, small, for AS interface cables

		Technical Data			Technical Data		
General data							
Material		SEBS		SEBS			
Inflammability class according to UL 94		V0		V0			
Temperature range	[°C]	-40 ... 80		-40 ... 80			
		Ordering data			Ordering data		
Description	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Cable sleeves, IP54, with 2 bore holes, small, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:							
2 x 4 mm ... 5 mm	gray	CES-STPG-GY-2X5	0801708	10			
2 x 5 mm ... 6 mm	gray	CES-STPG-GY-2X6	0801709	10			
Cable sleeves, IP54, with 4 bore holes, small, slotted , can be used in sealing frames with locking latch and screw locking, for cable diameters of:							
4 x 2 mm ... 3 mm	gray	CES-STPG-GY-4X3	0801710	10			
4 x 3 mm ... 4 mm	gray	CES-STPG-GY-4X4	0801711	10			
Cable sleeve, IP54, slotted, for one AS-Interface cable	gray				CES-STPG-GY-1ASI-L	0801712	10
Cable sleeve, IP54, slotted, for two AS-Interface cables, cable arrangement: LL	gray				CES-STPG-GY-2ASI-LL	0801714	10
Cable sleeve, IP54, slotted, for two AS-Interface cables, cable arrangement: LR	gray				CES-STPG-GY-2ASI-LR	0801713	10

Connection technology for field devices and field cabling - PLUSCON

CES cable entry system - PLUSCON cabinet

Accessories, filler plugs, seals, replacement screws



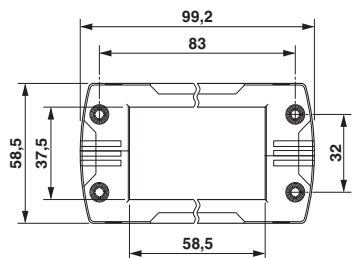
Diameter of 3 to 17 mm



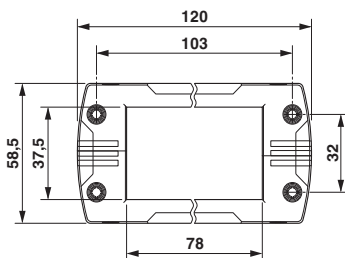
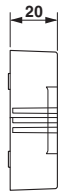
For mounting on CES sealing frames

General data		Technical Data			Technical Data		
Material		PA			high-grade steel		
Degree of protection		IP54			-		
Inflammability class according to UL 94		V0			-		
Temperature range	[°C]	-20 ... 80			-		
Description		Ordering data			Ordering data		
	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Plugs , for closing unoccupied cable sleeves with a diameter of:							
3 mm	white	KDT-ST 3	3063921	25			
4 mm	white	KDT-ST 4	3063934	25			
5 mm	white	KDT-ST 5	3063947	25			
6 mm	white	KDT-ST 6	3063950	25			
7 mm	white	KDT-ST 7	3063963	25			
8 mm	white	KDT-ST 8	3063976	25			
9 mm	white	KDT-ST 9	3063989	25			
10 mm	white	KDT-ST 10	3063992	25			
11 mm	white	KDT-ST 11	3064001	25			
12 mm	white	KDT-ST 12	3062016	25			
13 mm	white	KDT-ST 13	3062029	25			
14 mm	white	KDT-ST 14	3062032	25			
15 mm	white	KDT-ST 15	3062045	25			
16 mm	white	KDT-ST 16	3062058	25			
17 mm	white	KDT-ST 17	3062061	25			
EMC cable catch rail , for mounting on the longitudinal side of the CES sealing frame CES-B16...					KEL-EMV 16-4	3063507	5
EMC cable catch rail , for mounting on the longitudinal side of the CES sealing frame CES-B24...					KEL-EMV 24-5	3063510	5
EMC cable catch rail , for mounting on the diagonal side of the CES sealing frames CES-B16... and CES-24...					KEL-EMV-F	3063523	5

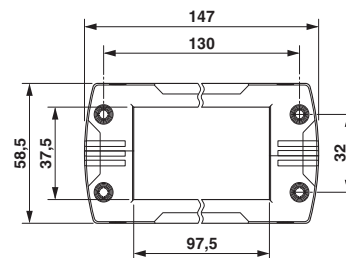
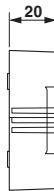
Dimensional drawings
CES... sealing frame



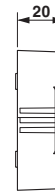
CES-B10-HFFS-PLBK
CES-B10-SFFS-PLBK



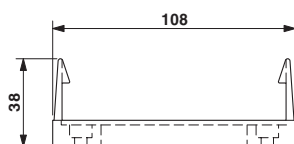
CES-B16-HFFS-PLBK
CES-B16-SFFS-PLBK



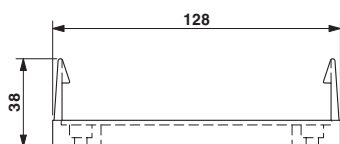
CES-B24-HFFS-PLBK
CES-B24-SFFS-PLBK



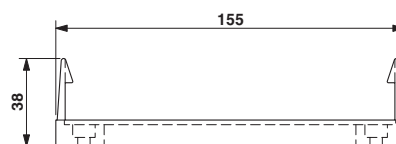
Dimensional drawings
CES... snap-up frame



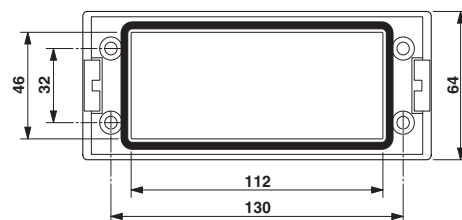
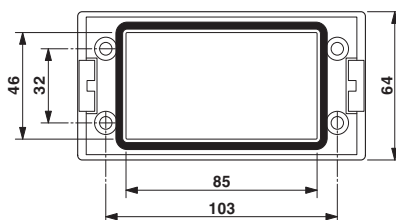
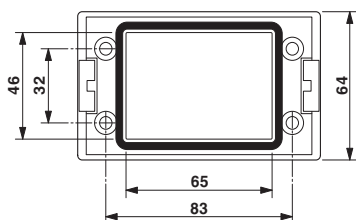
CES-B10-SF-PLBK



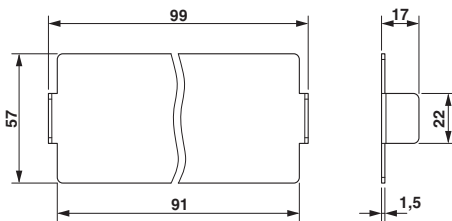
CES-B16-SF-PLBK



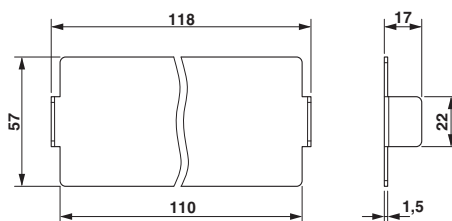
CES-B24-SF-PLBK



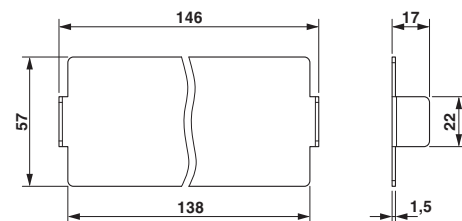
Dimensional drawings
CES... locking plate



CES-B10-SFC-M



CES-B16-SFC-M

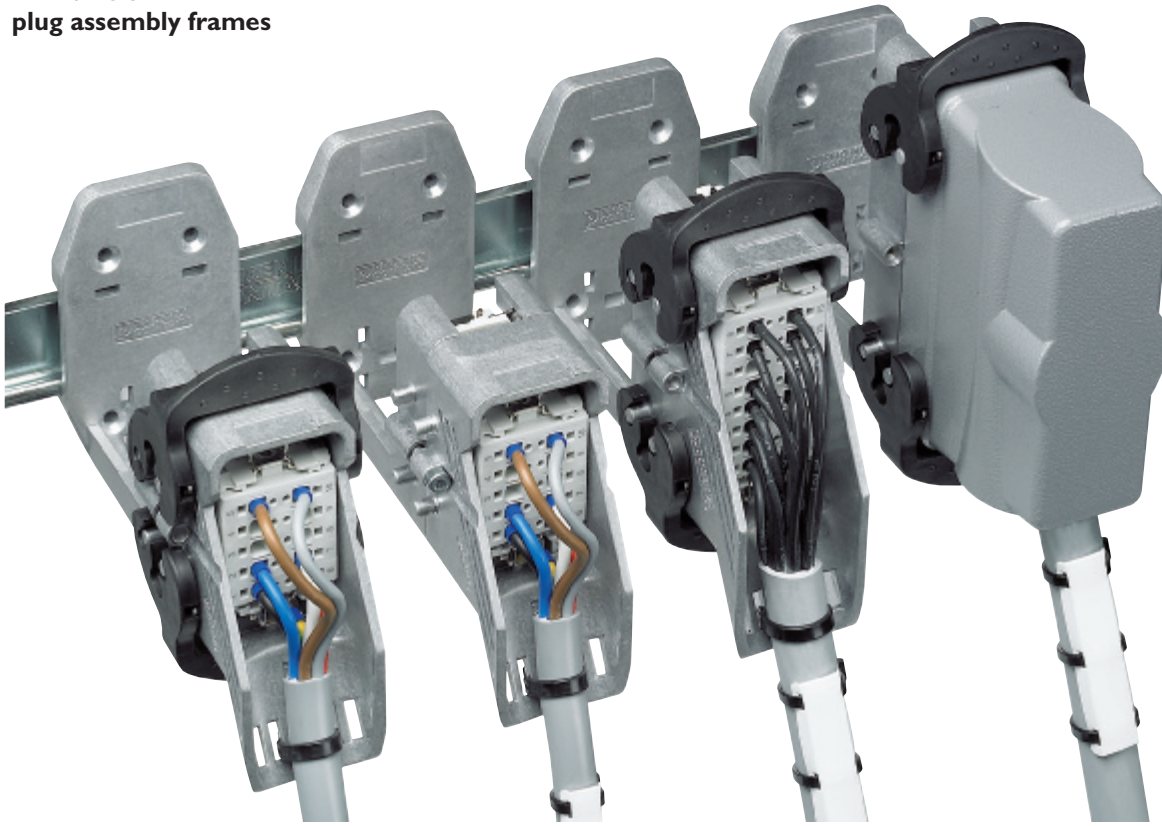


CES-B24-SFC-M

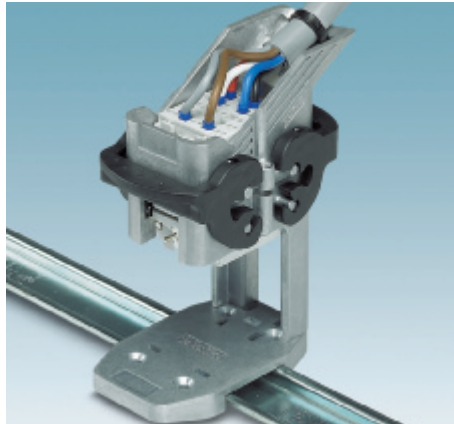
Connection technology for field devices and field cabling - PLUSCON

Heavy-duty plug-in connectors – PLUSCON heavy

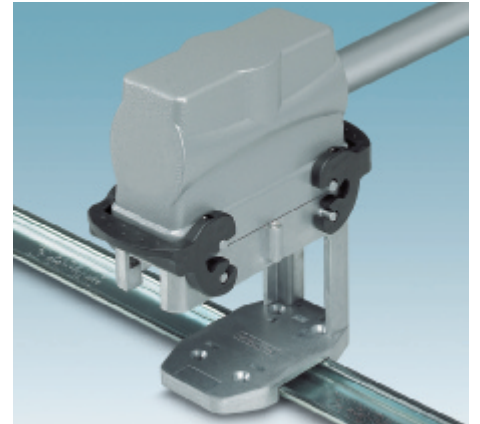
HEAVYCON plug assembly frames



Base frame for screw locking



Base frame with locking latch



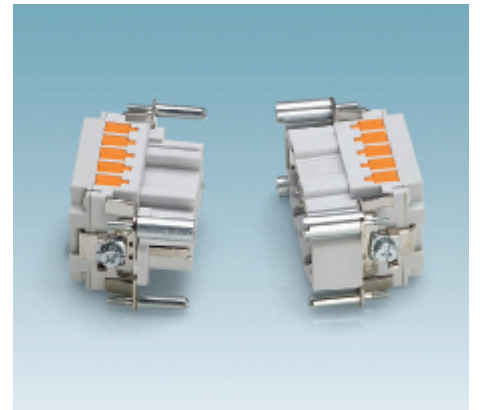
Compatible with standard HEAVYCON housings



The open base frame enables easy mounting of pre-assembled contact inserts



The U-shaped side profile can be used as a cable duct



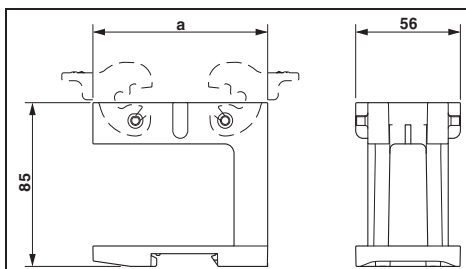
The normal keying and guide elements can be used with the IP65 standard housings.

HEAVYCON plug assembly frames

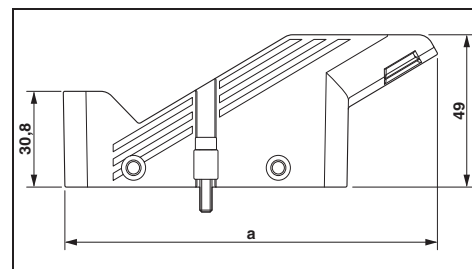
- For standard HEAVYCON contact inserts on NS35/7,5 DIN rail
- Rugged cast aluminum housing
- Base frame for pre-assembled contact inserts
- Cable duct function
- Grounding for DIN rail
- Coding function



Notes:
The bridging function of the aluminum design ensures that there is a leading PE.
Stainless steel locking latch, handle: PA-GF
Upon delivery, there is no pre-assembled bracket (HC-CIF..BFWD..). The bracket is assembled after the contact insert.



Technical Data



Technical Data

Material data
Material
Tightening torque
Temperature data
Ambient temperature (operation)

cast aluminum, uncoated
-
-40°C ... 125°C

cast aluminum, uncoated
2 Nm (Locking screw)
-40°C ... 125°C

Description	Design
Base frame, with double locking latch	
a = 93.5 mm	for B10
a = 93.5 mm	for B16
a = 120.0 mm	for B24
Base frame, without double locking latch, for screw locking	
a = 120.0 mm	for 2xB6
a = 93.5 mm	for B10
a = 93.5 mm	for B16
a = 120.0 mm	for B24
Top frame, for double locking latch and optionally with locking screws, Allen screw, WAF 3	
a = 150.2 mm	for 2xB6
a = 103.2 mm	for B10
a = 123.7 mm	for B16
a = 150.2 mm	for B24

Ordering data		
Type	Order No.	Pcs. / Pkt.
HC-CIF-B10-BFWD-FH-AL	1404220	1
HC-CIF-B16-BFWD-FH-AL	1404217	1
HC-CIF-B24-BFWD-FH-AL	1404212	1
HC-CIF-2B6-BFFD-FH-AL	1404214	1
HC-CIF-B10-BFFD-FH-AL	1404219	1
HC-CIF-B16-BFFD-FH-AL	1404216	1
HC-CIF-B24-BFFD-FH-AL	1404211	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
HC-CIF-2B6-HFFD-WH-AL	1404215	1
HC-CIF-B10-HFFD-WH-AL	1404221	1
HC-CIF-B16-HFFD-WH-AL	1404218	1
HC-CIF-B24-HFFD-WH-AL	1404213	1

Bit screwdriver, with 1/4" quick-action chuck, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic
Screw bit, hexagonal, E6.3-1/4" drive, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173
Size: hex 3 x 50 mm

Accessories		
Type	Order No.	Pcs. / Pkt.
SF-M BH	1212070	1
SF-BIT-HEX 3-50	1212647	5

Accessories		
Type	Order No.	Pcs. / Pkt.

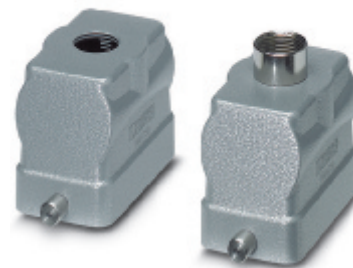
Connection technology for field devices and field cabling - PLUSCON

Heavy-duty plug-in connectors – PLUSCON heavy

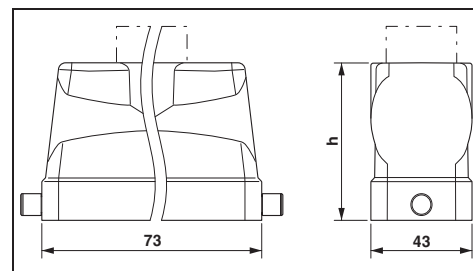
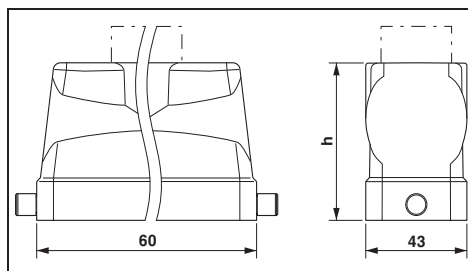
Sleeve housings for single locking latch (type B)



Type B6



Type B10



Technical Data

Housing material/housing surface material
Type of protection (when plugged in)
Ambient temperature (operation)

aluminum, die-cast/powder-coated, gray
IP65
-40°C ... 125°C

Technical Data

aluminum, die-cast/powder-coated, gray
IP65
-40°C ... 125°C

Ordering data

Description	Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
	56 mm	lateral	1x M20	1460346	10
	56 mm	straight	1x M25	1460258	10
	56 mm	lateral	1x M25	1460347	10
	72 mm	straight	1x M25	1460027	10
	72 mm	lateral	1x M25	1460028	10
	72 mm	straight	1x M32	1460029	10
	72 mm	lateral	1x M32	1460030	10
Sleeve housing, for Pg screw connections, with glands	56 mm	straight	1x Pg13,5	1460340	10
	56 mm	lateral	1x Pg13,5	1460348	10
	56 mm	straight	1x Pg16	1460341	10
	56 mm	lateral	1x Pg16	1460349	10
	72 mm	straight	1x Pg21	1460021	10
	72 mm	lateral	1x Pg21	1460022	10
	72 mm	straight	1x Pg29	1460023	10
	72 mm	lateral	1x Pg29	1460024	10

Ordering data

Description	Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
	56 mm	lateral	1x M20	1460035	10
	56 mm	straight	1x M25	1460039	10
	56 mm	lateral	1x M25	1460040	10
	72 mm	straight	1x M25	1460054	10
	72 mm	lateral	1x M25	1460055	10
	72 mm	straight	1x M32	1460056	10
	72 mm	lateral	1x M32	1460057	10
Sleeve housing, for Pg screw connections, with glands	56 mm	straight	1x Pg16	1460036	10
	56 mm	lateral	1x Pg16	1460041	10
	72 mm	straight	1x Pg21	1460048	10
	72 mm	lateral	1x Pg21	1460049	10
	72 mm	straight	1x Pg29	1460050	10
	72 mm	lateral	1x Pg29	1460051	10

Accessories

Matching contact inserts:

B series: 6-pos. + PE; BB series: 10-pos. + PE;
DD series: 24-pos. + PE; M series

Accessories

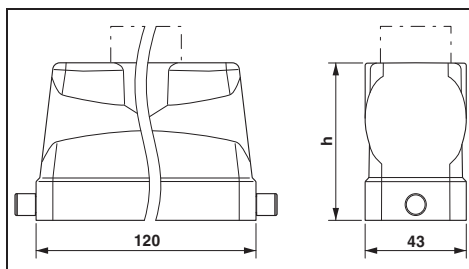
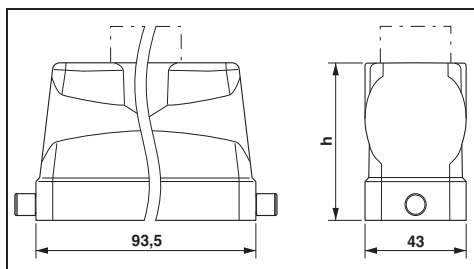
B series: 10-pos. + PE; BB series: 18-pos. + PE;
DD series: 42-pos. + PE; M series; K series: 8/24-pos. + PE



Type B16



Type B24



Technical Data

aluminum, die-cast/powder-coated, gray
IP65
-40°C ... 125°C

Technical Data

aluminum, die-cast/powder-coated, gray
IP65
-40°C ... 125°C

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
65 mm	straight	1x M25	1460100	10
65 mm	lateral	1x M25	1460102	10
65 mm	straight	1x M32	1460095	10
65 mm	lateral	1x M32	1460109	10
76 mm	straight	1x M32	1460124	10
76 mm	lateral	1x M32	1460125	10
76 mm	straight	1x M40	1460126	10
76 mm	lateral	1x M40	1460127	10
65 mm	straight	1x Pg21	1460101	10
65 mm	lateral	1x Pg21	1460103	10
76 mm	straight	1x Pg21	1460118	10
76 mm	lateral	1x Pg21	1460119	10
76 mm	straight	1x Pg29	1460120	10
76 mm	lateral	1x Pg29	1460121	10

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
65 mm	straight	1x M25	1460189	10
65 mm	lateral	1x M25	1460191	10
65 mm	straight	1x M32	1460297	10
65 mm	lateral	1x M32	1460192	10
76 mm	straight	1x M32	1460212	10
76 mm	lateral	1x M32	1460213	10
76 mm	straight	1x M40	1460214	10
76 mm	lateral	1x M40	1460215	10
65 mm	straight	1x Pg21	1460190	10
65 mm	lateral	1x Pg21	1460193	10
65 mm	straight	1x Pg29	1460293	10
65 mm	lateral	1x Pg29	1460194	10
76 mm	straight	1x Pg21	1460342	10
76 mm	lateral	1x Pg21	1460206	10
76 mm	straight	1x Pg29	1460207	10
76 mm	lateral	1x Pg29	1460208	10

Accessories

B series: 16-pos. + PE; BB series: 32-pos. + PE;
D series: 40-pos. + PE; DD series: 72-pos. + PE; M series;
K series; HS series: 6-pos. + PE

Accessories

B series: 24-pos. + PE; BB series: 46-pos. + PE;
D series: 64 pos. + PE; DD series: 108-pos. + PE; M series;
K series: 4/8-pos. + PE

Connection technology for field devices and field cabling - PLUSCON

Heavy-duty plug-in connectors – PLUSCON heavy

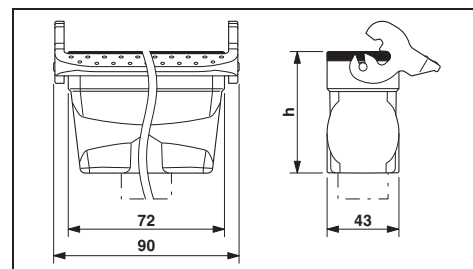
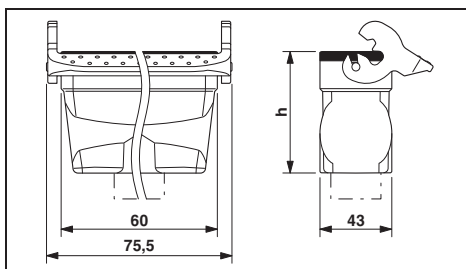
Coupling housing with single locking latch (design B)



Type B6



Type B10



Technical Data

Housing material/housing surface material
Seal material
Locking latch material
Type of protection (when plugged in)
Ambient temperature (operation)

aluminum, die-cast/powder-coated, gray
NBR
high-grade steel, handle: PA-GF
IP65
-40°C ... 125°C

Technical Data

aluminum, die-cast/powder-coated, gray
NBR
high-grade steel, handle: PA-GF
IP65
-40°C ... 125°C

Ordering data

Description
Coupling housing, for metric screw connections, without glands
Coupling housing, for Pg screw connections, with glands

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
61.5 mm	straight	1x M20	1460137	10
77.5 mm	straight	1x M25	1460283	10
77.5 mm	straight	1x M32	1460284	10
61.5 mm	straight	1x Pg13,5	1460168	10
77.5 mm	straight	1x Pg21	1460280	10
77.5 mm	straight	1x Pg29	1460281	10

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
61.5 mm	straight	1x M20	1460316	10
77.5 mm	straight	1x M25	1460291	10
77.5 mm	straight	1x M32	1460292	10
61.5 mm	straight	1x Pg16	1460287	10
77.5 mm	straight	1x Pg21	1460260	10
77.5 mm	straight	1x Pg29	1460289	10

Accessories

Matching contact inserts:

B series: 6-pos. + PE; BB series: 10-pos. + PE;
DD series: 24-pos. + PE; M series

Accessories

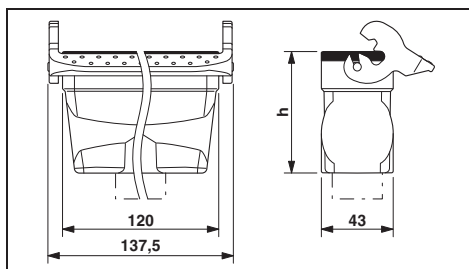
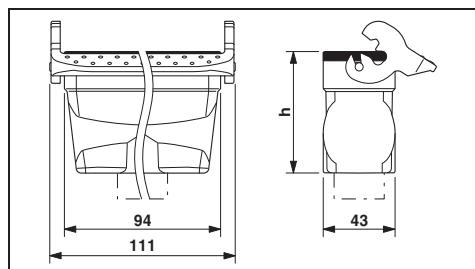
B series: 10-pos. + PE; BB series: 18-pos. + PE;
DD series: 42-pos. + PE; M series; K series: 8/24-pos. + PE



Type B16



Type B24



Technical Data

aluminum, die-cast/powder-coated, gray
NBR
high-grade steel, handle: PA-GF
IP65
-40°C ... 125°C

Technical Data

aluminum, die-cast/powder-coated, gray
NBR
high-grade steel, handle: PA-GF
IP65
-40°C ... 125°C

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
70.5 mm	straight	1x M25	1460267	10
70.5 mm	straight	1x M32	1460264	10
81.5 mm	straight	1x M32	1460172	10
81.5 mm	straight	1x M40	1460309	10
70.5 mm	straight	1x Pg21	1460198	10
81.5 mm	straight	1x Pg21	1460306	10
81.5 mm	straight	1x Pg29	1460307	10

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
70.5 mm	straight	1x M32	1460229	10
81.5 mm	straight	1x M32	1460325	10
81.5 mm	straight	1x M40	1460326	10
70.5 mm	straight	1x Pg29	1460226	10
81.5 mm	straight	1x Pg29	1460250	10

Accessories

B series: 16-pos. + PE; BB series: 32-pos. + PE;
D series: 40-pos. + PE; DD series: 72-pos. + PE; M series;
K series; HS series: 6-pos. + PE

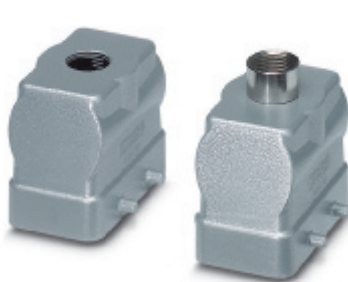
Accessories

B series: 24-pos. + PE; BB series: 46-pos. + PE;
D series: 64 pos. + PE; DD series: 108-pos. + PE; M series;
K series: 4/8-pos. + PE

Connection technology for field devices and field cabling - PLUSCON

Heavy-duty plug-in connectors – PLUSCON heavy

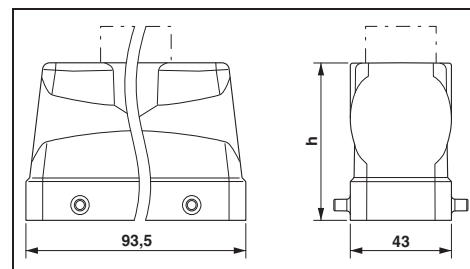
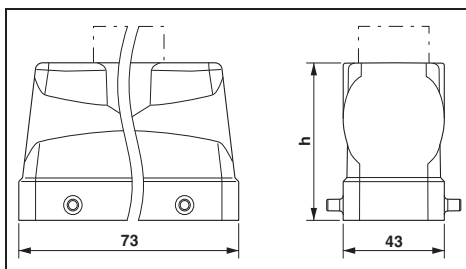
Sleeve housing for double locking latch (design B)



Type B10



Type B16



Technical Data

Housing material/housing surface material
Type of protection (when plugged in)
Ambient temperature (operation)

aluminum, die-cast/powder-coated, gray
IP65
-40°C ... 125°C

Technical Data

aluminum, die-cast/powder-coated, gray
IP65
-40°C ... 125°C

Ordering data

Description

Sleeve housing, for metric screw connections, without glands

Height _h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
56 mm	straight	1x M20	1460061	10
56 mm	lateral	1x M20	1460062	10
56 mm	straight	1x M25	1460066	10
56 mm	lateral	1x M25	1460067	10
72 mm	straight	1x M25	1460080	10
72 mm	lateral	1x M25	1460081	10
72 mm	straight	1x M32	1460082	10
72 mm	lateral	1x M32	1460083	10

Sleeve housing, for Pg screw connections, with glands

56 mm	straight	1x Pg16	1460063	10
56 mm	lateral	1x Pg16	1460068	10
72 mm	straight	1x Pg21	1460074	10
72 mm	lateral	1x Pg21	1460075	10
72 mm	straight	1x Pg29	1460076	10
72 mm	lateral	1x Pg29	1460077	10

Ordering data

Height _h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
65 mm	straight	1x M25	1460128	10
65 mm	lateral	1x M25	1460130	10
65 mm	straight	1x M32	1460134	10
65 mm	lateral	1x M32	1460160	10
76 mm	straight	1x M32	1460155	10
76 mm	lateral	1x M32	1409354	10
76 mm	straight	1x M40	1460157	10
76 mm	lateral	1x M40	1460158	10

65 mm	straight	1x Pg21	1460129	10
65 mm	lateral	1x Pg21	1460131	10
76 mm	straight	1x Pg21	1460146	10
76 mm	lateral	1x Pg21	1460147	10
76 mm	straight	1x Pg29	1460148	10
76 mm	lateral	1x Pg29	1460149	10

Accessories

Matching contact inserts:

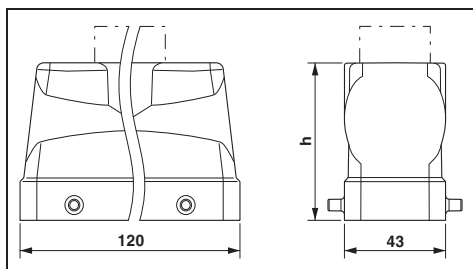
B series: 10-pos. + PE; BB series: 18-pos. + PE;
DD series: 42-pos. + PE; M series; K series: 8/24-pos. + PE

Accessories

B series: 16-pos. + PE; BB series: 32-pos. + PE;
D series: 40-pos. + PE; DD series: 72-pos. + PE; M series;
K series; HS series: 6-pos. + PE



Type B24



Technical Data

aluminum, die-cast/powder-coated, gray
 IP65
 -40°C ... 125°C

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
65 mm	straight	1x M25	1460218	10
65 mm	lateral	1x M25	1460219	10
65 mm	straight	1x M32	1460222	10
65 mm	lateral	1x M32	1460223	10
76 mm	straight	1x M32	1460243	10
76 mm	lateral	1x M32	1409367	10
76 mm	straight	1x M40	1460245	10
76 mm	lateral	1x M40	1460246	10
65 mm	straight	1x Pg29	1460332	10
65 mm	lateral	1x Pg21	1460224	10
76 mm	straight	1x Pg21	1460350	10
76 mm	lateral	1x Pg21	1460238	10
76 mm	straight	1x Pg29	1460239	10
76 mm	lateral	1x Pg29	1460240	10

Accessories

B series: 24-pos. + PE; BB series: 46-pos. + PE;
 D series: 64 pos. + PE; DD series: 108-pos. + PE; M series;
 K series: 4/8-pos. + PE

Connection technology for field devices and field cabling - PLUSCON

Heavy-duty plug-in connectors – PLUSCON heavy

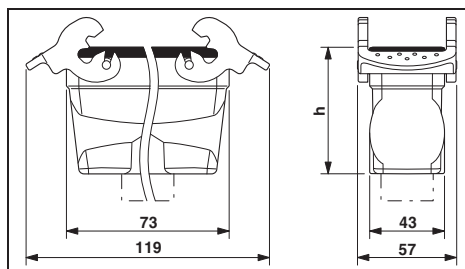
Coupling housing with double locking latch (design B)



Type B10



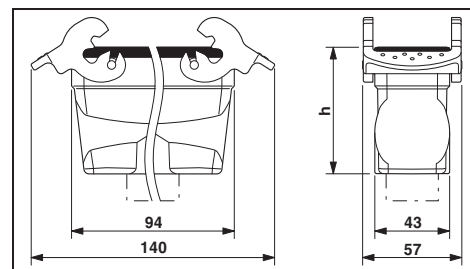
Type B16



Technical Data

Housing material/housing surface material
 Seal material
 Locking latch material
 Type of protection (when plugged in)
 Ambient temperature (operation)

aluminum, die-cast/powder-coated, gray
 NBR
 high-grade steel, handle: PA-GF
 IP65
 -40°C ... 125°C



Technical Data

aluminum, die-cast/powder-coated, gray
 NBR
 high-grade steel, handle: PA-GF
 IP65
 -40°C ... 125°C

Ordering data

Description

Coupling housing, for metric screw connections, without glands

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
61.5 mm	straight	1x M20	1460151	10
77.5 mm	straight	1x M25	1460301	10
77.5 mm	straight	1x M32	1460302	10

Coupling housing, for Pg screw connections, with glands

61.5 mm	straight	1x Pg16	1460042	10
77.5 mm	straight	1x Pg21	1460298	10
77.5 mm	straight	1x Pg29	1460299	10

Accessories

Matching contact inserts:

B series: 10-pos. + PE; BB series: 18-pos. + PE;
 DD series: 42-pos. + PE; M series; K series: 8/24-pos. + PE

Ordering data

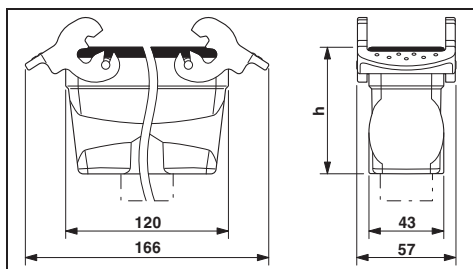
Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
70.5 mm	straight	1x M25	1460089	10
70.5 mm	straight	1x M32	1460093	10
81.5 mm	straight	1x M25	1460315	10
81.5 mm	straight	1x M32	1460312	10
70.5 mm	straight	1x Pg21	1460217	10
81.5 mm	straight	1x Pg21	1460313	10
81.5 mm	straight	1x Pg29	1460314	10

Accessories

B series: 16-pos. + PE; BB series: 32-pos. + PE;
 D series: 40-pos. + PE; DD series: 72-pos. + PE; M series;
 K series; HS series: 6-pos. + PE



Type B24



Technical Data

aluminum, die-cast/powder-coated, gray
 NBR
 high-grade steel, handle: PA-GF
 IP65
 -40°C ... 125°C

Ordering data

Height h [mm]	Conductor exit	Screw connection	Order No.	Pcs. / Pkt.
70.5 mm	straight	1x M32	1460276	10
81.5 mm	straight	1x M32	1460335	10
81.5 mm	straight	1x M40	1460336	10
70.5 mm	straight	1x Pg29	1460251	10
81.5 mm	straight	1x Pg21	1460329	10
81.5 mm	straight	1x Pg29	1460330	10

Accessories

B series: 24-pos. + PE; BB series: 46-pos. + PE;
 D series: 64 pos. + PE; DD series: 108-pos. + PE; M series;
 K series: 4/8-pos. + PE

Connection technology for field devices and field cabling - PLUSCON

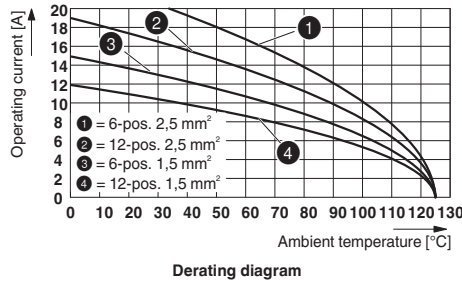
Heavy-duty plug-in connectors – PLUSCON heavy

Q series contact inserts, crimp connection



- Cost-effective and saves space, thanks to high number of contacts within a small surface area
- Can be keyed in seconds, thanks to keying profiles

Notes:
 Plug-in connectors may only be operated when under no load.
 Can be used in housing design HC-D 7...



12-pos. + PE

Electrical data according to DIN EN 61984:2001	
Rated voltage	400 V
Rated surge voltage	6 kV
Rated current	10 A
Surge voltage category/pollution degree	III/3
Material data	
Contact material	copper alloy
Contact surface material	Ag (alternatively Au)
Contact carrier material	PC
Inflammability class according to UL 94	V0
Mechanical data	
Conductor cross section	0.14 mm ² ... 2.5 mm ²
Connection cross section AWG	26 ... 14
Stripping length of the individual wire	8 mm
Stripping length of the individual wire	6 mm (2.5 mm ²)
Insertion/withdrawal cycles	≥ 500
Temperature data	
Ambient temperature (operation)	-40°C ... 125°C

Technical Data

Rated voltage	400 V
Rated surge voltage	6 kV
Rated current	10 A
Surge voltage category/pollution degree	III/3
Material data	
Contact material	copper alloy
Contact surface material	Ag (alternatively Au)
Contact carrier material	PC
Inflammability class according to UL 94	V0
Mechanical data	
Conductor cross section	0.14 mm ² ... 2.5 mm ²
Connection cross section AWG	26 ... 14
Stripping length of the individual wire	8 mm
Stripping length of the individual wire	6 mm (2.5 mm ²)
Insertion/withdrawal cycles	≥ 500
Temperature data	
Ambient temperature (operation)	-40°C ... 125°C

Description
Contact insert , contact marking: 1 ... X
Female
Male

Ordering data

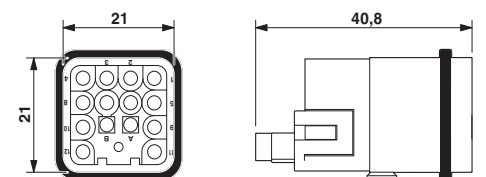
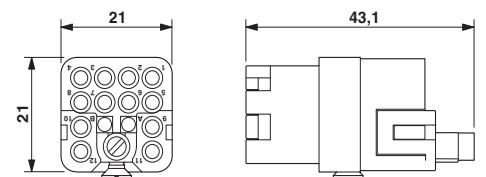
Type	Order No.	Pcs. / Pkt.
HC-Q 12-I-CT-F	1409419	1
HC-Q 12-I-CT-M	1409422	1

Keying profile , for Q12 series
Removal tool
Crimping pliers
Crimp contacts , CK1,6-ED...

Accessories

HC-Q 12-COD	1409435	10
VC-EW 1,6	1884869	1
CRIMPFOX-1,6/2,5-ED-4,0	1687419	1

See PLUSCON 2011 catalog, page 600



Heavy-duty plug-in connectors – PLUSCON heavy

HEAVYCON-ADVANCE sleeve housing, M6 screw locking, plastic, IP67

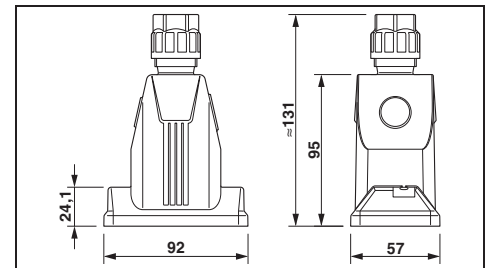


- Can also be mounted without panel mounting base on HEAVYCON standard panel cutouts
- PE inlays ensure leading PE contact with angled plugs
- Integrated cable gland makes mounting and logistics easier

Notes:
Corresponding marking label: US-EMP (20X9), Order No. 0829439



Type B6



Technical Data

Material data
Housing material
Seal material
Material, lock
Mechanical data
Locking type
Locking screw
Tightening torque
Design
Degree of protection
Temperature data
Ambient temperature (operation)

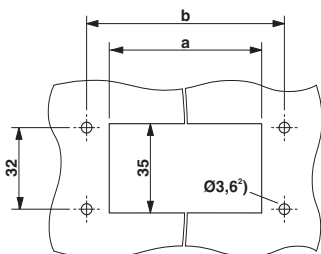
PA
NBR
steel, galvanized
screw locking
M6 (screw head: 5 mm Allen screw)
3 Nm (locking screw)
B6
IP65/67
-40°C ... 100°C

Screw connection	Cable clamping range	Wrench sizes (DIN 475/3)
M20	7 mm ... 13 mm	22
M25	9 mm ... 17 mm	26
M32	11 mm ... 21 mm	30
M40	19 mm ... 28 mm	36

Table: cable clamping ranges of the cable glands

Description	Screw connection	Conductor exit
Sleeve housing		
	1x M20	straight
	1x M20	lateral
	1x M25	straight
	1x M25	lateral
	1x M32	straight
	1x M32	lateral
	1x M40	straight
	1x M40	lateral

Ordering data		
Type	Order No.	Pcs. / Pkt.
HC-ADV-B06-HHWH-1TGM20-PL	1404222	1
HC-ADV-B06-HHWH-1SGM20-PL	1404224	1
HC-ADV-B06-HHWH-1TGM25-PL	1404225	1
HC-ADV-B06-HHWH-1SGM25-PL	1404226	1



Dimensional drawing, panel cutout: HC-ADV-B...
²⁾ When self-tapping Torx screws are used (Torx20, M4)

Type	a [mm]	b [mm]
HC-ADV-B 6-...	52	70
HC-ADV-B 10-...	65	83
HC-ADV-B 16-...	86	103
HC-ADV-B 24-...	112	130

IP65 protective cover, for panel mounting side, with retaining cord
 For screw locking
Bit screwdriver, with 1/4" quick-action chuck, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic

Screw bit, hexagonal with ball head, E6.3-1/4" drive, hardened, suitable for holder according to DIN 3126-F 6.3/ISO 1173

Size: hex 5 x 89 mm
UniSheet, just 0.5 mm thick
 70-section, lettering field size: 20 x 9 mm
Panel mounting flange (2 pcs. per housing)

Mounting flange set, consisting of 2 mounting flanges with 4 self-tapping screws (Torx® 20, M4) and 4 fan-type spacers (hole Ø = 3.6 mm)

Matching contact inserts:

Accessories		
Type	Order No.	Pcs. / Pkt.
HC-B 6-TMS-SD-IP65	1690778	10
SF-M BH	1212070	1
SF-BIT-HEX5 5-89	1208911	5
US-EMP (20X9)	0829439	10
HC-B-AF	1686533	20
HC-B-AF-SET	1604638	1

B series: 6-pos. + PE; BB series: 10-pos. + PE;
 DD series: 24-pos. + PE; M series



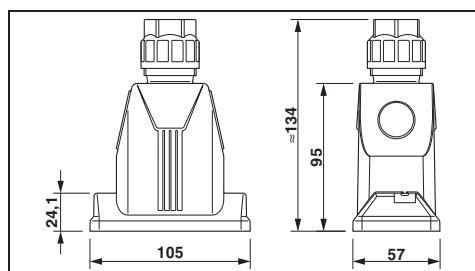
Type B10



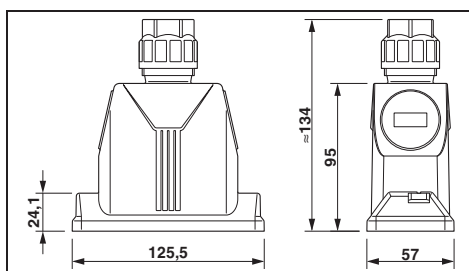
Type B16



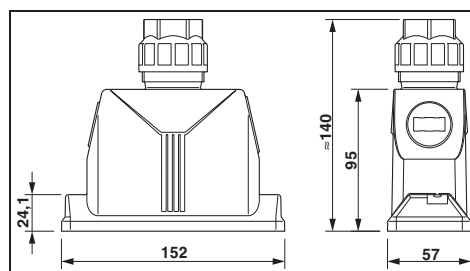
Type B24



Technical Data



Technical Data



Technical Data

PA
NBR
steel, galvanized

screw locking
M6 (screw head: 5 mm Allen screw)
3 Nm (locking screw)
B10
IP65/67

-40°C ... 100°C

PA
NBR
steel, galvanized

screw locking
M6 (screw head: 5 mm Allen screw)
3 Nm (locking screw)
B16
IP65/67

-40°C ... 100°C

PA
NBR
steel, galvanized

screw locking
M6 (screw head: 5 mm Allen screw)
3 Nm (locking screw)
B24
IP65/67

-40°C ... 100°C

Ordering data

Type	Order No.	Pcs. / Pkt.
HC-ADV-B10-HHWH-1TGM25-PL	1404227	1
HC-ADV-B10-HHWH-1SGM25-PL	1404228	1
HC-ADV-B10-HHWH-1TGM32-PL	1404229	1
HC-ADV-B10-HHWH-1SGM32-PL	1404230	1

Ordering data

Type	Order No.	Pcs. / Pkt.
HC-ADV-B16-HHWH-1TGM32-PL	1404231	1
HC-ADV-B16-HHWH-1SGM32-PL	1404232	1
HC-ADV-B16-HHWH-1TGM40-PL	1404233	1
HC-ADV-B16-HHWH-1SGM40-PL	1404234	1

Ordering data

Type	Order No.	Pcs. / Pkt.
HC-ADV-B24-HHWH-1TGM32-PL	1404235	1
HC-ADV-B24-HHWH-1SGM32-PL	1404237	1
HC-ADV-B24-HHWH-1TGM40-PL	1404238	1
HC-ADV-B24-HHWH-1SGM40-PL	1404239	1

Accessories

Accessories	Order No.	Pcs. / Pkt.
HC-B 10-TMS-SD-IP65	1690781	10
SF-M BH	1212070	1
SF-BIT-HEXB 5-89	1208911	5
US-EMP (20X9)	0829439	10
HC-B-AF	1686533	20
HC-B-AF-SET	1604638	1

Accessories

Accessories	Order No.	Pcs. / Pkt.
HC-B 16-TMS-SD-IP65	1690794	10
SF-M BH	1212070	1
SF-BIT-HEXB 5-89	1208911	5
US-EMP (20X9)	0829439	10
HC-B-AF	1686533	20
HC-B-AF-SET	1604638	1

Accessories

Accessories	Order No.	Pcs. / Pkt.
HC-B 24-TMS-SD-IP65	1690804	10
SF-M BH	1212070	1
SF-BIT-HEXB 5-89	1208911	5
US-EMP (20X9)	0829439	10
HC-B-AF	1686533	20
HC-B-AF-SET	1604638	1

B series: 10-pos. + PE; BB series: 18-pos. + PE;
DD series: 42-pos. + PE; M series; K series: 8/24-pos. + PE

B series: 16-pos. + PE; BB series: 32-pos. + PE;
D series: 40-pos. + PE; DD series: 72-pos. + PE; M series;
K series; HS series: 6-pos. + PE

B series: 24-pos. + PE; BB series: 46-pos. + PE;
D series: 64-pos. + PE; DD series: 108-pos. + PE; M series;
K series: 4/8-pos. + PE

Heavy-duty plug-in connectors – PLUSCON heavy

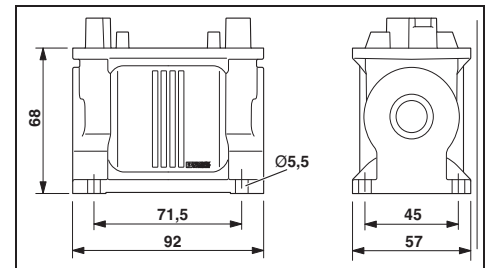
HEAVYCON ADVANCE supporting base element, for M6 screw locking



- Basic housing without thread for free processing
- EMC-compliant in conjunction with EEE sleeve housings
- Supporting base element for bayonet locking on request



Type B6



Technical Data

Material data	
Housing material	die-cast aluminum, salt water resistant
Housing surface material	uncoated
Seal material	NBR, conductive
Mechanical data	
Degree of protection	IP65/IP68 (0.2 bar, 24h)/IP69K
Temperature data	
Ambient temperature (operation)	-40°C ... 125°C

Ordering data

Description	Screw connection	Type	Order No.	Pcs. / Pkt.
Basic housing , for flexible thread processing		HC-ADV-B06-BHFH-EEE	1408614	1
Coupling housing , with straight cable outlet	1x M20	HC-ADV-B06-CHF-H-1TTM20-EEE	1408685	1
	1x M25	HC-ADV-B06-CHF-H-1TTM25-EEE	1408698	1
	1x M32			
Box mounting base , with 2 lateral cable outlets	1x M40			
	2x M20	HC-ADV-B06-SHFH-2STM20-EEE	1408630	1
	2x M25	HC-ADV-B06-SHFH-2STM25-EEE	1408656	1
	2x M32			
	2x M40			

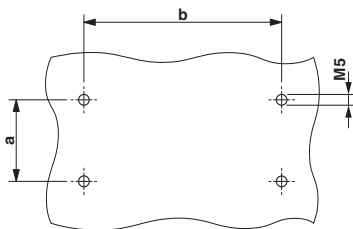
Accessories

IP65 protective cover , for panel mounting side, with retaining cord For screw locking	HC-B 6-TMS-SD-IP65	1690778	10
Bit screwdriver , with 1/4" quick-action chuck, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic	SF-M BH	1212070	1
Screw bit , hexagonal with ball head, E6.3-1/4" drive, hardened, suitable for holder according to DIN 3126-F 6.3/ISO 1173	SF-BIT-HEXB 5-89	1208911	5

Size: hex 5 x 89 mm

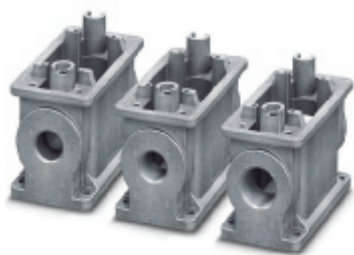
Cable glands
Matching contact inserts:

See PLUSCON 2011 catalog, page 592
B series: 6-pos. + PE; BB series: 10-pos. + PE;
DD series: 24-pos. + PE; M series



Drilling diagram, box mounting base:

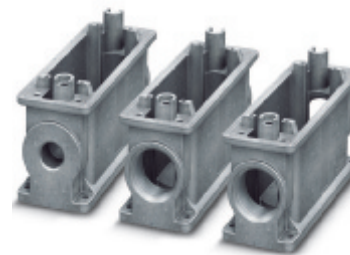
Type	a [mm]	b [mm]
HC-ADV-B 6-...	45	70
HC-ADV-B 10-...	45	82
HC-ADV-B 16-...	45	105
HC-ADV-B 24-...	45	132



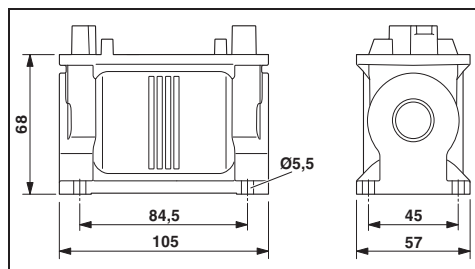
Type B10



Type B16



Type B24



Technical Data

die-cast aluminum, salt water resistant
uncoated
NBR, conductive

IP65/IP68 (0.2 bar, 24h)/IP69K

-40°C ... 125°C

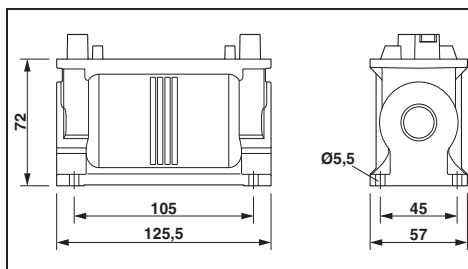
Ordering data

Type	Order No.	Pcs. / Pkt.
HC-ADV-B10-BHFH-EEE	1408711	1
HC-ADV-B10-CHF1-1TTM20-EEE	1408782	1
HC-ADV-B10-CHF1-1TTM25-EEE	1408795	1
HC-ADV-B10-SHFH-2STM20-EEE	1408737	1
HC-ADV-B10-SHFH-2STM25-EEE	1408753	1

Accessories

HC-B 10-TMS-SD-IP65	1690781	10
SF-M BH	1212070	1
SF-BIT-HEXB 5-89	1208911	5

See PLUSCON 2011 catalog, page 592
B series: 10-pos. + PE; BB series: 18-pos. + PE;
DD series: 42-pos. + PE; M series; K series: 8/24-pos. + PE



Technical Data

die-cast aluminum, salt water resistant
uncoated
NBR, conductive

IP65/IP68 (0.2 bar, 24h)/IP69K

-40°C ... 125°C

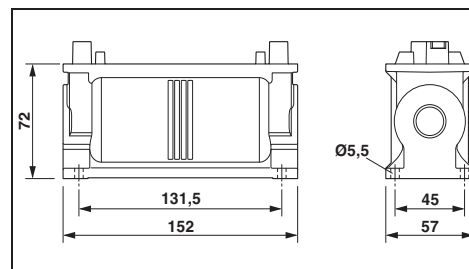
Ordering data

Type	Order No.	Pcs. / Pkt.
HC-ADV-B16-BHFH-EEE	1408818	1
HC-ADV-B16-CHF1-1TTM25-EEE	1408889	1
HC-ADV-B16-CHF1-1TTM32-EEE	1408892	1
HC-ADV-B16-SHFH-2STM25-EEE	1408834	1
HC-ADV-B16-SHFH-2STM32-EEE	1408850	1

Accessories

HC-B 16-TMS-SD-IP65	1690794	10
SF-M BH	1212070	1
SF-BIT-HEXB 5-89	1208911	5

See PLUSCON 2011 catalog, page 592
B series: 16-pos. + PE; BB series: 32-pos. + PE;
D series: 40-pos. + PE; DD series: 72-pos. + PE; M series;
K series; HS series: 6-pos. + PE



Technical Data

die-cast aluminum, salt water resistant
uncoated
NBR, conductive

IP65/IP68 (0.2 bar, 24h)/IP69K

-40°C ... 125°C

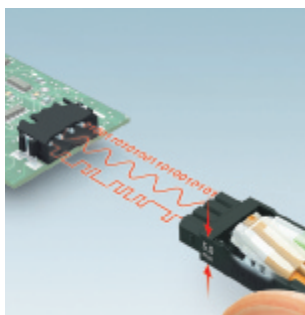
Ordering data

Type	Order No.	Pcs. / Pkt.
HC-ADV-B24-BHFH-EEE	1408915	1
HC-ADV-B24-CHF1-1TTM25-EEE	1408986	1
HC-ADV-B24-CHF1-1TTM32-EEE	1408999	1
HC-ADV-B24-CHF1-1TTM40-EEE	1409008	1
HC-ADV-B24-SHFH-2STM25-EEE	1408931	1
HC-ADV-B24-SHFH-2STM32-EEE	1408957	1
HC-ADV-B24-SHFH-2STM40-EEE	1408973	1

Accessories

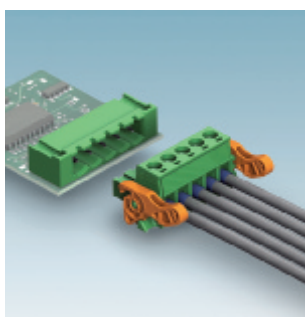
HC-B 24-TMS-SD-IP65	1690804	10
SF-M BH	1212070	1
SF-BIT-HEXB 5-89	1208911	5

See PLUSCON 2011 catalog, page 592
B series: 24-pos. + PE; BB series: 46-pos. + PE;
D series: 64-pos. + PE; DD series: 108-pos. + PE; M series;
K series: 4/8-pos. + PE



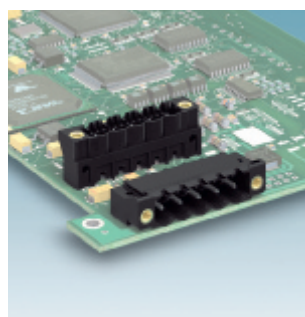
CAT5 plugs with fast connection

PTPM 0,2/ 5-P-2,5 PA CAT5 page 239
PTPM 0,4/ 5-P-2,5 PA CAT5 page 239



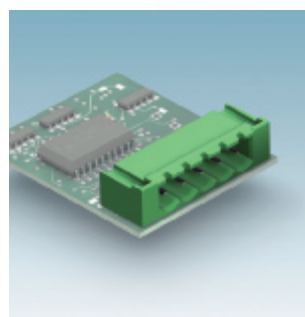
Plugs with lock & release lever

MSTB 2,5/...-ST-5,08-LR page 241
FKC 2,5/...-ST-5,08-LR page 241



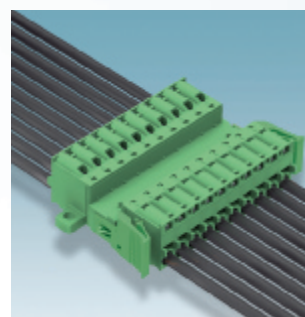
Headers for plug with lock & release locking

CC 2,5/...-GF-5,08-LR P26THR page 242
CCV 2,5/...-GF-5,08-LR P26THR page 243



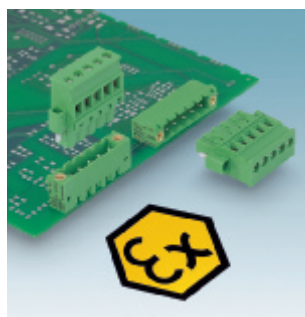
Headers for plug with lock & release locking

MSTBA 2,5/...-G-5,08-LR page 244
MSTBVA 2,5/...-G-5,08-LR page 245



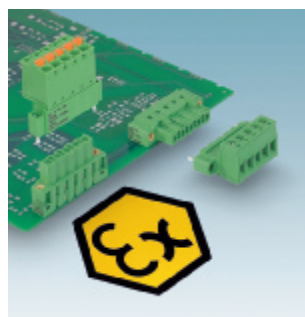
Free-hanging connection with direct mounting

FKCS 2,5/...-ST-5,08-RF page 247
FKICS 2,5/...-STD-5,08-RN page 247



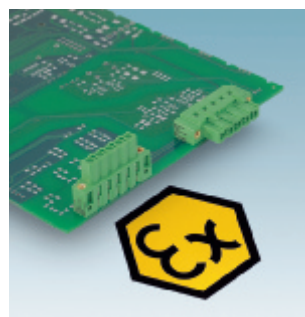
Plug-in connectors for the Ex area with 5.08 mm pitch

MVSTBR 2,5/...-STF-5,08 EX page 251
MVSTBW 2,5/ 2-STF-5,08 EX page 251



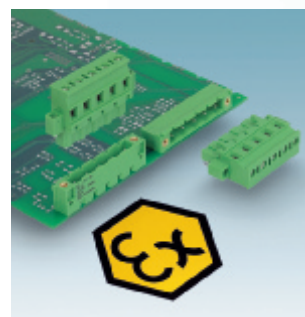
Inverted plugs for the Ex area with 5.08 mm pitch

IC 2,5/...-STF-5,08 EX page 253
FKIC 2,5/...-STF-5,08 EX page 253



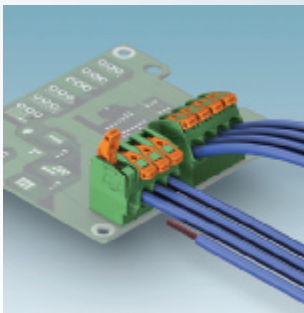
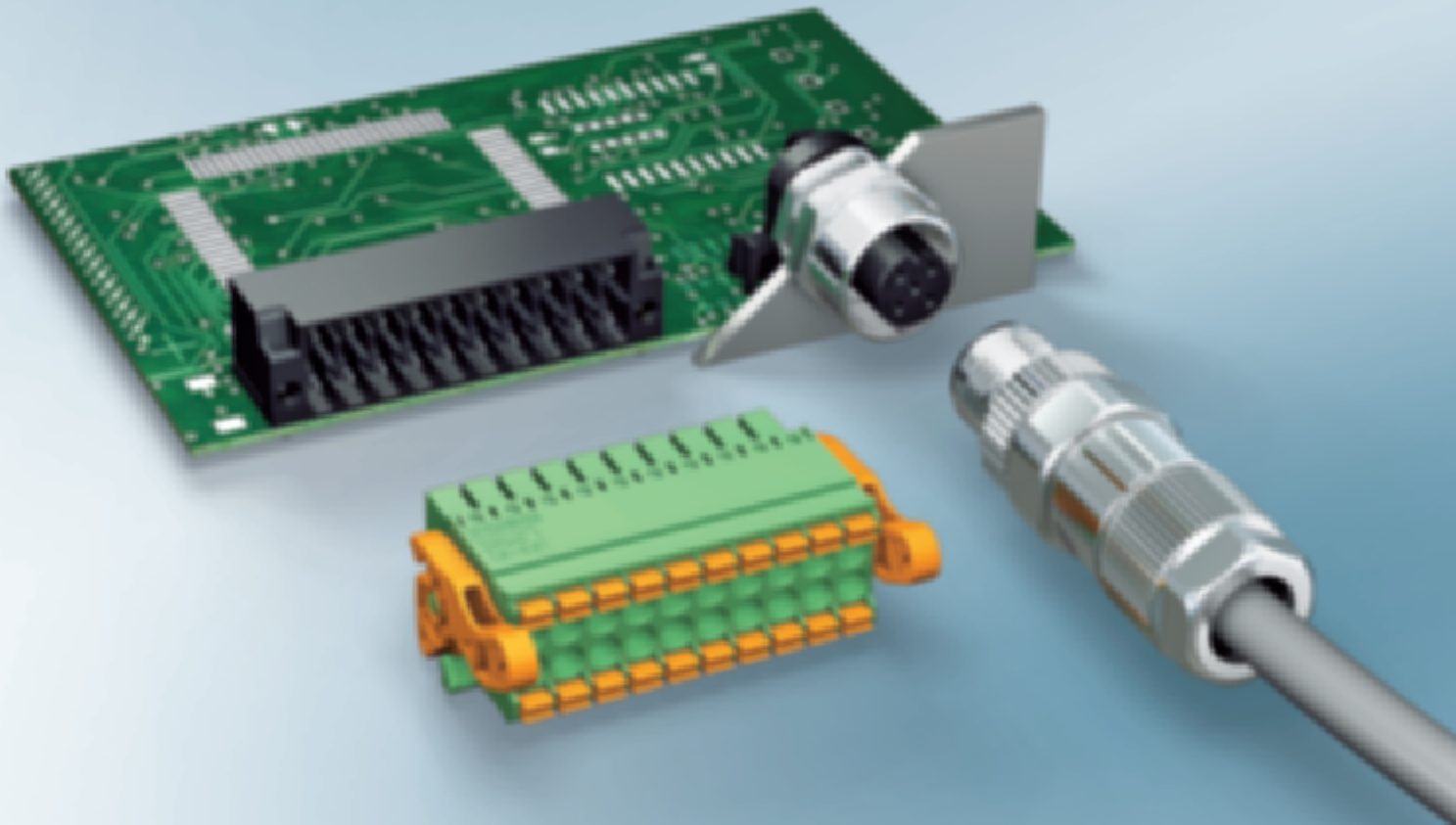
Inverted headers for the Ex area with 5.08 mm pitch

IC 2,5/...-GF-5,08 EX page 255
ICV 2,5/...-GF-5,08 EX page 255



Plug-in connectors for the Ex area with 7.62 mm pitch

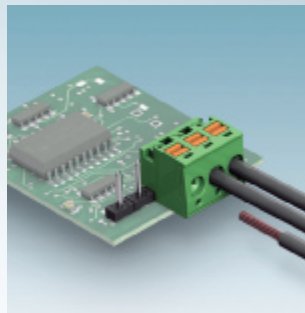
GMVSTBR 2,5/...-STF-7,62 EX page 257
GMVSTBR 2,5/...-STF-7,62 EX page 257



PL series up to 6 mm²

PLH 5/...-7,5
PLA 5/...-7,5

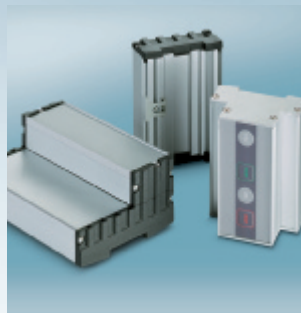
page 258
page 259



Plugs with spring connection for pin strips

PTS 1,5/...PH-5,0
PST 1,3/...5,0-SF
PTS 1,5/...-7,5-H

page 261
page 261
page 261



Aluminum profile housing

UM-ALU 4-...PROFILE...

page 264

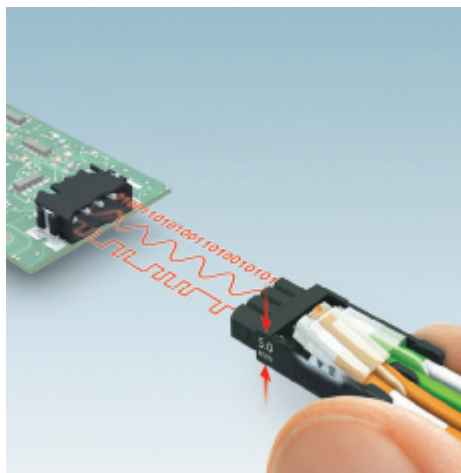


Handheld aluminum housing

HC-ALU 6-...PROFILE...

page 268

CAT5 plug with fast connection



- 4-pos. miniature plug with 2.5 mm pitch
- CAT5 Ethernet-capable according to IEC 11801
- Paired fast connection
- Tool-free conductor connection
- Can be combined with 5-pos. THR and SMD base strips of types PTSM 0,5/5...

For accessories, see COMBICON catalog

For all types	Type	Page
	Base strip PTSM 0,5/5-HH-2,5-THR R32 Order No. 1778654	57
	Base strip PTSM 0,5/5-HV-2,5-THR R32 Order No. 1778586	57
	Base strip PTSM 0,5/5-HH-2,5-SMD R32 Order No. 1778793	57

Technical Data

Technical data in accordance with IEC/DIN VDE	
Rated current/conductor cross section	[A]/[mm ²]
Rated insulation voltage for pollution degree 2	[V]
Pitch	[mm]
Connection capacity	
Solid/stranded	[mm ²]/[mm ²]/AWG
Insulation coordination	
Surge voltage category/pollution degree	
Rated insulation voltage	[V]
Rated surge voltage	[kV]
Approval data (UL/CUL)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
Approval data (CSA)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
General data	
Type of insulation material/insulation material group	
Inflammability class according to UL 94	

PTPM 0,2/ 5-P-2,5 PA CAT5

Rated current/conductor cross section			2/0.14
Rated insulation voltage for pollution degree 2			160
Pitch			2.5
Connection capacity			
Solid/stranded			-/0.14 - 0.14/26 - 26
Insulation coordination			
Surge voltage category/pollution degree	III/3	III/2	II/2
Rated insulation voltage	40	160	160
Rated surge voltage	2.5	2.5	2.5
Approval data (UL/CUL)	B	C	D
Nominal voltage	-	-	-
Nominal current	-	-	-
Connection capacity AWG	-	-	-
Approval data (CSA)	B	C	D
Nominal voltage	-	-	-
Nominal current	-	-	-
Connection capacity AWG	-	-	-
Type of insulation material/insulation material group			PA/PC/III
Inflammability class according to UL 94			V0/V2

PTPM 0,4/ 5-P-2,5 PA CAT5

Rated current/conductor cross section			4/0.34
Rated insulation voltage for pollution degree 2			125
Pitch			2.5
Connection capacity			
Solid/stranded			-/0.25 - 0.34/24 - 22
Insulation coordination			
Surge voltage category/pollution degree	III/3	III/2	II/2
Rated insulation voltage	32	125	125
Rated surge voltage	2.5	2.5	2.5
Approval data (UL/CUL)	B	C	D
Nominal voltage	-	-	-
Nominal current	-	-	-
Connection capacity AWG	-	-	-
Approval data (CSA)	B	C	D
Nominal voltage	-	-	-
Nominal current	-	-	-
Connection capacity AWG	-	-	-
Type of insulation material/insulation material group			PA/PC/III
Inflammability class according to UL 94			V0/V2

No. of pos.

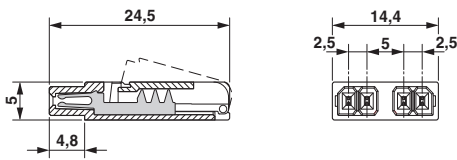
4



Pierce connection of conductor cross sections of 0.14 mm²/26 AWG

Applied for:
UL/CUL

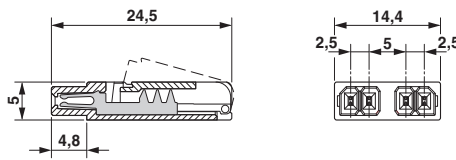
Dimensional drawing



Pierce connection of conductor cross sections from 0.25 to 0.34 mm²/24 - 22 AWG

Applied for:
UL/CUL

Dimensional drawing



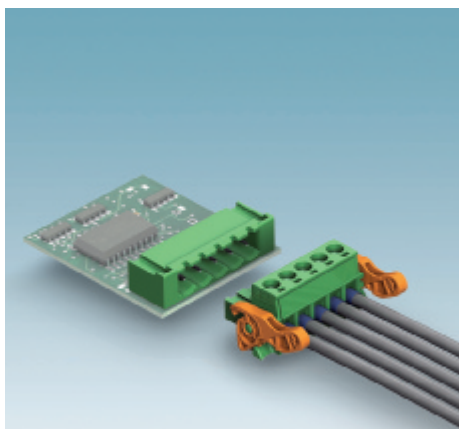
Ordering data

Type	Order No.	Pcs. / Pkt.
PTPM 0,2/ 5-P-2,5 PA CAT5	1811161	100

Ordering data

Type	Order No.	Pcs. / Pkt.
PTPM 0,4/ 5-P-2,5 PA CAT5	1811145	100

Plug with lock & release lever







- When the plug is inserted, the levers automatically latch onto the header
- The levers enable the plug to be conveniently ejected
- A screwdriver is used to extend the levers and make actuation easier where space is tight
- Higher numbers of positions up to 20-pos. can be found at: www.phoenixcontact.net/catalog

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

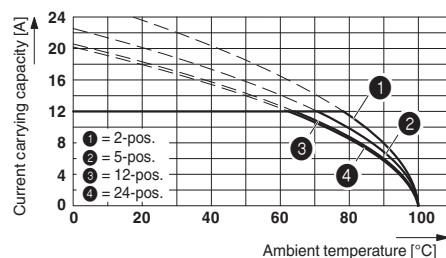
1) Please observe the derating curves. Derating curves of further combination options on request.

For accessories, see COMBICON catalog

For all types	Type	Page
	Marker cards SK 5,08/3,8	842
	Screwdriver SZS 0,6 x 3,5 Order No. 1205053	
	Keying profile CP-MSTB Order No. 1734634	
	Ferrules with and without plastic sleeve	858
	Crimping pliers for 0.25 to 6 mm ² CRIMPFOX 6 Order No. 1212034	

Representative derating curve

Type: **MSTB 2,5/...-ST-5,08-LR with MSTBA 2,5/...-G-5,08-LR**
Derating curves, determined according to DIN EN 61984 (VDE 0627):2002-09
Representation based on DIN EN 60512-5-2:2003-01
Connected conductor cross section = 2.5 mm²
Reduction factor = 0.8
Number of positions = See diagram



Technical Data

Technical data in accordance with IEC/DIN VDE	
Rated current/conductor cross section	[A]/[mm ²]
Rated insulation voltage for pollution degree 2	[V]
Pitch	[mm]
Connection capacity	
Solid/stranded	[mm ²]/[mm ²]/AWG
Stranded with ferrules without plastic sleeve	[mm ²]
Stranded with ferrules with plastic sleeve	[mm ²]
Multi-conductor connection capacity (two conductors with the same cross section)	
Solid/stranded	[mm ²]
Stranded with ferrules without plastic sleeve	[mm ²]
Stranded with TWIN ferrule with plastic sleeve	[mm ²]
Insulation coordination	
Surge voltage category/pollution degree	
Rated insulation voltage	[V]
Rated surge voltage	[kV]
Approval data (UL/CUL)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
Approval data (CSA)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
General data	
Stripping length	[mm]
Screw thread	
Tightening torque	[Nm]
Type of insulation material/insulation material group	
Inflammability class according to UL 94	

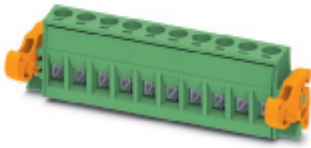
MSTB 2,5/ 2-ST-5,08-LR

12 ¹⁾ /2.5		
320		
5.08		
0.2 - 2.5/0.2 - 2.5/24 - 12		
0.25 - 2.5		
0.25 - 2.5		
0.2 - 1/0.2 - 1.5		
0.25 - 1		
0.5 - 1.5		
III/3	III/2	II/2
250	320	630
4	4	4
B	C	D
-	-	-
-	-	-
-	-	-
-	-	-
B	C	D
-	-	-
-	-	-
-	-	-
PA/I		
V0		

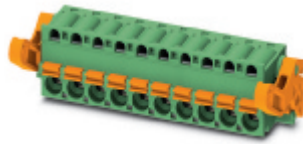
FKC 2,5/ 2-ST-5,08-LR

12 ¹⁾ /2.5		
320		
5.08		
0.2 - 2.5/0.2 - 2.5/24 - 12		
0.25 - 2.5		
0.25 - 2.5		
-/-		
-		
0.5 - 1		
III/3	III/2	II/2
250	320	630
4	4	4
B	C	D
-	-	-
-	-	-
-	-	-
-	-	-
B	C	D
-	-	-
-	-	-
-	-	-
PA/I		
V0		

No. of pos.	Dim. a [mm]
2	5.08
3	10.16
4	15.24
5	20.32
6	25.40
7	30.48
8	35.56
9	40.64
10	45.72
11	50.80
12	55.88
13	60.96
14	66.04
15	71.12
16	76.20



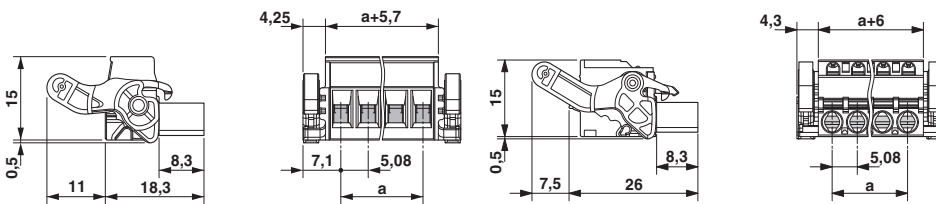
With screw connection



With push-in spring connection with test tab

Dimensional drawing

Dimensional drawing



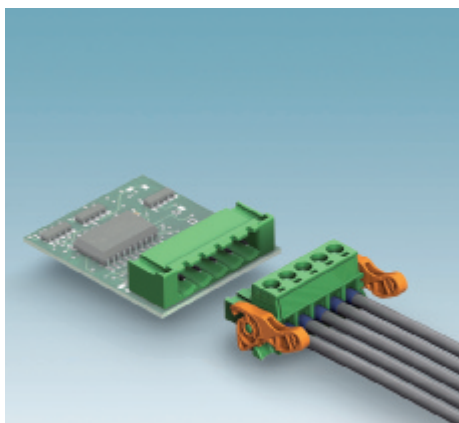
Ordering data

Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: Green		
MSTB 2,5/ 2-ST-5,08-LR	1808886	50
MSTB 2,5/ 3-ST-5,08-LR	1808899	50
MSTB 2,5/ 4-ST-5,08-LR	1808909	50
MSTB 2,5/ 5-ST-5,08-LR	1808912	50
MSTB 2,5/ 6-ST-5,08-LR	1808925	50
MSTB 2,5/ 7-ST-5,08-LR	1808938	50
MSTB 2,5/ 8-ST-5,08-LR	1808941	50
MSTB 2,5/ 9-ST-5,08-LR	1808954	50
MSTB 2,5/10-ST-5,08-LR	1808967	50
MSTB 2,5/11-ST-5,08-LR	1808970	50
MSTB 2,5/12-ST-5,08-LR	1808983	50
MSTB 2,5/13-ST-5,08-LR	1808996	50
MSTB 2,5/14-ST-5,08-LR	1809005	50
MSTB 2,5/15-ST-5,08-LR	1809018	50
MSTB 2,5/16-ST-5,08-LR	1809021	50

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: Green		
FKC 2,5/ 2-ST-5,08-LR	1792517	50
FKC 2,5/ 3-ST-5,08-LR	1792520	50
FKC 2,5/ 4-ST-5,08-LR	1792533	50
FKC 2,5/ 5-ST-5,08-LR	1792546	50
FKC 2,5/ 6-ST-5,08-LR	1792559	50
FKC 2,5/ 7-ST-5,08-LR	1792562	50
FKC 2,5/ 8-ST-5,08-LR	1792575	50
FKC 2,5/ 9-ST-5,08-LR	1792588	50
FKC 2,5/10-ST-5,08-LR	1792591	50
FKC 2,5/11-ST-5,08-LR	1792601	50
FKC 2,5/12-ST-5,08-LR	1792614	50
FKC 2,5/13-ST-5,08-LR	1810900	50
FKC 2,5/14-ST-5,08-LR	1810913	50
FKC 2,5/15-ST-5,08-LR	1810926	50
FKC 2,5/16-ST-5,08-LR	1810939	50

Header for plugs with lock & release locking



- Pin strips for 320 V with snap-in edges for plugs with lock & release lever
- Delivery form: box packaging - bulk
- Tape-on-reel packing available on request
- Other pin lengths available on request
- Can be combined with plugs with lock & release mechanism or screw flange

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.




CR-MSTB may only be used after reflow soldering.

CR-MSTB NAT HT may also be used prior to reflow soldering.

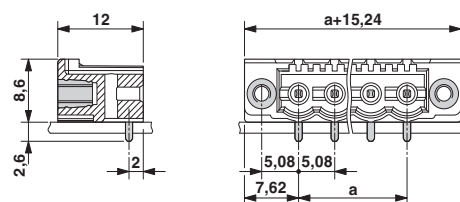


For SMT, reflow, and wave soldering processes, with threaded flange, plug-in direction parallel to the PCB

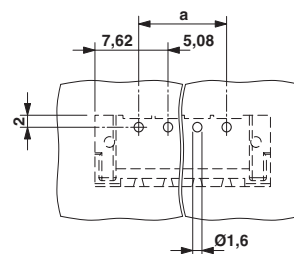
For accessories, see COMBICON catalog

For all types	Type	Page
	Keying section CR-MSTB Order No. 1734401	
	Keying section CR-MSTB NAT HT Order No. 1954362	
	Marker cards SK 5,08/3,8	842

Dimensional drawing



Drilling diagram



Technical Data

Technical data in accordance with IEC/DIN VDE

Rated current/conductor cross section [A]/[mm²]

Rated insulation voltage for pollution degree 2 [V]

Pitch [mm]

Insulation coordination

Surge voltage category/pollution degree

Rated insulation voltage [V]

Rated surge voltage [kV]

Approval data (UL/CUL) Use Group

Nominal voltage [V]

Nominal current [A]

Connection capacity AWG AWG

Approval data (CSA) Use Group

Nominal voltage [V]

Nominal current [A]

Connection capacity AWG AWG

General data

Type of insulation material/insulation material group

Inflammability class according to UL 94

Drill hole diameter/pin dimensions [mm]

12/2.5

320

5.08

III/3 III/2 II/2

250 320 400

4 4 4

B C D

- - -

- - -

- - -

B C D

- - -

- - -

- - -

LCP/IIIa

V0

1.6/1 x 1 mm

No. of pos.

Dim. a [mm]

2 5.08

3 10.16

4 15.24

5 20.32

6 25.40

7 30.48

8 35.56

9 40.64

10 45.72

11 50.80

12 55.88

Ordering data

Type Order No. Pcs. / Pkt.

Headers, 5.08 mm pitch, color: black

CC 2,5/ 2-GF-5,08-LR P26THR 1792627 50

CC 2,5/ 3-GF-5,08-LR P26THR 1792630 50

CC 2,5/ 4-GF-5,08-LR P26THR 1792643 50

CC 2,5/ 5-GF-5,08-LR P26THR 1792656 50

CC 2,5/ 6-GF-5,08-LR P26THR 1792669 50

CC 2,5/ 7-GF-5,08-LR P26THR 1792672 50

CC 2,5/ 8-GF-5,08-LR P26THR 1792685 50

CC 2,5/ 9-GF-5,08-LR P26THR 1792698 50

CC 2,5/10-GF-5,08-LR P26THR 1792708 50

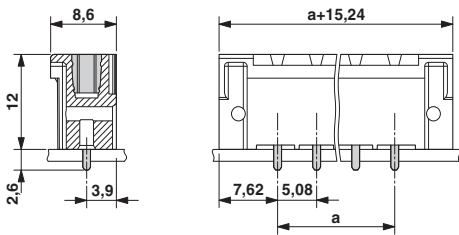
CC 2,5/11-GF-5,08-LR P26THR 1792711 50

CC 2,5/12-GF-5,08-LR P26THR 1792724 50

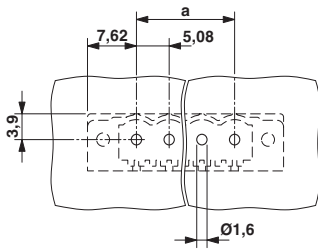


For SMT, reflow, and wave soldering processes, with threaded flange, plug-in direction vertical to the PCB

Dimensional drawing



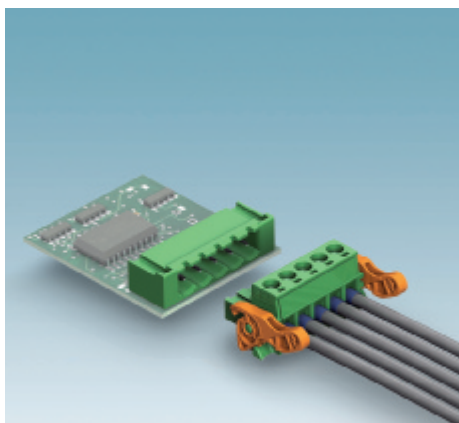
Drilling diagram



Ordering data

Type	Order No.	Pcs. / Pkt.
Headers, 5.08 mm pitch, color: black		
CCV 2,5/ 2-GF-5,08-LR P26THR	1792737	50
CCV 2,5/ 3-GF-5,08-LR P26THR	1792740	50
CCV 2,5/ 4-GF-5,08-LR P26THR	1792753	50
CCV 2,5/ 5-GF-5,08-LR P26THR	1792766	50
CCV 2,5/ 6-GF-5,08-LR P26THR	1792779	50
CCV 2,5/ 7-GF-5,08-LR P26THR	1792782	50
CCV 2,5/ 8-GF-5,08-LR P26THR	1792795	50
CCV 2,5/ 9-GF-5,08-LR P26THR	1792805	50
CCV 2,5/10-GF-5,08-LR P26THR	1792818	50
CCV 2,5/11-GF-5,08-LR P26THR	1792821	50
CCV 2,5/12-GF-5,08-LR P26THR	1792834	50

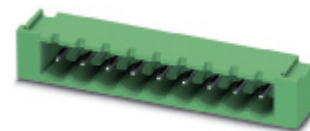
Header for plugs with lock & release locking



- Pin strips for 320 V with snap-in edges for plugs with lock & release lever
- Delivery form: box packaging - bulk
- Other pin lengths available on request



Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

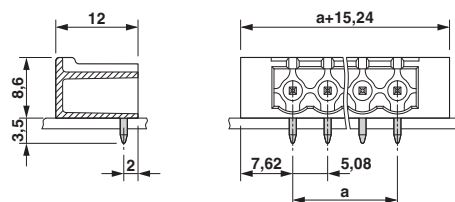


For wave soldering processes, plug-in direction parallel to the PCB

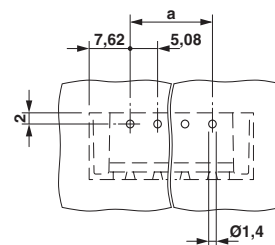
For accessories, see COMBICON catalog

For all types	Type	Page
	Keying section CR-MSTB Order No. 1734401	
	Marker cards SK 5,08/3,8	436

Dimensional drawing



Drilling diagram

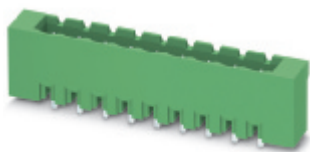


Technical Data

Technical data in accordance with IEC/DIN VDE	
Rated current/conductor cross section	[A]/[mm ²] 12/2.5
Rated insulation voltage for pollution degree 2	[V] 320
Pitch	[mm] 5.08
Insulation coordination	
Surge voltage category/pollution degree	III/3 III/2 II/2
Rated insulation voltage	[V] 250 320 400
Rated surge voltage	[kV] 4 4 4
Approval data (UL/CUL)	Use Group B C D
Nominal voltage	[V] - - -
Nominal current	[A] - - -
Connection capacity AWG	AWG - - -
Approval data (CSA)	Use Group B C D
Nominal voltage	[V] - - -
Nominal current	[A] - - -
Connection capacity AWG	AWG - - -
General data	
Type of insulation material/insulation material group	PBT/IIIa
Inflammability class according to UL 94	V0
Drill hole diameter/pin dimensions	[mm] 1.4/1 x 1 mm

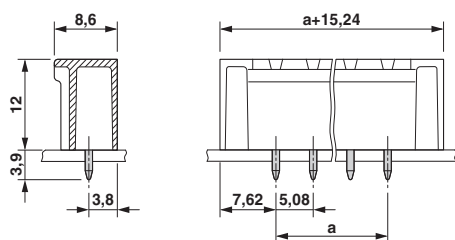
Ordering data

No. of pos.	Dim. a [mm]	Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green				
2	5.08	MSTBA 2,5/ 2-G-5,08-LR	1809076	50
3	10.16	MSTBA 2,5/ 3-G-5,08-LR	1809089	50
4	15.24	MSTBA 2,5/ 4-G-5,08-LR	1809092	50
5	20.32	MSTBA 2,5/ 5-G-5,08-LR	1809102	50
6	25.40	MSTBA 2,5/ 6-G-5,08-LR	1809115	50
7	30.48	MSTBA 2,5/ 7-G-5,08-LR	1809128	50
8	35.56	MSTBA 2,5/ 8-G-5,08-LR	1809131	50
9	40.64	MSTBA 2,5/ 9-G-5,08-LR	1809144	50
10	45.72	MSTBA 2,5/10-G-5,08-LR	1809157	50
11	50.80	MSTBA 2,5/11-G-5,08-LR	1809160	50
12	55.88	MSTBA 2,5/12-G-5,08-LR	1809173	50
13	60.96	MSTBA 2,5/13-G-5,08-LR	1809186	50
14	66.04	MSTBA 2,5/14-G-5,08-LR	1809199	50
15	71.12	MSTBA 2,5/15-G-5,08-LR	1809209	50
16	76.20	MSTBA 2,5/16-G-5,08-LR	1809212	50

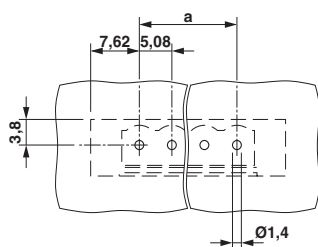


For wave soldering processes, plug-in direction vertical to the PCB

Dimensional drawing



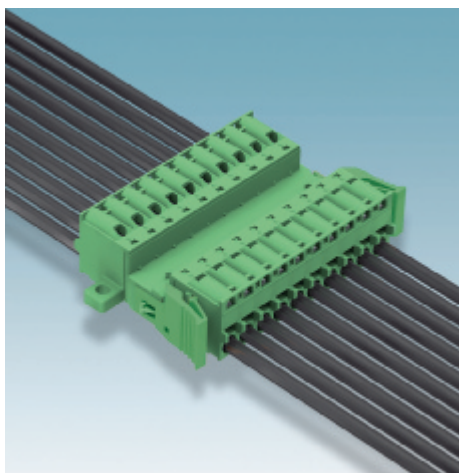
Drilling diagram



Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
MSTBVA 2,5/ 2-G-5,08-LR	1809267	50
MSTBVA 2,5/ 3-G-5,08-LR	1809270	50
MSTBVA 2,5/ 4-G-5,08-LR	1809283	50
MSTBVA 2,5/ 5-G-5,08-LR	1809296	50
MSTBVA 2,5/ 6-G-5,08-LR	1809306	50
MSTBVA 2,5/ 7-G-5,08-LR	1809319	50
MSTBVA 2,5/ 8-G-5,08-LR	1809322	50
MSTBVA 2,5/ 9-G-5,08-LR	1809335	50
MSTBVA 2,5/10-G-5,08-LR	1809348	50
MSTBVA 2,5/11-G-5,08-LR	1809351	50
MSTBVA 2,5/12-G-5,08-LR	1809364	50
MSTBVA 2,5/13-G-5,08-LR	1809377	50
MSTBVA 2,5/14-G-5,08-LR	1809380	50
MSTBVA 2,5/15-G-5,08-LR	1809393	50
MSTBVA 2,5/16-G-5,08-LR	1809403	50

Free-hanging connection with direct mounting



- Fast conductor connection, thanks to push-in spring connection
- Convenient two-hand operation, thanks to actuation shafts for screwdrivers
- Test connection for accommodating 2 mm test pins or 2.3 mm test plugs

FKICS 2,5/...-STD-...

- Inverted contact system (pin contact)
- Side flange for screw connection on mounting plates or unit housing

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

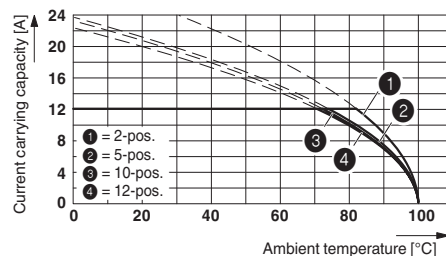
1) Please observe the derating curves. Derating curves of further combination options on request.

For accessories, see COMBICON catalog

For all types	Type	Page
	Marker cards SK 5/3,8 or SK 5,08/3,8	
	Screwdriver SZS 0,6 x 3,5 Order No. 1205053	
	Keying profile CP-MSTB Order No. 1734634	
	Test plug MPS	855
	Crimping pliers for 0.25 to 6 mm ² CRIMPFOX 6 Order No. 1212034	

Representative derating curve

Type: FKCS 2,5/...-ST-5,08-RF with FKICS 2,5/...-STD-5,08-RN
Derating curves, determined according to DIN EN 61984 (VDE 0627):2002-09
Representation based on DIN EN 60512-5-2:2003-01
Connected conductor cross section = 2.5 mm²
Reduction factor = 0.8
Number of positions = See diagram



Technical Data

Technical data in accordance with IEC/DIN VDE	
Rated current/conductor cross section	[A]/[mm ²]
Rated insulation voltage for pollution degree 2	[V]
Pitch	[mm]
Connection capacity	
Solid/stranded	[mm ²]/[mm ²]/AWG
Stranded with ferrules without plastic sleeve	[mm ²]
Stranded with ferrules with plastic sleeve	[mm ²]
Multi-conductor connection capacity (two conductors with the same cross section)	
Solid/stranded	[mm ²]
Stranded with ferrules without plastic sleeve	[mm ²]
Stranded with TWIN ferrule with plastic sleeve	[mm ²]
Insulation coordination	
Surge voltage category/pollution degree	
Rated insulation voltage	[V]
Rated surge voltage	[kV]
Approval data (UL/CUL)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
Approval data (CSA)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
General data	
Stripping length	[mm]
Type of insulation material/insulation material group	
Inflammability class according to UL 94	

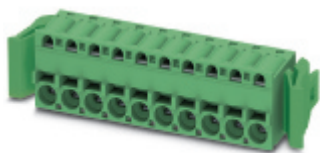
FKCS 2,5/ 2-ST-5,08-RF

12 ¹⁾ /2.5		
320		
5.08		
0.2 - 2.5/0.2 - 2.5/24 - 12		
0.25 - 2.5		
0.25 - 2.5		
-/-		
-		
0.5 - 1		
III/3	III/2	II/2
250	320	630
4	4	4
B	C	D
-	-	-
-	-	-
-	-	-
B	C	D
-	-	-
-	-	-
-	-	-
10		
PA/I		
V0		

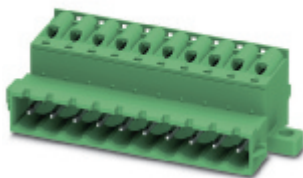
FKICS 2,5/ 2-STD-5,08-RN

12 ¹⁾ /2.5		
320		
5.08		
0.2 - 2.5/0.2 - 2.5/24 - 12		
0.25 - 2.5		
0.25 - 2.5		
-/-		
-		
0.5 - 1		
III/3	III/2	II/2
320	320	630
4	4	4
B	C	D
-	-	-
-	-	-
-	-	-
B	C	D
-	-	-
-	-	-
-	-	-
10		
PA/I		
V0		

No. of pos.	Dim. a [mm]
2	5.08
3	10.16
4	15.24
5	20.32
6	25.40
7	30.48
8	35.56
9	40.64
10	45.72
11	50.80
12	55.88
13	60.96
14	66.04
15	71.12
16	76.20

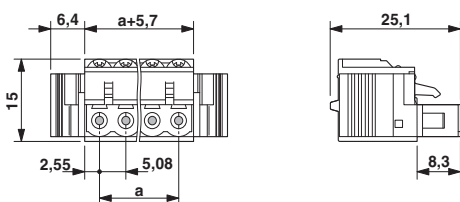


Plug with push-in spring connection and self-locking flanges

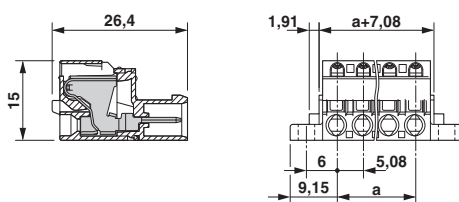


Inverted plug with push-in spring connection, engagement noses and flanges for direct fixing

Dimensional drawing



Dimensional drawing



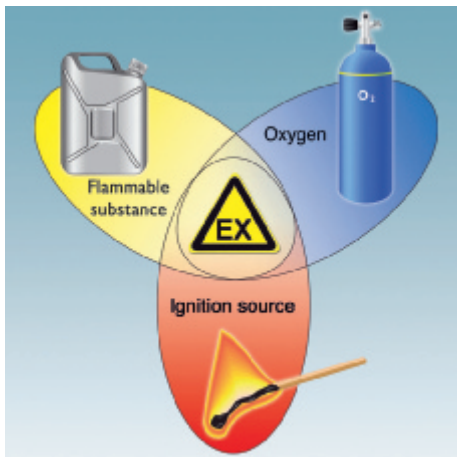
Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: Green		
FKCS 2,5/ 2-ST-5,08-RF	1808569	50
FKCS 2,5/ 3-ST-5,08-RF	1808572	50
FKCS 2,5/ 4-ST-5,08-RF	1808585	50
FKCS 2,5/ 5-ST-5,08-RF	1808598	50
FKCS 2,5/ 6-ST-5,08-RF	1808608	50
FKCS 2,5/ 7-ST-5,08-RF	1808611	50
FKCS 2,5/ 8-ST-5,08-RF	1808624	50
FKCS 2,5/ 9-ST-5,08-RF	1808637	50
FKCS 2,5/10-ST-5,08-RF	1808640	50
FKCS 2,5/11-ST-5,08-RF	1808653	50
FKCS 2,5/12-ST-5,08-RF	1808666	50
FKCS 2,5/13-ST-5,08-RF	1808679	50
FKCS 2,5/14-ST-5,08-RF	1808682	50
FKCS 2,5/15-ST-5,08-RF	1808695	50
FKCS 2,5/16-ST-5,08-RF	1808705	50

Ordering data

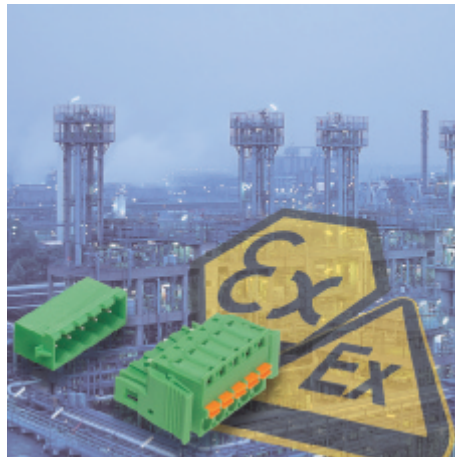
Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: Green		
FKICS 2,5/ 2-STD-5,08-RN	1808721	50
FKICS 2,5/ 3-STD-5,08-RN	1808734	50
FKICS 2,5/ 4-STD-5,08-RN	1808747	50
FKICS 2,5/ 5-STD-5,08-RN	1808750	50
FKICS 2,5/ 6-STD-5,08-RN	1808763	50
FKICS 2,5/ 7-STD-5,08-RN	1808776	50
FKICS 2,5/ 8-STD-5,08-RN	1808789	50
FKICS 2,5/ 9-STD-5,08-RN	1808792	50
FKICS 2,5/10-STD-5,08-RN	1808802	50
FKICS 2,5/11-STD-5,08-RN	1808815	50
FKICS 2,5/12-STD-5,08-RN	1808828	50
FKICS 2,5/13-STD-5,08-RN	1808831	50
FKICS 2,5/14-STD-5,08-RN	1808844	50
FKICS 2,5/15-STD-5,08-RN	1808857	50
FKICS 2,5/16-STD-5,08-RN	1808860	50

Plug-in connectors with Ex approval



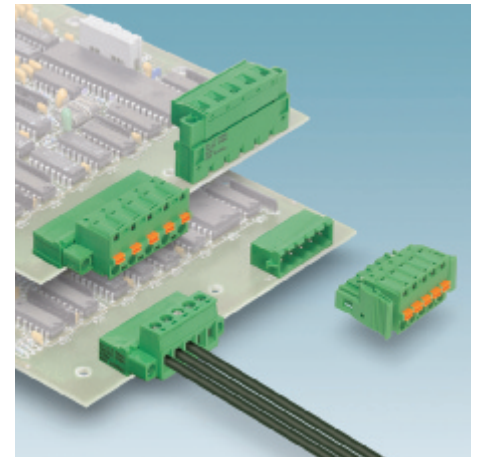
To prevent explosions, we must know exactly what causes them. Explosions occur when oxygen, a combustible material, and a source of combustion come into contact with each other. There must be a critical point of intersection between these three factors.

A potentially explosive material is defined as a combustible material which is present as a gas, vapor or dust. The source of combustion may be sparks or thermal effects. The oxygen provides the explosive atmosphere. Using components with Ex approval significantly minimizes the risk that a device will act as a source of combustion. The plug-in connectors with Ex approval are specially designed for use in potentially explosive areas.



The plug-in connectors have component approval according to the standards IEC/EN 60079-0 and IEC/EN 60079-7, which define the requirements for devices in potentially explosive atmospheres. The components are designed for use in the field of increased safety. Increased safety - also referred to as Ex e - is achieved by measures undertaken during construction. It stipulates, for example, the air and creepage distances of the live components, in order to prevent generation of sparks.

In addition, the connection between the header and the PCB and between the header and the plug must be additionally secured against unintentional loosening as a result of external influences, such as vibration. Either the header can be screwed to the PCB or the solder pins can be staggered. The screw or self-locking flange ensures a secure connection between the header and plug.


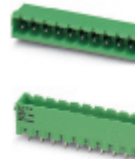













Technical data:

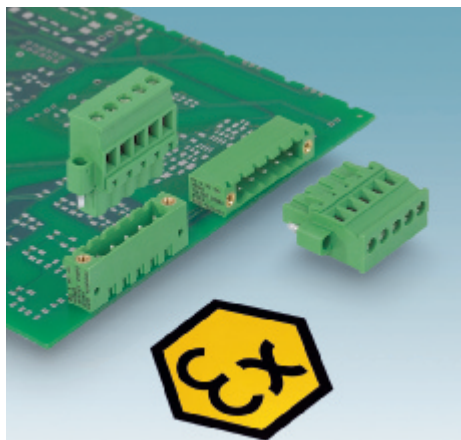
- Ex marking: 0344 Ⓜ II 2 GD Ex e IIC Gb
- Examination certificate: Kema 10ATEX0196U
- IECEx certificate: IECEx KEM 10.0093U
- Conductor connection: screw and push-in spring connection
- Screw flange or self-locking flange
- Pitch: 5.08 and 7.62 mm
- Voltage: 176 to 352 V
- Current: 12 A
- Conductor cross section: 0.2 to 2.5 mm² (solid and stranded conductors)
- Number of positions: 2 to 12
- Horizontal or vertical conductor connection in comparison to plug-in direction
- Horizontal and vertical pin strips for wave soldering processes

Before using plug-in connectors with Ex approval, the installation instructions must be observed. These can be downloaded at www.phoenixcontact.com.

Cross-reference list CLASSIC COMBICON plug-in connectors with Ex approval

CLASSIC COMBICON plug	Type	Pitch in mm	CLASSIC COMBICON header			
			MSTB[V]...GF EX Catalog 2011 page 346	MSTB[V]A...G...RN EX Catalog 2011 page 347	IC[V]...GF EX page 255	GMSTB[V]...GF EX Catalog 2011 page 351
		5.08	•			
		5.08		•		
		5.08			•	
		7.62				•
	MSTB...STF EX Catalog 2011 page 345	5.08	•			
	MVSTB[R][W] page 251	5.08	•			
	IC...STF EX page 253	5.08			•	
	FKC...STF EX Catalog 2011 page 345	5.08	•			
	FKC...ST...RF EX Catalog 2011 page 345	5.08		•		
	FKIC...STF EX page 253	5.08			•	
	GMSTB...STF EX Catalog 2011 page 349	7.62				•
	GMVSTB[R][W]...STF EX page 257	7.62				•
	GFKC...STF EX Catalog 2011 page 349	7.62				•

Plug-in connectors for the Ex area with 5.08 mm pitch






- Hazardous area approval for voltages up to 176 V
- Plug-in direction vertical to the conductor axis
- For more application and installation instructions, please go to the hazardous area section at www.phoenixcontact.net/catalog and see page 248

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

The maximum torque for the screw flange is 0.3 Nm.


For accessories, see COMBICON catalog

For all types	Type	Page
	Keying profile CP-MSTB Order No. 1734634	
	Marker cards SK 5,08/3,8	842
	Screwdriver SZS 0,6 x 3,5 Order No. 1205053	


Technical Data

Ex e terminal blocks as per EN/IEC 60079-0 and EN/IEC 60079-7	
Ex marking	ATEX-RL/IEC60079-0
Examination certificate	
IECEX certificate	
Rated voltage	[V] 176
Rated current	[A]/[2.5 mm²] 12
Connection capacity	
Solid/stranded	[mm²] 0.2 - 2.5/0.2 - 2.5
Solid/stranded	AWG -/24 - 12
General data	
Stripping length	[mm] 7
Screw thread	M3
Tightening torque	[Nm] 0.5 - 0.6
Type of insulation material/insulation material group	PA/I
Inflammability class according to UL 94	V0
Drill hole diameter/pin dimensions	[mm] -/-

MVSTBR 2,5/ 2-STF-5,08 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
176
12
0.2 - 2.5/0.2 - 2.5
-/24 - 12
7
M3
0.5 - 0.6
PA/I
V0
-/-

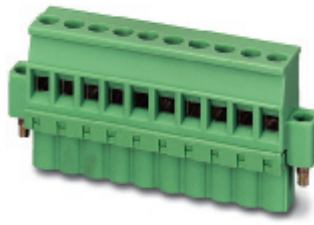
MVSTBW 2,5/ 2-STF-5,08 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
176
12
0.2 - 2.5/0.2 - 2.5
-/24 - 12
7
M3
0.5 - 0.6
PA/I
V0
-/-

No. of pos.	Dim. a [mm]
2	5.08
3	10.16
4	15.24
5	20.32
6	25.40
7	30.48
8	35.56
9	40.64
10	45.72
11	50.80
12	55.88



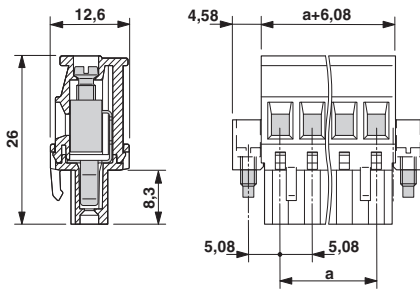
Conductor entry facing the coding side, with screw connection and screw flange



Conductor entry facing the rippled side, with screw connection and screw flange

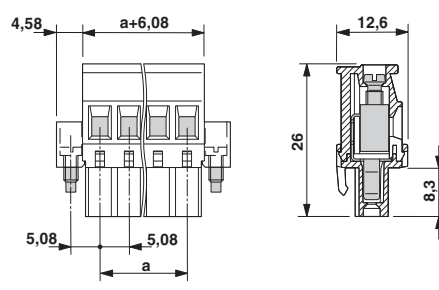
Ex: KEMA

Dimensional drawing



Ex: KEMA

Dimensional drawing



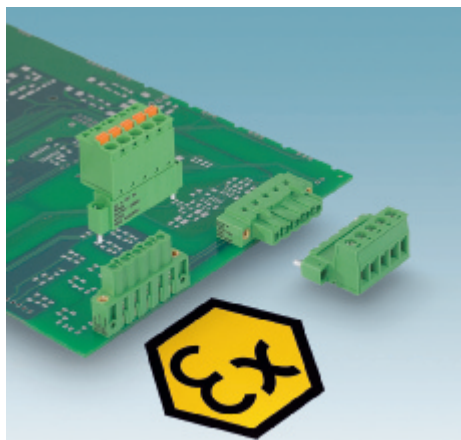
Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
MVSTBR 2,5/ 2-STF-5,08 EX	1809678	50
MVSTBR 2,5/ 3-STF-5,08 EX	1809681	50
MVSTBR 2,5/ 4-STF-5,08 EX	1809694	50
MVSTBR 2,5/ 5-STF-5,08 EX	1809704	50
MVSTBR 2,5/ 6-STF-5,08 EX	1809717	50
MVSTBR 2,5/ 7-STF-5,08 EX	1809720	50
MVSTBR 2,5/ 8-STF-5,08 EX	1809733	50
MVSTBR 2,5/ 9-STF-5,08 EX	1809746	50
MVSTBR 2,5/10-STF-5,08 EX	1809759	50
MVSTBR 2,5/11-STF-5,08 EX	1809762	50
MVSTBR 2,5/12-STF-5,08 EX	1809775	50

Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
MVSTBW 2,5/ 2-STF-5,08 EX	1809788	50
MVSTBW 2,5/ 3-STF-5,08 EX	1809791	50
MVSTBW 2,5/ 4-STF-5,08 EX	1809801	50
MVSTBW 2,5/ 5-STF-5,08 EX	1809814	50
MVSTBW 2,5/ 6-STF-5,08 EX	1809827	50
MVSTBW 2,5/ 7-STF-5,08 EX	1809830	50
MVSTBW 2,5/ 8-STF-5,08 EX	1809843	50
MVSTBW 2,5/ 9-STF-5,08 EX	1809856	50
MVSTBW 2,5/10-STF-5,08 EX	1809869	50
MVSTBW 2,5/11-STF-5,08 EX	1809872	50
MVSTBW 2,5/12-STF-5,08 EX	1809885	50

Inverted plug-in connectors for the Ex area with 5.08 mm pitch



- Hazardous area approval for voltages up to 176 V
- Plug-in direction parallel to the conductor axis
- For more application and installation instructions, please go to the hazardous area section at www.phoenixcontact.net/catalog and see page 248

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

The maximum torque for the screw flange is 0.3 Nm.


For accessories, see COMBICON catalog

For all types	Type	Page
	Keying profile CP-MSTB Order No. 1734634	
	Marker cards SK 5,08/3,8	842
Only for IC 2,5/...-STF-5,08 EX		
	Screwdriver SZS 0,6 x 3,5 Order No. 1205053	
Only for FKIC 2,5/...-STF-5,08 EX		
	Strain relief STZ ...-FKC-5,08	
	Test plug MPS	855


Technical Data

Ex e terminal blocks as per EN/IEC 60079-0 and EN/IEC 60079-7	
Ex marking	ATEX-RL/IEC60079-0
Examination certificate	
IECEX certificate	
Rated voltage	[V]
Rated current	[A]/[2.5 mm²]
Connection capacity	
Solid/stranded	[mm²]
Solid/stranded	AWG
General data	
Stripping length	[mm]
Screw thread	
Tightening torque	[Nm]
Type of insulation material/insulation material group	
Inflammability class according to UL 94	
Drill hole diameter/pin dimensions	[mm]

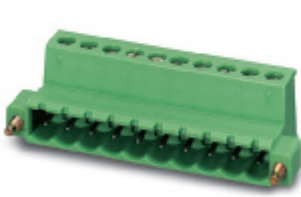
IC 2,5/ 2-STF-5,08 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
176
12
0.2 - 2.5/0.2 - 2.5
-/24 - 12
7
M3
0.5 - 0.6
PA/I
V0
-/-

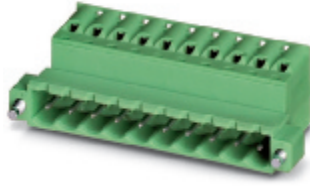
FKIC 2,5/ 2-STF-5,08 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
176
12
0.2 - 2.5/0.2 - 2.5
-/24 - 12
10
-
-
PA/I
V0
-/-

No. of pos.	Dim. a [mm]
2	5.08
3	10.16
4	15.24
5	20.32
6	25.40
7	30.48
8	35.56
9	40.64
10	45.72
11	50.80
12	55.88



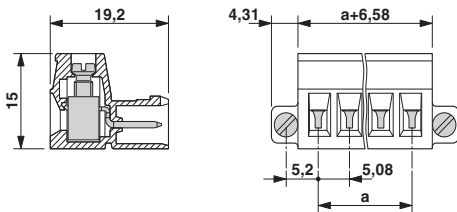
With screw connection and screw flange



With push-in spring connection and screw flange

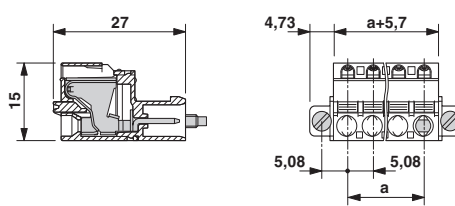
Ex: KEMA

Dimensional drawing



Ex: KEMA

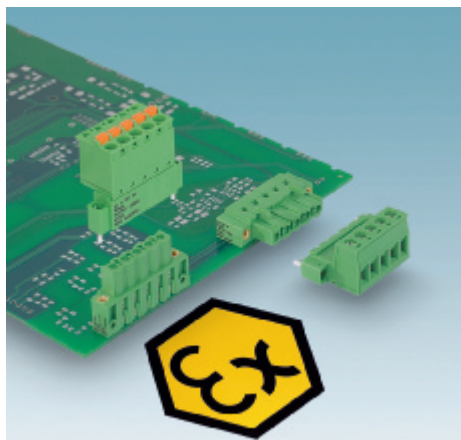
Dimensional drawing



Ordering data		
Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
IC 2,5/ 2-STF-5,08 EX	1810117	50
IC 2,5/ 3-STF-5,08 EX	1810120	50
IC 2,5/ 4-STF-5,08 EX	1810133	50
IC 2,5/ 5-STF-5,08 EX	1810146	50
IC 2,5/ 6-STF-5,08 EX	1810159	50
IC 2,5/ 7-STF-5,08 EX	1810162	50
IC 2,5/ 8-STF-5,08 EX	1810175	50
IC 2,5/ 9-STF-5,08 EX	1810188	50
IC 2,5/10-STF-5,08 EX	1810191	50
IC 2,5/11-STF-5,08 EX	1810201	50
IC 2,5/12-STF-5,08 EX	1810214	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
FKIC 2,5/ 2-STF-5,08 EX	1810227	50
FKIC 2,5/ 3-STF-5,08 EX	1810230	50
FKIC 2,5/ 4-STF-5,08 EX	1810243	50
FKIC 2,5/ 5-STF-5,08 EX	1810256	50
FKIC 2,5/ 6-STF-5,08 EX	1810269	50
FKIC 2,5/ 7-STF-5,08 EX	1810272	50
FKIC 2,5/ 8-STF-5,08 EX	1810285	50
FKIC 2,5/ 9-STF-5,08 EX	1810298	50
FKIC 2,5/10-STF-5,08 EX	1810308	50
FKIC 2,5/11-STF-5,08 EX	1810311	50
FKIC 2,5/12-STF-5,08 EX	1810324	50

Inverted plug-in connectors for the Ex area with 5.08 mm pitch







- Hazardous area approval for voltages up to 176 V
- Headers for wave soldering processes
- For more application and installation instructions, please go to the hazardous area section at www.phoenixcontact.net/catalog and see page 248

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.


For accessories, see COMBICON catalog

For all types	Type	Page
	Keying profile CP-MSTB Order No. 1734634	
	Marker cards SK 5,08/3,8	842
	Reducing plug RPS Order No. 0201647	855
	Test plug MPS	855


Technical Data

Ex e terminal blocks as per EN/IEC 60079-0 and EN/IEC 60079-7	
Ex marking	ATEX-RL/IEC60079-0
Examination certificate	
IECEX certificate	
Rated voltage	[V]
Rated current	[A]/[2.5 mm ²]
Connection capacity	
Solid/stranded	[mm ²]
Solid/stranded	AWG
General data	
Stripping length	[mm]
Screw thread	
Tightening torque	[Nm]
Type of insulation material/insulation material group	
Inflammability class according to UL 94	
Drill hole diameter/pin dimensions	[mm]

IC 2,5/ 2-GF-5,08 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
176
12
-/-
-/-
-
-
-
PA/I
V0
1.4/1,2 x 0,5

ICV 2,5/ 2-GF-5,08 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
176
12
-/-
-/-
-
-
-
PA/I
V0
1.4/1,2 x 0,5

No. of pos.	Dim. a [mm]
2	5.08
3	10.16
4	15.24
5	20.32
6	25.40
7	30.48
8	35.56
9	40.64
10	45.72
11	50.80
12	55.88



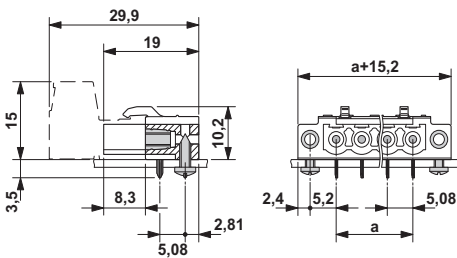
With threaded flange,
plug-in direction parallel to the PCB



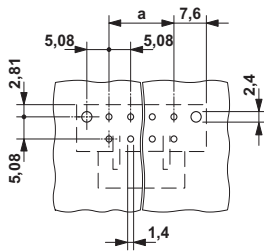
With threaded flange,
plug-in direction vertical to the PCB

Ex:

Dimensional drawing

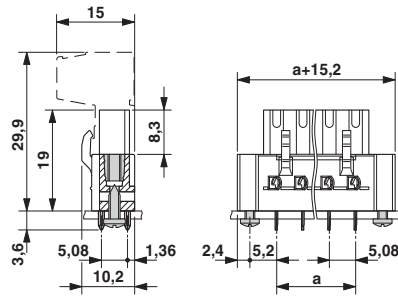


Drilling diagram

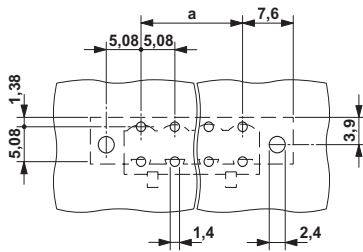


Ex:

Dimensional drawing



Drilling diagram



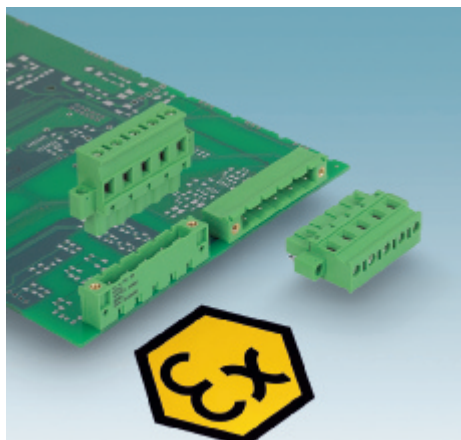
Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
IC 2,5/ 2-GF-5,08 EX	1810337	50
IC 2,5/ 3-GF-5,08 EX	1810340	50
IC 2,5/ 4-GF-5,08 EX	1810353	50
IC 2,5/ 5-GF-5,08 EX	1810366	50
IC 2,5/ 6-GF-5,08 EX	1810379	50
IC 2,5/ 7-GF-5,08 EX	1810382	50
IC 2,5/ 8-GF-5,08 EX	1810395	50
IC 2,5/ 9-GF-5,08 EX	1810405	50
IC 2,5/10-GF-5,08 EX	1810418	50
IC 2,5/11-GF-5,08 EX	1810421	50
IC 2,5/12-GF-5,08 EX	1810434	50

Ordering data

Type	Order No.	Pcs. / Pkt.
5.08 mm pitch, color: green		
ICV 2,5/ 2-GF-5,08 EX	1810447	50
ICV 2,5/ 3-GF-5,08 EX	1810450	50
ICV 2,5/ 4-GF-5,08 EX	1810463	50
ICV 2,5/ 5-GF-5,08 EX	1810476	50
ICV 2,5/ 6-GF-5,08 EX	1810489	50
ICV 2,5/ 7-GF-5,08 EX	1810492	50
ICV 2,5/ 8-GF-5,08 EX	1810502	50
ICV 2,5/ 9-GF-5,08 EX	1810515	50
ICV 2,5/10-GF-5,08 EX	1810528	50
ICV 2,5/11-GF-5,08 EX	1810531	50
ICV 2,5/12-GF-5,08 EX	1810544	50

Plug-in connectors for the Ex area with 7.62 mm pitch






- Ex approval for voltages up to 352 V
- Plug-in direction vertical to the conductor axis
- For more application and installation instructions, please go to the hazardous area section at www.phoenixcontact.net/catalog and see page 248

Notes:

In accordance with DIN EN 61984, COMBICON plug-in connectors have no switching power. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

The maximum torque for the screw flange is 0.3 Nm.


For accessories, see COMBICON catalog

For all types	Type	Page
	Keying profile CP-MSTB Order No. 1734634	
	Marker cards SK 7,62/5	844
	Screwdriver SZS 0,6 x 3,5 Order No. 1205053	


Technical Data

Ex e terminal blocks as per EN/IEC 60079-0 and EN/IEC 60079-7	
Ex marking	ATEX-RL/IEC60079-0
Examination certificate	
IECEX certificate	
Rated voltage	[V]
Rated current	[A]/[2.5 mm²]
Connection capacity	
Solid/stranded	[mm²]
Solid/stranded	AWG
General data	
Stripping length	[mm]
Screw thread	
Tightening torque	[Nm]
Type of insulation material/insulation material group	
Inflammability class according to UL 94	
Drill hole diameter/pin dimensions	[mm]

GMVSTBR 2,5/ 2-STF-7,62 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
352
12
0.2 - 2.5/0.2 - 2.5
-/24 - 12
7
M3
0.5 - 0.6
PA/I
V0
-/-

GMVSTBW 2,5/ 2-STF-7,62 EX

0344  II 2GD Ex e IIC Gb
KEMA 10ATEX0196 U
IECEX KEM 10.0093U
352
12
0.2 - 2.5/0.2 - 2.5
-/24 - 12
7
M3
0.5 - 0.6
PA/I
V0
-/-

No. of pos.	Dim. a [mm]
2	7.62
3	15.24
4	22.86
5	30.48
6	38.10
7	45.72
8	53.34
9	60.96
10	68.58
11	76.20
12	83.82



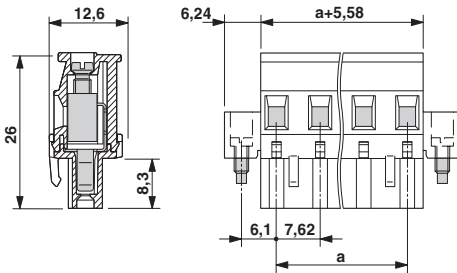
Conductor entry facing the coding side, with screw connection and screw flange



Conductor entry facing the rippled side, with screw connection and screw flange

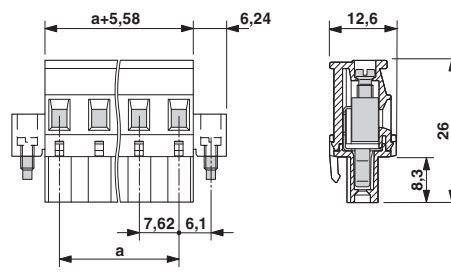
Ex:

Dimensional drawing



Ex:

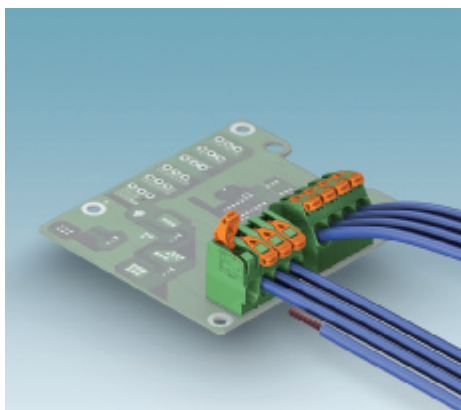
Dimensional drawing



Ordering data		
Type	Order No.	Pcs. / Pkt.
Pitch 7.62 mm, color: green		
GMVSTBR 2,5/ 2-STF-7,62 EX	1809898	50
GMVSTBR 2,5/ 3-STF-7,62 EX	1809908	50
GMVSTBR 2,5/ 4-STF-7,62 EX	1809911	50
GMVSTBR 2,5/ 5-STF-7,62 EX	1809924	50
GMVSTBR 2,5/ 6-STF-7,62 EX	1809937	50
GMVSTBR 2,5/ 7-STF-7,62 EX	1809940	50
GMVSTBR 2,5/ 8-STF-7,62 EX	1809953	50
GMVSTBR 2,5/ 9-STF-7,62 EX	1809966	50
GMVSTBR 2,5/10-STF-7,62 EX	1809979	50
GMVSTBR 2,5/11-STF-7,62 EX	1809982	50
GMVSTBR 2,5/12-STF-7,62 EX	1809995	50

Ordering data		
Type	Order No.	Pcs. / Pkt.
Pitch 7.62 mm, color: green		
GMVSTBW 2,5/ 2-STF-7,62 EX	1810007	50
GMVSTBW 2,5/ 3-STF-7,62 EX	1810010	50
GMVSTBW 2,5/ 4-STF-7,62 EX	1810023	50
GMVSTBW 2,5/ 5-STF-7,62 EX	1810036	50
GMVSTBW 2,5/ 6-STF-7,62 EX	1810049	50
GMVSTBW 2,5/ 7-STF-7,62 EX	1810052	50
GMVSTBW 2,5/ 8-STF-7,62 EX	1810065	50
GMVSTBW 2,5/ 9-STF-7,62 EX	1810078	50
GMVSTBW 2,5/10-STF-7,62 EX	1810081	50
GMVSTBW 2,5/11-STF-7,62 EX	1810094	50
GMVSTBW 2,5/12-STF-7,62 EX	1810104	50

PL series up to 6 mm²



- Fast connection technology, thanks to tool-free "one-hand tilting lever principle", for conductor cross sections up to 6 mm² and a current carrying capacity up to 41 A
- Low actuation forces
- Unlimited 600 V UL approval already available with 7.5 mm pitch with zigzag pinning
- Color coding from position to position thanks to terminal blocks that can be mounted side by side and lever colors
- Integrated touch connection

Notes:

When aligning versions with double pinning, other rated insulation voltages can occur.




1) UL/CUL on request.

2) Please observe the current carrying capacity curves and laboratory data sheets. Current carrying capacity curves can be found at www.phoenixcontact.net/catalog.

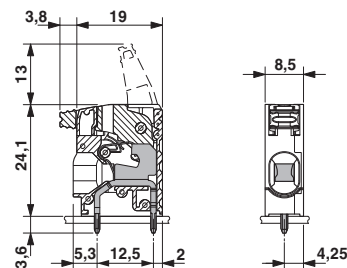


Horizontal connection direction, double pinning

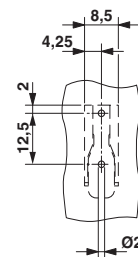
For accessories, see COMBICON catalog

For all types	Type	Page
	Marker cards SK U/3,8 WH: UNPRINTED Order No. 0803906	
	Ferrules with and without plastic sleeve	858
	Crimping pliers for 0.25 to 6 mm ² CRIMPFOX 6 Order No. 1212034	

Dimensional drawing



Drilling diagram



Technical Data

Technical data in accordance with IEC/DIN VDE	
Rated current/conductor cross section	[A]/[mm ²]
Rated insulation voltage for pollution degree 2	[V]
Pitch	[mm]
Connection capacity	
Solid & multi-strand/stranded	[mm ²]/[mm ²]/AWG
Stranded with ferrules without plastic sleeve	[mm ²]
Stranded with ferrules with plastic sleeve	[mm ²]
Multi-conductor connection capacity (two conductors with the same cross section)	
Solid & multi-strand/stranded	[mm ²]
Stranded with ferrules without plastic sleeve	[mm ²]
Stranded with TWIN ferrule with plastic sleeve	[mm ²]
Insulation coordination	
Surge voltage category/pollution degree	III/3 III/2 II/2
Rated insulation voltage	[V]
Rated surge voltage	[kV]
Approval data (UL/CUL)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
Approval data (CSA)	Use Group
Nominal voltage	[V]
Nominal current	[A]
Connection capacity AWG	AWG
General data	
Stripping length	[mm]
Type of insulation material/insulation material group	
Inflammability class according to UL 94	
Drill hole diameter/pin dimensions	[mm]

	41 ² /6
	1000
	7.5
	0.2 - 6/0.2 - 6/24 - 8
	0.2 - 6
	0.2 - 6
	-/-
	-
	0.5 - 2.5
	III/3 III/2 II/2
	1000 1000 1000
	8 8 8
	B C D
	- - -
	- - -
	- - -
	- - -
	- - -
	- - -
	- - -
	12
	PA/I
	V0
	2/1.2 x 1.5 mm

No. of pos.	Dim. a [mm]
1	0.00
2	7.50
3	15.00
4	22.50
5	30.00
6	37.50
7	45.00
8	52.50
9	60.00
10	67.50
11	75.00
12	82.50

Ordering data

Type	Order No.	Pcs. / Pkt.
PLH 5/1-7,5	1792096	50



Horizontal connection direction,
zig-zag pinning, 600 V UL approval

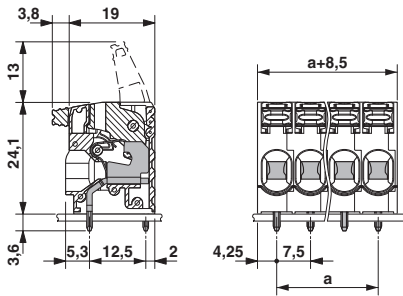


30° angled connection direction,
double pinning

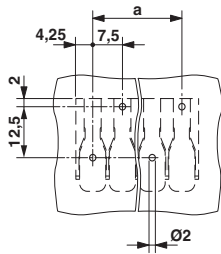


30° angled connection direction,
zig-zag pinning, 600 V UL approval

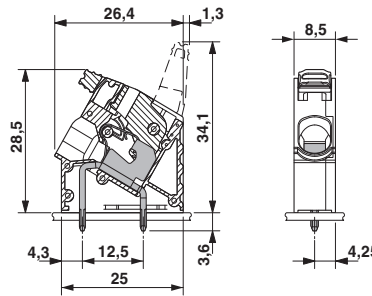
Dimensional drawing



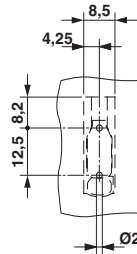
Drilling diagram



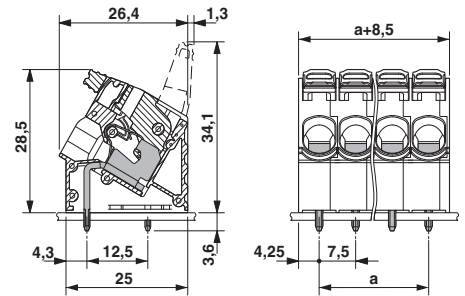
Dimensional drawing



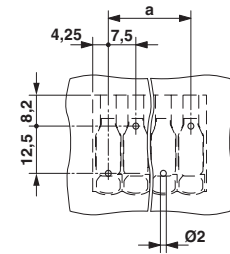
Drilling diagram



Dimensional drawing



Drilling diagram



Ordering data

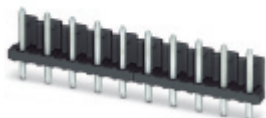
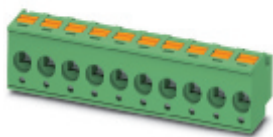
Type	Order No.	Pcs. / Pkt.
PLH 5/ 2-7,5-ZF	1792106	50
PLH 5/ 3-7,5-ZF	1792119	50
PLH 5/ 4-7,5-ZF	1792122	50
PLH 5/ 5-7,5-ZF	1792135	50
PLH 5/ 6-7,5-ZF	1792148	50
PLH 5/ 7-7,5-ZF	1792151	50
PLH 5/ 8-7,5-ZF	1792164	50
PLH 5/ 9-7,5-ZF	1792177	50
PLH 5/10-7,5-ZF	1792180	50
PLH 5/11-7,5-ZF	1792193	50
PLH 5/12-7,5-ZF	1792203	50

Ordering data

Type	Order No.	Pcs. / Pkt.
PLA 5/ 1-7,5	1792216	50

Ordering data

Type	Order No.	Pcs. / Pkt.
PLA 5/ 2-7,5-ZF	1792229	50
PLA 5/ 3-7,5-ZF	1792232	50
PLA 5/ 4-7,5-ZF	1792245	50
PLA 5/ 5-7,5-ZF	1792258	50
PLA 5/ 6-7,5-ZF	1792261	50
PLA 5/ 7-7,5-ZF	1792274	50
PLA 5/ 8-7,5-ZF	1792287	50
PLA 5/ 9-7,5-ZF	1792290	50
PLA 5/10-7,5-ZF	1792300	50
PLA 5/11-7,5-ZF	1792313	50
PLA 5/12-7,5-ZF	1792326	50

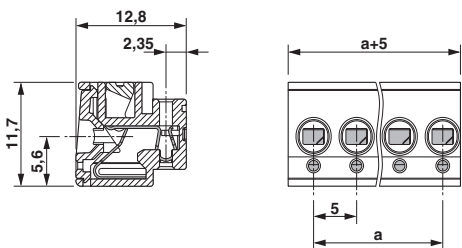


Spring-cage plug, can be plugged into PST 1,3/...-5,0 and PST 1,3/...-5,0-SF pin strips

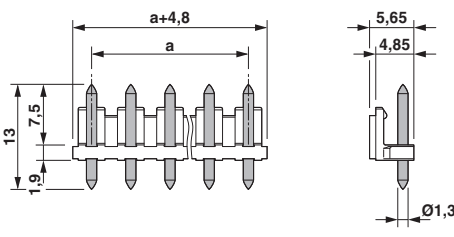
Pin strip with snap-lock fitting

Spring-cage PCB terminal block, 7.5 mm pitch

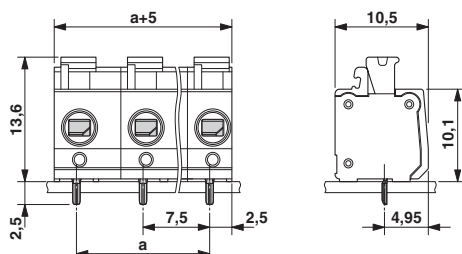
Dimensional drawing



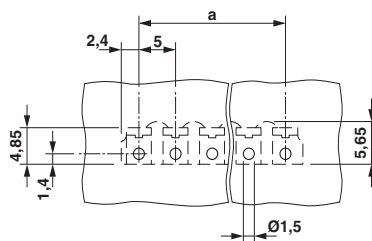
Dimensional drawing



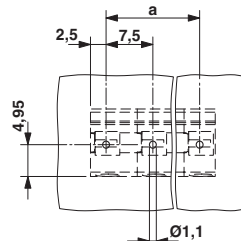
Dimensional drawing



Drilling diagram



Drilling diagram



Ordering data

Type	Order No.	Pcs. / Pkt.
5.0 mm pitch, color: green		
PTS 1,5/ 2-PH-5,0	1805517	250
PTS 1,5/ 3-PH-5,0	1805520	250
PTS 1,5/ 4-PH-5,0	1805533	250
PTS 1,5/ 5-PH-5,0	1805546	100
PTS 1,5/ 6-PH-5,0	1805559	100
PTS 1,5/ 7-PH-5,0	1805562	100
PTS 1,5/ 8-PH-5,0	1805575	100
PTS 1,5/ 9-PH-5,0	1805588	100
PTS 1,5/10-PH-5,0	1805591	100
PTS 1,5/11-PH-5,0	1805601	50
PTS 1,5/12-PH-5,0	1805614	50

Ordering data

Type	Order No.	Pcs. / Pkt.
Pitch 5.0 mm, color: black		
PST 1,3/ 2-5,0-SF	1805627	250
PST 1,3/ 3-5,0-SF	1805630	250
PST 1,3/ 4-5,0-SF	1805643	250
PST 1,3/ 5-5,0-SF	1805656	100
PST 1,3/ 6-5,0-SF	1805669	100
PST 1,3/ 7-5,0-SF	1805672	100
PST 1,3/ 8-5,0-SF	1805685	100

Ordering data

Type	Order No.	Pcs. / Pkt.
7.5 mm pitch, color: green		
PTS 1,5/ 2-7,5-H	1703083	250
PTS 1,5/ 3-7,5-H	1703084	250
PTS 1,5/ 4-7,5-H	1703086	250
PTS 1,5/ 5-7,5-H	1703087	100
PTS 1,5/ 6-7,5-H	1703088	100
PTS 1,5/ 7-7,5-H	1703090	100
PTS 1,5/ 8-7,5-H	1703091	100
PTS 1,5/ 9-7,5-H	1703093	100
PTS 1,5/10-7,5-H	1703094	100
PTS 1,5/11-7,5-H	1703095	50
PTS 1,5/12-7,5-H	1703096	50

Electronics housing - COMBICON housing

UM-ALU 4 aluminum profile housing

The rugged UM-ALU 4 DIN rail housing is available from stock in the anodized basic profile widths 75 mm and 100.5 mm, each with eight length options from 42.5 mm to 990 mm.

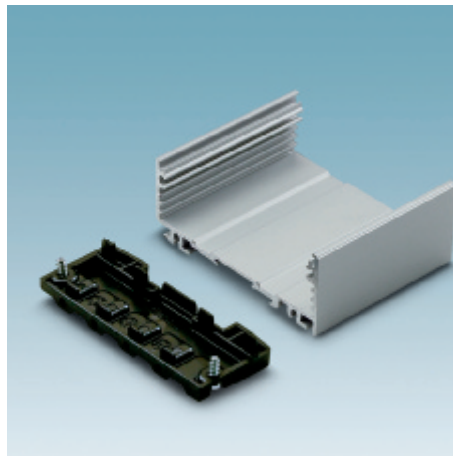
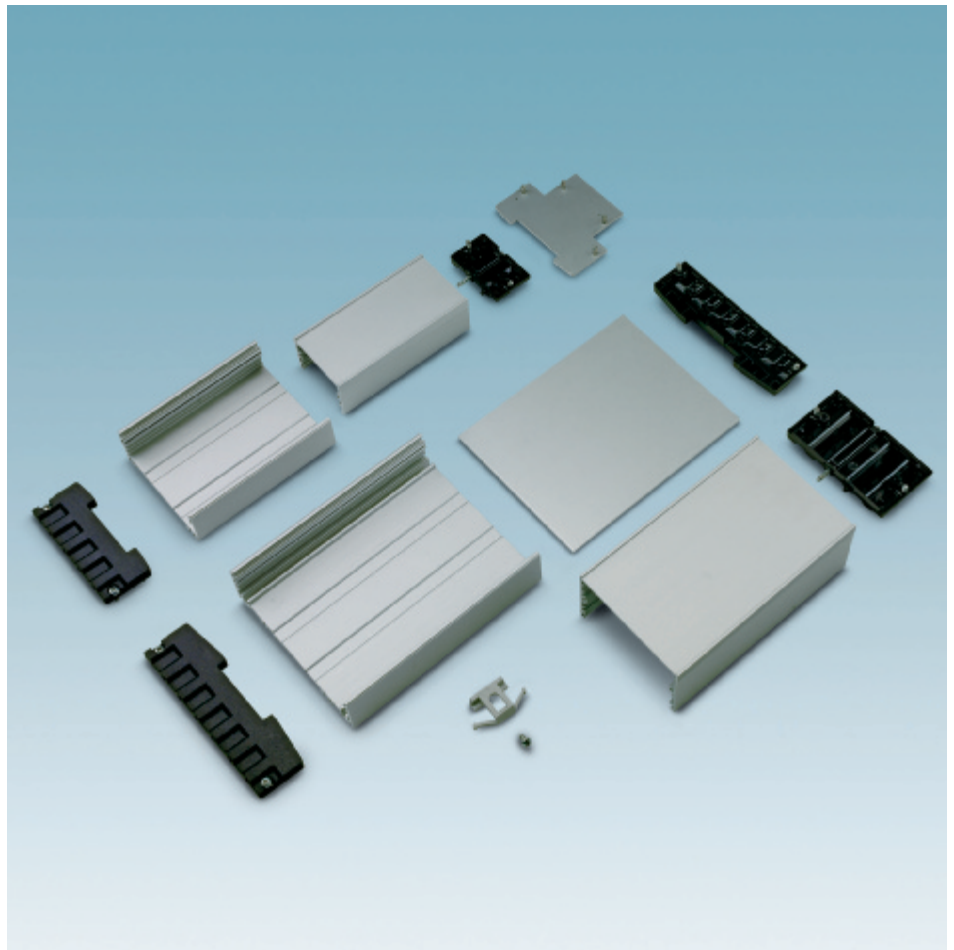
It has four different integrated guide levels for PCB mounting. Either anodized aluminum plates or well-designed plastic caps can be supplied for closing the sides. At the front, flush front plates close the housing, preferably in the top guide level of the basic profile. These can be combined, in a modular way, with covering hood profiles, which are also available in two widths, so that individual areas of the board are effectively protected against mechanical impairment and interference.

Mounting on a 35 mm DIN rail according to DIN EN 60715 TH35 is carried out with a snap-on foot which can be screwed on anywhere on the underside.

Thanks to the aluminum alloy, the housing is particularly well-suited for use in extreme temperatures from minus 40°C up to 100°C. The maximum contact protection is IP40 according to DIN EN 60529, depending on the connection technology and design.

The range is rounded off by a comprehensive range of accessories, such as a potential ground contact or fixing elements for wall mounting.

Individual profile lengths, customer-specific front plates or membrane keypads can also be supplied.



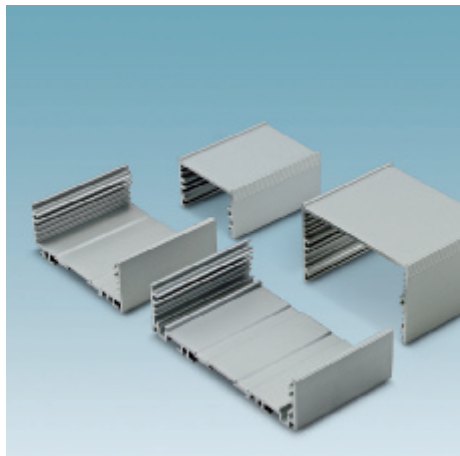
Rugged press-drawn section

Both the basic profile and the hood profile are made of an anodized aluminum press-drawn section. In addition to mechanical strength, the material's outstanding properties also include an extremely high level of heat resistance and shielding against disruptive radiation and noise emission.



Variability in shape

A myriad of housing combinations can be formed by combining the basic profile with one of the two module profiles, which can be flexibly positioned. The available or customer-specific lengths ensure professional and tailor-made electronic housing.



Unrestricted assembly

PCB levels in the basic and hood profiles provide electronics engineers with the required flexibility for positioning various components or modules.



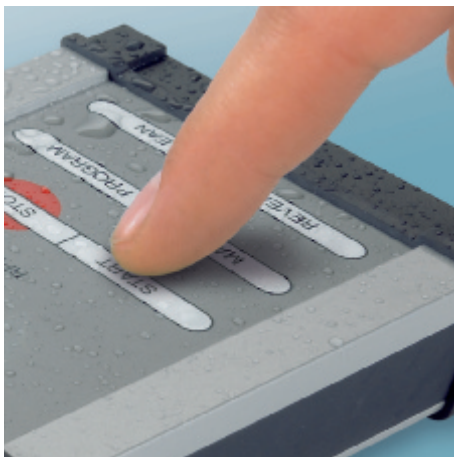
PE contacting

An optional PE contact can also be provided on the basic profile. The press-in technology penetrates the anodized layer and provides a conductive connection between the housing and the DIN rail. Contacting is via standard cable lugs for flat plugs according to DIN 46244-A6.3



DIN rail mounting

The freely-positionable foot element is used for fixing to the DIN rail. The housing is secured, as usual, by swinging it into place and latching. Best of all - no tools are needed for removal and it can be carried out effectively "blind" - simply gently push the housing vertically in relation to the DIN rail and tilt it out. Depending on the application, several foot elements can be mounted and used per housing.



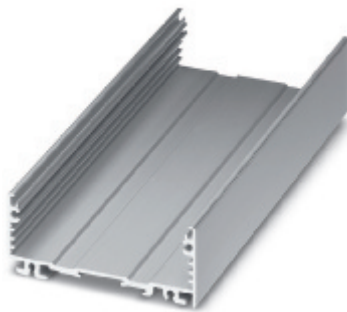
Individuality from the works

In addition to the products which can be ordered from the catalog, we offer an extensive range of additional services. Whether it be special profile lengths, additional mechanical processing and labeling or membrane keypads according to your requirements, our service team can help. Test us out!

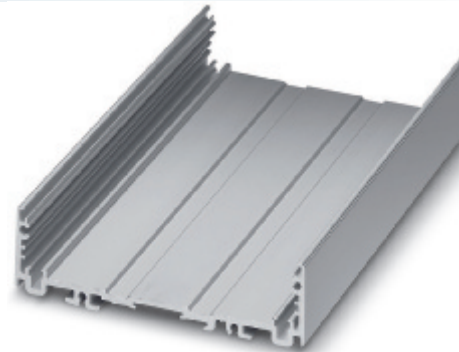
UM-ALU 4 aluminum profile housing

Notes:

For SF-TX-SET (Order No. 1212539) and SF-M-Set (Order No. 1212543) screwdriver set, see www.phoenixcontact.net/catalog.



Aluminum basic profile
Width: 72 mm



Aluminum basic profile
Width: 100.5 mm

Description	Ordering data			Ordering data		
	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Basic profile , one-piece						
Length 42.5 mm	UM-ALU 4-72 PROFILE 42,5	2200917	1	UM-ALU 4-100,5 PROFILE 42,5	2200935	1
Length 60 mm	UM-ALU 4-72 PROFILE 60	2200918	1	UM-ALU 4-100,5 PROFILE 60	2200936	1
Length 95 mm	UM-ALU 4-72 PROFILE 95	2200919	1	UM-ALU 4-100,5 PROFILE 95	2200937	1
Length 130 mm	UM-ALU 4-72 PROFILE 130	2200920	1	UM-ALU 4-100,5 PROFILE 130	2200938	1
Length 165 mm	UM-ALU 4-72 PROFILE 165	2200921	1	UM-ALU 4-100,5 PROFILE 165	2200939	1
Length 200 mm	UM-ALU 4-72 PROFILE 200	2200922	1	UM-ALU 4-100,5 PROFILE 200	2200940	1
Length 235 mm	UM-ALU 4-72 PROFILE 235	2200923	1	UM-ALU 4-100,5 PROFILE 235	2200941	1
Length 990 mm	UM-ALU 4-72 PROFILE 990	2200924	1	UM-ALU 4-100,5 PROFILE 990	2200942	1
Basic profile front plate						
Length 42.5 mm	UM-ALU 4-72 FRONT 42,5	2200925	1	UM-ALU 4-100,5 FRONT 42,5	2200943	1
Length 60 mm	UM-ALU 4-72 FRONT 60	2200926	1	UM-ALU 4-100,5 FRONT 60	2200944	1
Length 95 mm	UM-ALU 4-72 FRONT 95	2200927	1	UM-ALU 4-100,5 FRONT 95	2200945	1
Length 130 mm	UM-ALU 4-72 FRONT 130	2200928	1	UM-ALU 4-100,5 FRONT 130	2200946	1
Length 165 mm	UM-ALU 4-72 FRONT 165	2200929	1	UM-ALU 4-100,5 FRONT 165	2200947	1
Length 200 mm	UM-ALU 4-72 FRONT 200	2200930	1	UM-ALU 4-100,5 FRONT 200	2200948	1
Length 235 mm	UM-ALU 4-72 FRONT 235	2200931	1	UM-ALU 4-100,5 FRONT 235	2200949	1
Length 990 mm	UM-ALU 4-72 FRONT 990	2200932	1	UM-ALU 4-100,5 FRONT 990	2200950	1
Side plate set , including snap-on foot with screws for basic profile, anodized aluminum	UM-ALU 4-72 COVER AL	2200933	1	UM-ALU 4-100,5 COVER AL	2200951	1
Profile cap set , including snap-on foot with screws for polyamide basic profile, black	UM-ALU 4-72 COVER PA BK	2200934	1	UM-ALU 4-100,5 COVER PA BK	2200952	1
Module profile , one-piece (U-shape), anodized aluminum, width 45 mm						
Length 25 mm	UM-ALU 4 AU45 L25	2200953	1	UM-ALU 4 AU45 L25	2200953	1
Length 42.5 mm	UM-ALU 4 AU45 L42,5	2200954	1	UM-ALU 4 AU45 L42,5	2200954	1
Length 60 mm	UM-ALU 4 AU45 L60	2200955	1	UM-ALU 4 AU45 L60	2200955	1
Length 95 mm	UM-ALU 4 AU45 L95	2200956	1	UM-ALU 4 AU45 L95	2200956	1
Length 130 mm	UM-ALU 4 AU45 L130	2200957	1	UM-ALU 4 AU45 L130	2200957	1
Length 165 mm	UM-ALU 4 AU45 L165	2200958	1	UM-ALU 4 AU45 L165	2200958	1
Length 200 mm	UM-ALU 4 AU45 L200	2200959	1	UM-ALU 4 AU45 L200	2200959	1
Length 235 mm	UM-ALU 4 AU45 L235	2200960	1	UM-ALU 4 AU45 L235	2200960	1
Length 990 mm	UM-ALU 4 AU45 L990	2200961	1	UM-ALU 4 AU45 L990	2200961	1
Module profile , one-piece (U-shape), anodized aluminum, width 75 mm						
Length 25 mm	UM-ALU 4 AU75 L25	2200962	1	UM-ALU 4 AU75 L25	2200962	1
Length 42.5 mm	UM-ALU 4 AU75 L42,5	2200963	1	UM-ALU 4 AU75 L42,5	2200963	1
Length 60 mm	UM-ALU 4 AU75 L60	2200964	1	UM-ALU 4 AU75 L60	2200964	1
Length 95 mm	UM-ALU 4 AU75 L95	2200965	1	UM-ALU 4 AU75 L95	2200965	1
Length 130 mm	UM-ALU 4 AU75 L130	2200966	1	UM-ALU 4 AU75 L130	2200966	1
Length 165 mm	UM-ALU 4 AU75 L165	2200967	1	UM-ALU 4 AU75 L165	2200967	1
Length 200 mm	UM-ALU 4 AU75 L200	2200968	1	UM-ALU 4 AU75 L200	2200968	1
Length 235 mm	UM-ALU 4 AU75 L235	2200969	1	UM-ALU 4 AU75 L235	2200969	1
Length 990 mm	UM-ALU 4 AU75 L990	2200970	1	UM-ALU 4 AU75 L990	2200970	1
Module cap set , including mounting screws, polyamide, black, 45 mm	UM-ALU 4 LID45 PA BK	2200971	1	UM-ALU 4 LID45 PA BK	2200971	1
Module cap set , including mounting screws, polyamide, black, 75 mm	UM-ALU 4 LID75 PA BK	2200972	1	UM-ALU 4 LID75 PA BK	2200972	1
	Accessories			Accessories		
Grounding clamp for making contact with DIN rail	UM-ALU 4 PE CONTACT	2200973	1	UM-ALU 4 PE CONTACT	2200973	1
Snap-in element for DIN rail including screw	UM-ALU 4 FOOT	2200974	1	UM-ALU 4 FOOT	2200974	1

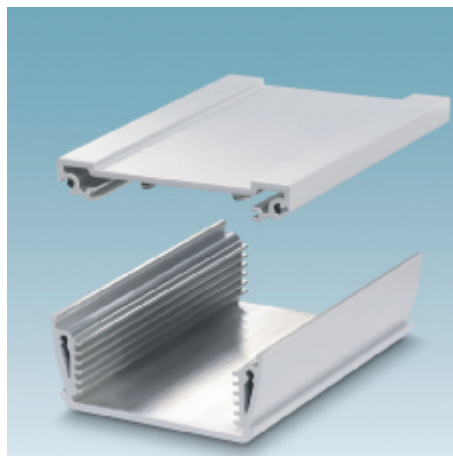
Handheld aluminum housing HC-ALU 6

The HC-ALU 6 split aluminum press-drawn section housing is available ex stock in widths of 53.5 mm, 78 mm, 100.5 mm, and 161 mm, each in four lengths from 100 mm to 1000 mm. It has integrated narrowly tiered guide levels for PCB mounting. The sides are closed by die-cast covers with matching molded seals for screwing to the profile. The screw channels for the self-tapping screws are located in a cavity, so that conductive chips cannot form in the internal electronics. On the exterior of the profile there is a shaped groove for accommodating decorative or printed strips, as well as optional matching wall fastenings for stationary use in the field.

Displays or membrane keypads can be inserted flush in the recessed housing front, thereby allowing ergonomic operation of HMI/hand held devices. Thanks to the aluminum alloy, the housing is particularly well-suited for use in extreme temperatures from minus 40°C to over 100°C. In addition to mechanical strength, the material properties also include an extremely high level of heat resistance and shielding against disruptive radiation and noise emission. The maximum contact protection is IP65 according to DIN EN 60529, depending on the connection technology and design.

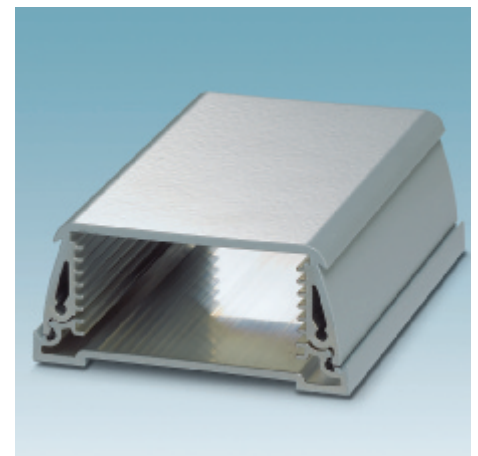
The range is rounded off by a comprehensive range of accessories, such as decorative strips or fixing elements for wall mounting.

Individual profile lengths, customer-specific front plates or membrane keypads can also be supplied.



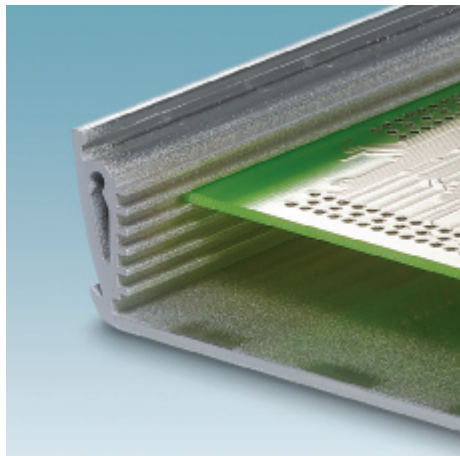
Split press-drawn section

The split housing enables the integration of elements which protrude through the front surface. Both profile halves securely latch together making integrating a membrane keypad or display child's play.



Ergonomic design

The trapezoidal external shape of the housing is concave on one side for improved ergonomics for the device operator. The level, smooth side of the housing also facilitates labeling.



Unrestricted assembly

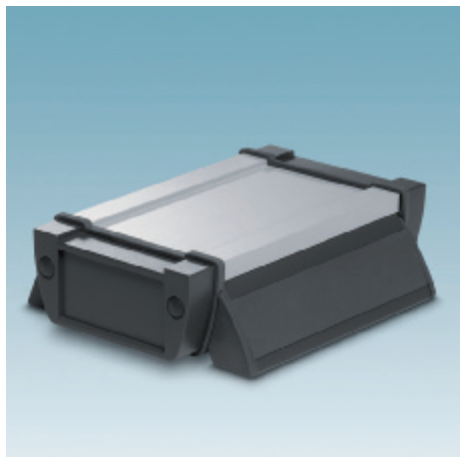
All PCBs have the same external dimensions and can be securely fixed in various locations in the housing. This provides the required flexibility for positioning various components or modules.



Intelligent interface

The COVERS have a 2 mm recessed surface for accommodating slides or labels. The version with mounting cover allows optional installation of plug-in connectors or sockets.

For improved EMC properties, an alternative version is available with a metal-filled seal.



Individual use

The sophisticated range of accessories opens up diverse applications. The grooves on the side of the housing can be fitted with decorative or printed strips. With the matching wall fastening, the housing can be used as a wall, operating or front plate solution.



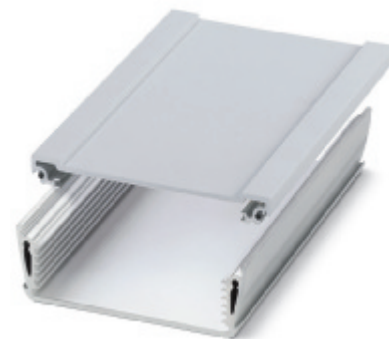
Added-value from the works

In addition to the products which can be ordered from the catalog, we offer an extensive range of additional services. Whether it be special profile lengths, additional mechanical processing and labeling, or membrane keypads according to your requirements, our service team can help. Test us out!

HC-ALU 6... handheld aluminum housing



Aluminum profile
Width: 53.5 mm

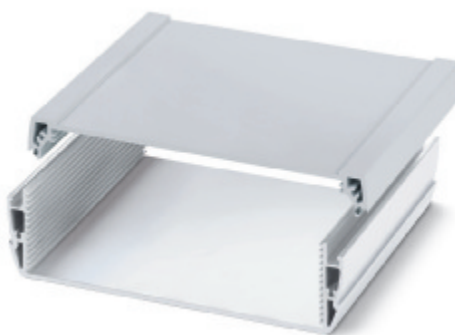


Aluminum profile
Width: 78 mm

Description	Ordering data			Ordering data		
	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Silver split profile , including cord seal						
Length 100 mm	HC-ALU 6-53,5 PROFILE 100	2200887	1	HC-ALU 6-78 PROFILE 100	2200892	1
Length 150 mm	HC-ALU 6-53,5 PROFILE 150	2200888	1	HC-ALU 6-78 PROFILE 150	2200893	1
Length 200 mm	HC-ALU 6-53,5 PROFILE 200	2200889	1	HC-ALU 6-78 PROFILE 200	2200894	1
Length 1000 mm	HC-ALU 6-53,5 PROFILE 1000	2200890	1	HC-ALU 6-78 PROFILE 1000	2200895	1
End cover , graphite gray, with screws and seal						
	HC-ALU 6-53,5 COVER GY	2200891	1	HC-ALU 6-78 COVER GY	2200896	1
End cover , graphite gray, with hinged flap, screws and seal						
	HC-ALU 6-53,5 DKL-COVER GY	2201121	1	HC-ALU 6-78 DKL-COVER GY	2201122	1
	Accessories			Accessories		
EMC seal , black	HC-ALU 6-53,5 SEAL EMC	2200907	10	HC-ALU 6-78 SEAL EMC	2200908	10
Decorative strip , dark gray, length = 98.4 mm	HC-ALU 6 DECO 100 GY	2200914	10	HC-ALU 6 DECO 100 GY	2200914	10
Decorative strip , dark gray, length = 148.4 mm						
	HC-ALU 6 DECO 150 GY	2200915	10	HC-ALU 6 DECO 150 GY	2200915	10
Decorative strip , dark gray, length = 198.4 mm	HC-ALU 6 DECO 200 GY	2200916	10	HC-ALU 6 DECO 200 GY	2200916	10
Panel fastening , including cover caps, for 100 mm profile section, graphite gray	HC-ALU 6 MOUNT 100 GY	2200911	2	HC-ALU 6 MOUNT 100 GY	2200911	2
Panel fastening , including cover caps, for 150 mm profile section, graphite gray	HC-ALU 6 MOUNT 150 GY	2200912	2	HC-ALU 6 MOUNT 150 GY	2200912	2
Panel fastening , including cover caps, for 200 mm profile section, graphite gray	HC-ALU 6 MOUNT 200 GY	2200913	2	HC-ALU 6 MOUNT 200 GY	2200913	2
Screwdriver set , Torx® with drill bit, 6-part, incl. rack, contents: TX 8 x 60; TX 10 x 80; TX 15 x 80; TX 20 x 100; TX 25 x 100; TX 30 x 115	SF-TXH SET	1212538	1	SF-TXH SET	1212538	1
Bit screwdriver set with quick-action chuck , 89 mm long slotted/cross-recessed (PZ and PH)/hex / Torx® bits, 17-part, in folding belt pouch, contents: PH 1,2,3 x 89; PZ 1,2,3 x 89; SL 1.5 x 5.5 x 89; TX 10-30 x 89; SW 3,4,5,6 x 89						
	SF-M SET	1212543	1	SF-M SET	1212543	1



Aluminum profile
Width: 100.5 mm



Aluminum profile
Width: 161 mm

Ordering data		
Type	Order No.	Pcs. / Pkt.
HC-ALU 6-100,5 PROFILE 100	2200897	1
HC-ALU 6-100,5 PROFILE 150	2200898	1
HC-ALU 6-100,5 PROFILE 200	2200899	1
HC-ALU 6-100,5 PROFILE 1000	2200900	1
HC-ALU 6-100,5 COVER GY	2200901	1
HC-ALU 6-100,5 DKL-COVER GY	2201123	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
HC-ALU 6-161 PROFILE 100	2200902	1
HC-ALU 6-161 PROFILE 150	2200903	1
HC-ALU 6-161 PROFILE 200	2200904	1
HC-ALU 6-161 PROFILE 1000	2200905	1
HC-ALU 6-161 COVER GY	2200906	1

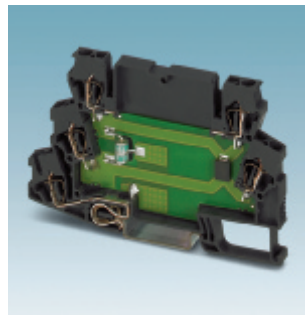
Accessories		
HC-ALU 6-100,5 SEAL EMC	2200909	10
HC-ALU 6 DECO 100 GY	2200914	10
HC-ALU 6 DECO 150 GY	2200915	10
HC-ALU 6 DECO 200 GY	2200916	10
HC-ALU 6 MOUNT 100 GY	2200911	2
HC-ALU 6 MOUNT 150 GY	2200912	2
HC-ALU 6 MOUNT 200 GY	2200913	2
SF-TXH SET	1212538	1
SF-M SET	1212543	1

Accessories		
HC-ALU 6-161 SEAL EMC	2200910	10
HC-ALU 6 DECO 100 GY	2200914	10
HC-ALU 6 DECO 150 GY	2200915	10
HC-ALU 6 DECO 200 GY	2200916	10
HC-ALU 6 MOUNT 100 GY	2200911	2
HC-ALU 6 MOUNT 150 GY	2200912	2
HC-ALU 6 MOUNT 200 GY	2200913	2
SF-TXH SET	1212538	1
SF-M SET	1212543	1



Set solution for building installation
GEB-SET

page 272



Modular terminal block with multi-stage
surge protection
TERMITRAB

page 273



Controller for supplying and monitoring
the surge protective devices
PLUGTRAB PT-IQ

page 276



Plug-in surge protective device for
MSR/data signals
PLUGTRAB PT-IQ

page 276



Protection for mobile phone antennas
with connection type N
COAXTRAB

page 280



Protection for mobile phone antennas
with connection type N
COAXTRAB

page 281



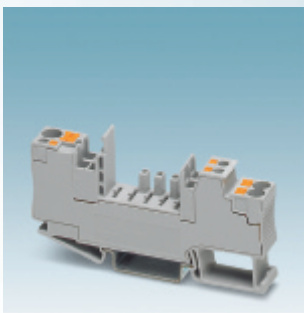
Protection for mobile phone antennas
with connection type 7/16
COAXTRAB

page 281



Plug-in electronic circuit breaker
COAXTRAB

page 284



Base element for plug-in circuit-breakers

page 286



Plug-in thermomagnetic circuit breakers with SFB characteristic curves

page 287



Plug-in thermomagnetic circuit breakers with M1 or F1 characteristic curves

page 288

POWER IEC/EN surge protection

Set solution for building installation

- Surge protection set for powerful basic protection
- Coordinated protective devices
- VAL-MS-T1/T2 lightning arrester for installation in the distribution
- Three device protection adapters (type 3) for protecting the power supply
- Two of these are equipped with additional signal line protection (TV/SAT or TAE)
- Cables and adapters are supplied as standard

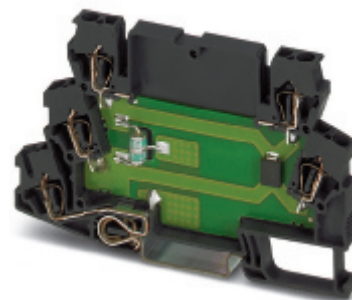
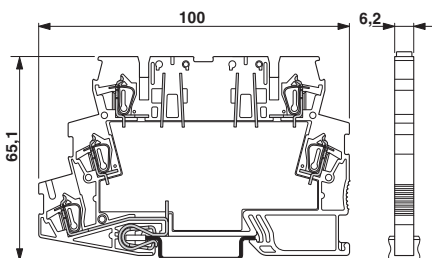


Set solution with surge protection for TAE and TV-SAT

Description	Ordering data		
	Type	Order No.	Pcs. / Pkt.
Building set, consisting of: 1 x VAL-MS-T1/T2 (surge arrester) 1 x MNT-1D (device protection adapter) 1 x MNT-TV-SAT D (device and TV-SAT protective adapter) 1 x MNT-TAE D (device and TAE protective adapter) 2 x adapter F to TV (IEC) plug 1 x KBL TV-SAT/150, 1 x KBL TV/150 1 x KBL TAE/150 (connecting cable)	GEB-SET-T1/T2 TAE/TV-SAT	2801022	1

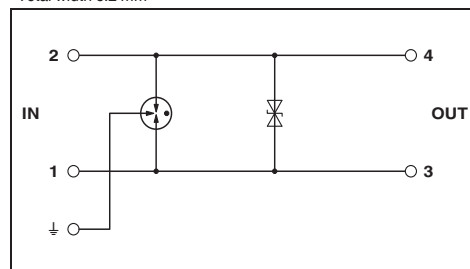
Modular terminal block with multi-stage surge protection
TERMITRAB

- Multi-stage modular terminal block with spring-cage connection
- For 2-wire impedance-sensitive signal circuits
- Quick-responding fine protection between the signal wires
- Additional coarse protection between the signal wires and ground
- Narrow design



Double wire (loop), floating

Total width 6.2 mm



Technical Data

Electrical data		
IEC category/EN type		C1/C2/C3/D1
Maximum continuous operating voltage U_c	DC/AC	30 V DC/21 V AC
Lightning test curr. I_{imp} (10/350) μ s	Per path	500 A
Nominal load current I_L		350 mA
Nominal discharge surge current I_n (8/20) μ s		
	Core-Core/Core-Ground	300 A/5 kA
Total surge current (8/20) μ s		10 kA
Output voltage limitation at 1 kV/ μ s		
	Core-Core/Core-Ground	≤ 45 V/ ≤ 950 V
Cut-off frequency f_g (3 dB)		
	Symmetrical in the 50 Ω system	3 MHz
	Symmetrical in the 150 Ω system	1 MHz
General data		
Connection data solid/stranded/AWG		0.2 ... 4 mm ² /0.2 ... 2.5 mm ² /24 - 12
Temperature range		-40°C ... 80°C
Degree of protection according to IEC 60529/EN 60529		IP20
Inflammability class according to UL 94		V0
Test standards		IEC 61643-21/A1 2008/EN 61643-21/A1 2009

Ordering data

Description	Voltage U_N	Type	Order No.	Pcs. / Pkt.
TERMITRAB, spring-cage modular terminal block with integrated surge protection, for mounting on NS 35				
	24 V DC	TT-ST-2-PE/S1-24DC	2801055	10

PLUGTRAB PT-IQ



Intelligent and systematic surge protection – PLUGTRAB PT-IQ

The PLUGTRAB PT-IQ product range is the first to offer predictive function monitoring for surge protective devices in the context of measurement and control technology. Boasting a whole range of additional features, the new surge protection system is a real highlight from Phoenix Contact.

Always know what is happening – predictive monitoring

The individual components of the protective devices are permanently monitored. When the performance limit has been reached as a result of frequent surge voltages, this is indicated by the yellow status symbol. The arrester continues to function and your system is still protected. However, replacement of the protective plug is recommended. This ensures you are informed even earlier and can replace your surge protection before the protective plug is overloaded (red signal). Furthermore, if you use the remote signaling option, you can check how well your system is being protected from anywhere and at any time.

Permanent and error-free installation

The PLUGTRAB PT-IQ minimizes the amount of wiring required. This is made possible by the DIN rail bus (TBUS), which is easily clipped onto the DIN rail. A controller handles the distribution of the power supply and implements remote signaling of all connected surge protective devices via the TBUS. All you have to do then is install the surge protective devices on the TBUS – and you're done! The plug and base element are coded to avoid installation errors during replacement.

Limitless extension

The controller monitors all arresters which are connected to the controller via the TBUS. You can bridge the TBUS across DIN rails to monitor even more protective devices. After 28 protective devices, an additional controller must be installed to supply voltage. Remote signaling can be performed from any controller in the system.



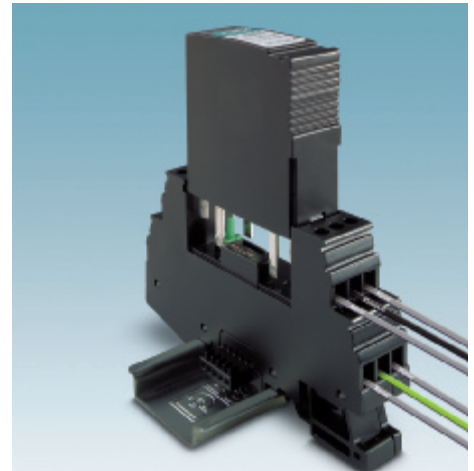
Group message

Green: protective device OK
 Yellow: performance limit reached, replacement recommended
 Red: protective device overloaded, replace



Multi-level remote signaling

Connect the remote signaling to the controller that acts as a supply and remote module (one-off connection operation). The status is output according to the priority as red, yellow or green. This ensures you always know what is happening and can always keep an eye on your system's protection.



Five signals

Thanks to the minimal low space requirements, you can protect up to five signal wires against surge voltages on a pitch of 17.5 mm.



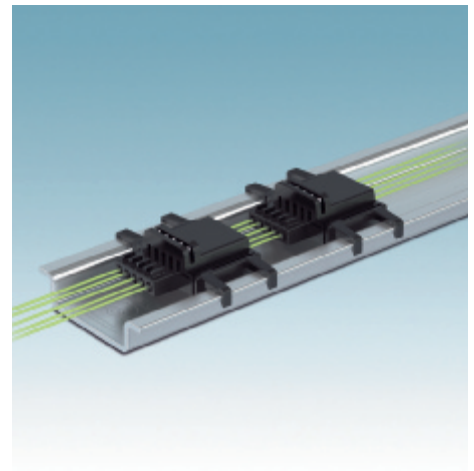
Coding

The base element and protective plug are coded in relation to each other. This prevents you mixing up plugs with different voltage levels or wiring versions.



Latching

You can quickly and easily remove the plugs from the base element. The new latching, which holds the plug firmly in the base element, ensures a secure fit in harsh environments.



DIN rail bus (TBUS)

The DIN rail bus (TBUS) supplies voltage to the protection modules and forwards the status of each individual arrester to the controller. You benefit from the reduced wiring costs and can implement surge protection quickly without errors.

Surge protection for MCR technology

PLUGTRAB PT-IQ

- Surge protection system
- Multi-level state monitoring
- Group message about supply and remote module
- Multi-level, floating remote signaling
- System supplied via DIN rail bus
- Up to 28 protection modules per supply module
- Maximum ease of maintenance thanks to the two-piece design
- Codable plug
- Impedance-neutral disconnection of plug for maintenance purposes
- Base element remains an integral part of the installation

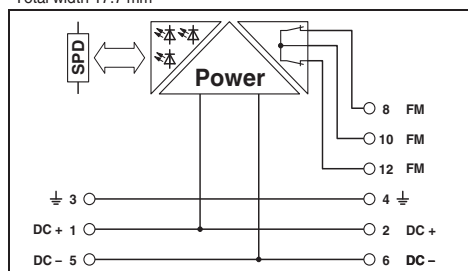


Controller for supply and remote signaling



Double conductor (loop), floating, 9/10 connection grounded directly

Total width 17.7 mm



Technical Data

Electrical data	
IEC category/EN type	-
Maximum continuous operating voltage U_C	DC/AC
Lightning test curr. I_{imp} (10/350) μ s	Per path
Nominal current I_N	500 mA (45°C)
Nominal discharge surge current I_n (8/20) μ s	Core-Core/Core-Ground
Total surge current (8/20) μ s	-/-
Protection level U_p	-
	Core-Core
	Core-ground
Resistance per path	-

General data	
Connection data solid/stranded with ferrule/AWG	0.2 ... 4 mm ² /0.2 ... 2.5 mm ² /24 - 12
Temperature range	-40°C ... 70°C
Degree of protection according to IEC 60529/EN 60529	IP20
Inflammability class according to UL 94	V0
Test standards	-
Remote indication contact	2 x N/C contacts
Connection data solid/stranded	0.2 ... 4 mm ² /24 - 14
Max. operating voltage	35 V AC/50 V DC
Max. operating current	1 A ($\leq 50^\circ\text{C}$)/200 mA ($\leq 70^\circ\text{C}$)

Ordering data

Description	Voltage U_N
PLUGTRAB supply module , consisting of a plug, base element, and DIN rail bus	24 V DC
MCR-PLUGTRAB , consisting of a plug, base element, and DIN rail bus	5 V DC 12 V DC 24 V DC 48 V DC

Type	Order No.	Pcs./Pkt.
PT-IQ-PTB-UT	2800768	1

Accessories

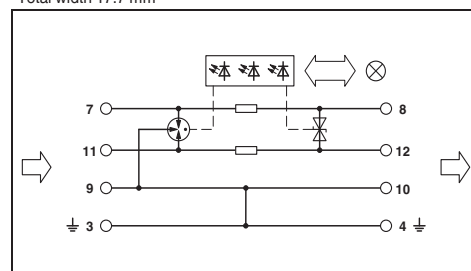
Replacement plug
5 V DC
12 V DC
24 V DC
48 V DC

Type	Order No.	Pcs./Pkt.
PT-IQ-PTB-P	2800989	1

Marking material

ZB 6, see TRABTECH catalog

Total width 17.7 mm



Technical Data

... 5DC	... 12DC	... 24DC	... 48DC
C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1
6 V DC	15 V DC	30 V DC	53 V DC
2.5 kA	2.5 kA	2.5 kA	2.5 kA
1 A (45°C)	1 A (45°C)	1 A (45°C)	300 mA (45°C)
10 kA/10 kA	10 kA/10 kA	10 kA/10 kA	10 kA/10 kA
20 kA	20 kA	20 kA	20 kA
≤ 25 V (C3 - 25 A)	≤ 35 V (C3 - 25 A)	≤ 55 V (C3 - 25 A)	≤ 85 V (C3 - 25 A)
≤ 650 V (C3 - 25 A)	≤ 650 V (C3 - 25 A)	≤ 650 V (C3 - 25 A)	≤ 650 V (C3 - 25 A)
1.2 Ω	1.2 Ω	1.2 Ω	1.2 Ω

General data	
Connection data solid/stranded with ferrule/AWG	0.2 ... 4 mm ² /0.2 ... 2.5 mm ² /24 - 12
Temperature range	-40°C ... 70°C
Degree of protection according to IEC 60529/EN 60529	IP20
Inflammability class according to UL 94	V0
Test standards	EN 61643-21/A1 2009 via TBUS
Remote indication contact	-
Connection data solid/stranded	-
Max. operating voltage	-
Max. operating current	-

Ordering data

Type	Order No.	Pcs./Pkt.
PT-IQ-1X2-5DC-UT	2800791	1
PT-IQ-1X2-12DC-UT	2800793	1
PT-IQ-1X2-24DC-UT	2800976	1
PT-IQ-1X2-48DC-UT	2800978	1

Accessories

Type	Order No.	Pcs./Pkt.
PT-IQ-1X2-5DC-P	2800770	1
PT-IQ-1X2-12DC-P	2800771	1
PT-IQ-1X2-24DC-P	2800772	1
PT-IQ-1X2-48DC-P	2800773	1



Double conductor (loop), floating, 9/10 connection grounded via gas-filled surge arrester



2-wire with common reference potential, 9/10 connection grounded directly

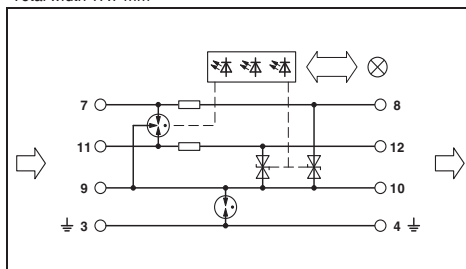
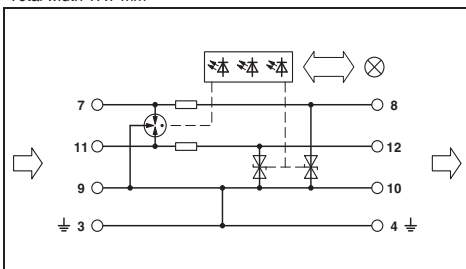
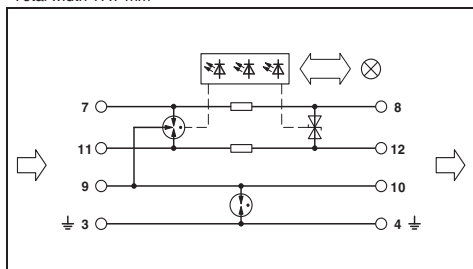


2-wire with common reference potential, 9/10 connection grounded via gas-filled surge arrester

Total width 17.7 mm

Total width 17.7 mm

Total width 17.7 mm



Technical Data

Technical Data

Technical Data

... 5DC	... 12DC	... 24DC	... 48DC
C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1
6 V DC	15 V DC	30 V DC	53 V DC
2.5 kA	2.5 kA	2.5 kA	2.5 kA
1 A (45°C)	1 A (45°C)	1 A (45°C)	300 mA (45°C)
10 kA/10 kA	10 kA/10 kA	10 kA/10 kA	10 kA/10 kA
20 kA	20 kA	20 kA	20 kA
≤ 25 V (C3 - 25 A)	≤ 35 V (C3 - 25 A)	≤ 55 V (C3 - 25 A)	≤ 85 V (C3 - 25 A)
≤ 1.1 kV (C3 - 25 A)	≤ 1.1 kV (C3 - 25 A)	≤ 1.1 kV (C3 - 25 A)	≤ 1.1 kV (C3 - 25 A)
1.2 Ω	1.2 Ω	1.2 Ω	1.2 Ω

... 5DC	... 12DC	... 24DC	... 48DC
C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1
6 V DC	15 V DC	30 V DC	53 V DC
2.5 kA	2.5 kA	2.5 kA	2.5 kA
1 A (45°C)	1 A (45°C)	1 A (45°C)	300 mA (45°C)
-10 kA	-10 kA	-10 kA	-10 kA
20 kA	20 kA	20 kA	20 kA
-	-	-	-
≤ 25 V (C3 - 25 A)	≤ 35 V (C3 - 25 A)	≤ 55 V (C3 - 25 A)	≤ 85 V (C3 - 25 A)
1.2 Ω	1.2 Ω	1.2 Ω	1.2 Ω

... 5DC	... 12DC	... 24DC	... 48DC
C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1
6 V DC	15 V DC	30 V DC	53 V DC
2.5 kA	2.5 kA	2.5 kA	2.5 kA
1 A (45°C)	1 A (45°C)	1 A (45°C)	300 mA (45°C)
-10 kA	-10 kA	-10 kA	-10 kA
20 kA	20 kA	20 kA	20 kA
-	-	-	-
≤ 800 V (C3 - 25 A)	≤ 800 V (C3 - 25 A)	≤ 800 V (C3 - 25 A)	≤ 800 V (C3 - 25 A)
1.2 Ω	1.2 Ω	1.2 Ω	1.2 Ω

0.2 ... 4 mm²/0.2 ... 2.5 mm²/24 - 12

0.2 ... 4 mm²/0.2 ... 2.5 mm²/24 - 12

0.2 ... 4 mm²/... /24 - 12

-40°C ... 70°C

-40°C ... 70°C

-40°C ... 70°C

IP20

IP20

IP20

V0

V0

V0

EN 61643-21/A1 2009

EN 61643-21/A1 2009

EN 61643-21/A1 2009

via TBUS

via TBUS

via TBUS

Ordering data

Ordering data

Ordering data

Type	Order No.	Pcs. / Pkt.
PT-IQ-1X2+F-5DC-UT	2800792	1
PT-IQ-1X2+F-12DC-UT	2800975	1
PT-IQ-1X2+F-24DC-UT	2800977	1
PT-IQ-1X2+F-48DC-UT	2800979	1

Type	Order No.	Pcs. / Pkt.
PT-IQ-2X1-5DC-UT	2800778	1
PT-IQ-2X1-12DC-UT	2800780	1
PT-IQ-2X1-24DC-UT	2800787	1
PT-IQ-2X1-48DC-UT	2800789	1

Type	Order No.	Pcs. / Pkt.
PT-IQ-2X1+F-5DC-UT	2800779	1
PT-IQ-2X1+F-12DC-UT	2800781	1
PT-IQ-2X1+F-24DC-UT	2800788	1
PT-IQ-2X1+F-48DC-UT	2800790	1

Accessories

Accessories

Accessories

Type	Order No.	Pcs. / Pkt.
PT-IQ-1X2-5DC-P	2800770	1
PT-IQ-1X2-12DC-P	2800771	1
PT-IQ-1X2-24DC-P	2800772	1
PT-IQ-1X2-48DC-P	2800773	1

Type	Order No.	Pcs. / Pkt.
PT-IQ-2X1-5DC-P	2800774	1
PT-IQ-2X1-12DC-P	2800775	1
PT-IQ-2X1-24DC-P	2800776	1
PT-IQ-2X1-48DC-P	2800777	1

Type	Order No.	Pcs. / Pkt.
PT-IQ-2X1-5DC-P	2800774	1
PT-IQ-2X1-12DC-P	2800775	1
PT-IQ-2X1-24DC-P	2800776	1
PT-IQ-2X1-48DC-P	2800777	1

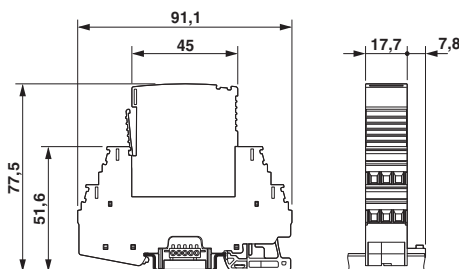
ZB 6, see TRABTECH catalog

ZB 6, see TRABTECH catalog

ZB 6, see TRABTECH catalog

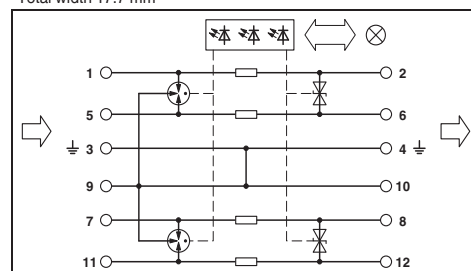
PLUGTRAB PT-IQ

- Surge protection system
- Multi-level state monitoring
- Group message about supply and remote module
- Multi-level, floating remote signaling
- System supplied via DIN rail bus
- Up to 28 protection modules per supply module
- Maximum ease of maintenance, thanks to the two-piece design
- Codable plug
- Impedance-neutral disconnection of plug for maintenance purposes
- Base element remains an integral part of the installation



2 double conductors (loops), floating, 9/10 connection grounded directly

Total width 17.7 mm



Technical Data

Electrical data		
IEC category/EN type		C1/C2/C3/D1
Maximum continuous operating voltage U_c	DC/AC	30 V DC
Lightning test curr. I_{imp} (10/350) μ s	Per path	2.5 kA
Nominal current I_N		700 mA (45°C)
Nominal discharge surge current I_n (8/20) μ s	Core-Core/Core-Ground	10 kA/10 kA
Total surge current (8/20) μ s		20 kA
Protection level U_p	Core-Core	≤ 55 V (C3 - 25 A)
	Core-ground	≤ 650 V (C3 - 25 A)
Resistance per path		1.2 Ω
General data		
Connection data solid/stranded with ferrule/AWG		0.2 ... 4 mm ² /0.2 ... 2.5 mm ² /24 - 12
Temperature range		-40°C ... 70°C
Degree of protection according to IEC 60529/EN 60529		IP20
Inflammability class according to UL 94		V0
Test standards		EN 61643-21/A1 2009
Remote indication contact		via TBUS

Ordering data

Description	Voltage U_N	Type	Order No.	Pcs. / Pkt.
MCR-PLUGTRAB, consisting of a plug, base element, and DIN rail bus	24 V DC	PT-IQ-2X2-24DC-UT	2800980	1

Accessories

Replacement plug 24 V DC	PT-IQ-2X2-24DC-P	2800804	1
Marking material	ZB 6, see TRABTECH catalog		



2 double conductors (loops), floating, 9/10 connection grounded via gas-filled surge arrester

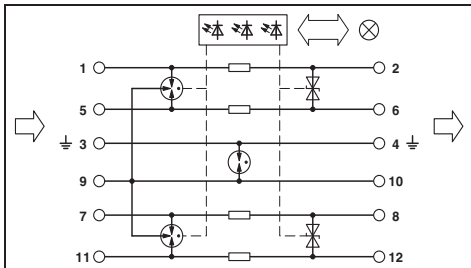


4-wire with common reference potential, 9/10 connection grounded directly



4-wire with common reference potential, 9/10 connection grounded via gas-filled surge arrester

Total width 17.7 mm



Technical Data

C1/C2/C3/D1
30 V DC
2.5 kA
700 mA (45°C)

10 kA/10 kA
20 kA

≤ 55 V (C3 - 25 A)
≤ 1.1 kV (C3 - 25 A)
1.2 Ω

0.2 ... 4 mm²/0.2 ... 2.5 mm²/24 - 12

-40°C ... 70°C
IP20
V0
EN 61643-21/A1 2009
via TBUS

Ordering data

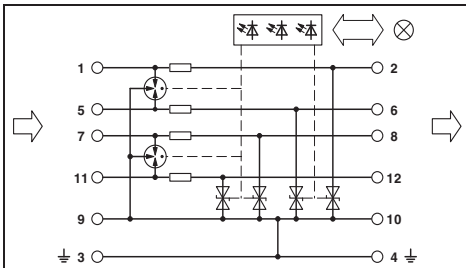
Type	Order No.	Pcs. / Pkt.
PT-IQ-2X2+F-24DC-UT	2800981	1

Accessories

PT-IQ-2X2-24DC-P	2800804	1
------------------	---------	---

ZB 6, see TRABTECH catalog

Total width 17.7 mm



Technical Data

C1/C2/C3/D1
30 V DC
2.5 kA
700 mA (45°C)

-/10 kA
20 kA

-
≤ 55 V (C3 - 25 A)
1.2 Ω

0.2 ... 4 mm²/0.2 ... 2.5 mm²/24 - 12

-40°C ... 70°C
IP20
V0
EN 61643-21/A1 2009
via TBUS

Ordering data

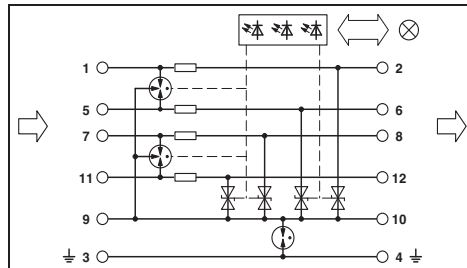
Type	Order No.	Pcs. / Pkt.
PT-IQ-4X1-24DC-UT	2800982	1

Accessories

PT-IQ-4X1-24DC-P	2800813	1
------------------	---------	---

ZB 6, see TRABTECH catalog

Total width 17.7 mm



Technical Data

C1/C2/C3/D1
30 V DC
2.5 kA
700 mA (45°C)

-/10 kA
20 kA

-
≤ 800 V (C3 - 25 A)
1.2 Ω

0.2 ... 4 mm²/0.2 ... 2.5 mm²/24 - 12

-40°C ... 70°C
IP20
V0
EN 61643-21/A1 2009
via TBUS

Ordering data

Type	Order No.	Pcs. / Pkt.
PT-IQ-4X1+F-24DC-UT	2800983	1

Accessories

PT-IQ-4X1-24DC-P	2800813	1
------------------	---------	---

ZB 6, see TRABTECH catalog

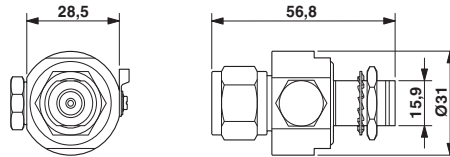
Surge protection for transceiver systems

Protection for mobile phone antennas

- Broadband surge protection for GSM systems
- Maintenance-free surge protection with Lambda/4 technology
- Low protection level, thanks to Lambda/4 technology
- High HF power
- Connection: N and 7/16 connector

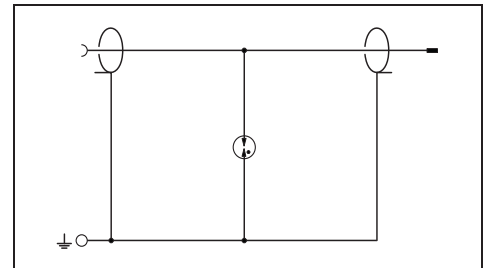


For GSM systems (0 GHz-3 GHz), grounded shield, connection: N type



Dimensional drawing
CN-UB-280DC-3-SB

Total width 31 mm

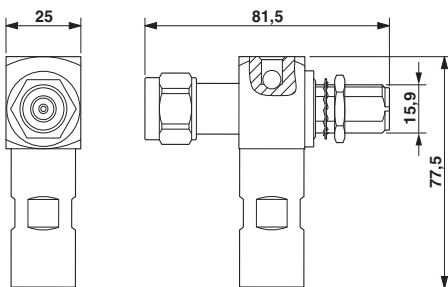


Technical Data

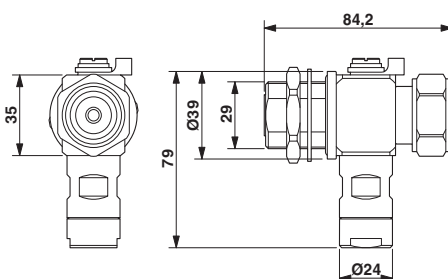
Electrical data	
IEC category/EN type	C2/C3/D1
Nominal current I_n	5 A (25°C)
Nominal discharge surge current I_n (8/20) μ s	
Total surge current (8/20) μ s	Core/shield 20 kA
Protection level U_p	20 kA
Frequency range	Core/shield ≤ 1.1 kV (C2 - 10 kV/5 kA)
Standing wave ratio SWR in a 50 Ω system	0 Hz ... 3 GHz
Permissible. RF power P_{max}	typ. 1.15 (≤ 3 GHz) 700 W (VSWR = 1.1)
General data	
Temperature range	-40°C ... 80°C
Degree of protection according to IEC 60529/EN 60529	IP55
Connection method	N connector 50 Ω
Test standards	IEC 61643-21/A1/EN 61643-21/A1

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
COAXTRAB, protective adapter for antenna connections			
Socket/socket	CN-UB-280DC-3-BB	2801050	1
Plug/socket	CN-UB-280DC-3-SB	2801051	1



Dimensional drawing
CN-LAMBDA/4-2.25-SB



Dimensional drawing
C7/16-LAMBDA/4-2.25-SB

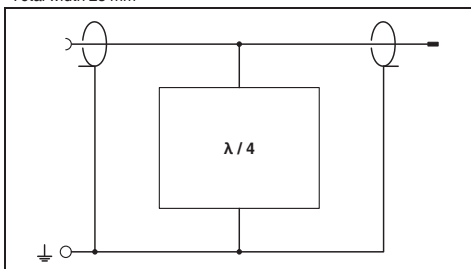


For GSM systems (0.8 GHz-2.25 GHz),
grounded shield, connection: N type

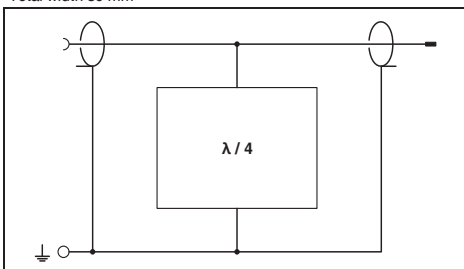


For GSM systems (0.8 GHz-2.25 GHz),
grounded shield, connection: 7/16

Total width 25 mm



Total width 39 mm



Technical Data

C2/C3/D1
5 A (25°C)

50 kA
60 kA

≤ 25 V (C2 - 10 kV/5 kA)
0.8 GHz ... 2.25 GHz
typ. 1.2
≤ 500 W

-40°C ... 85°C
IP68
N connector 50 Ω
IEC 61643-21/A1/EN 61643-21/A1

Technical Data

C2/C3/D1
5 A (25°C)

50 kA
60 kA

≤ 25 V (C2 - 10 kV/5 kA)
0.8 GHz ... 2.25 GHz
typ. 1.2
≤ 500 W

-40°C ... 85°C
IP68
7/16 connector
IEC 61643-21/A1/EN 61643-21/A1

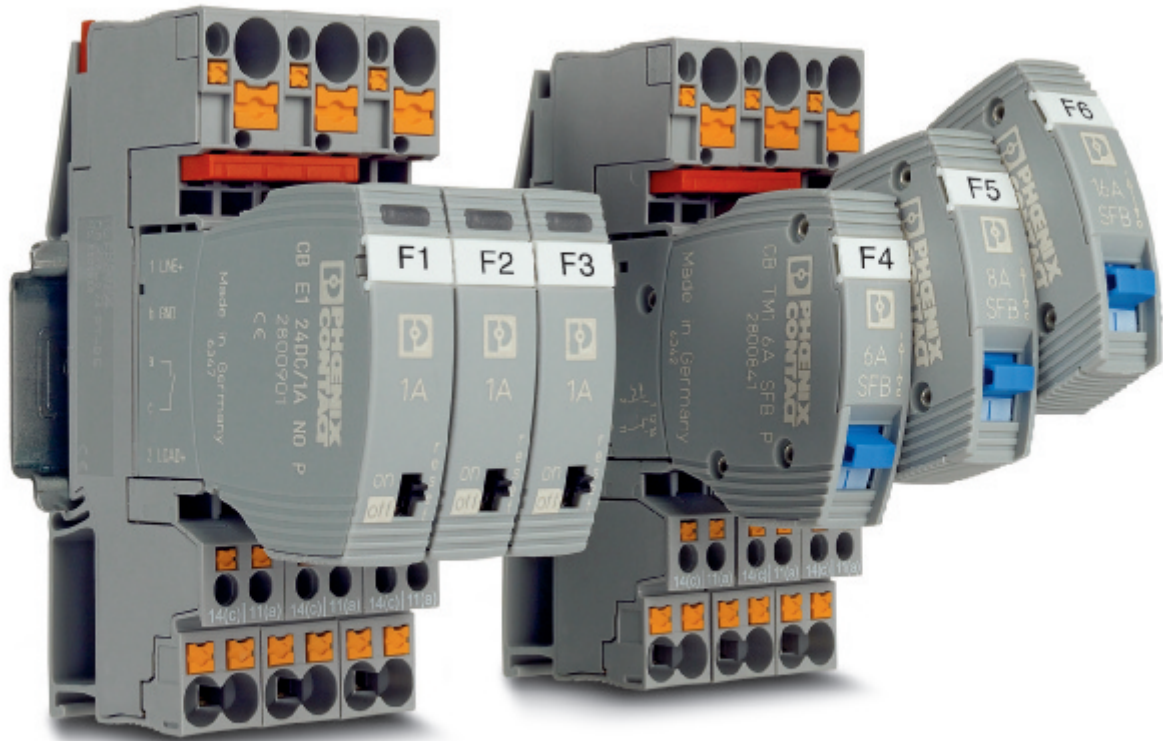
Ordering data

Type	Order No.	Pcs. / Pkt.
CN-LAMBDA/4-2.25-BB	2801057	1
CN-LAMBDA/4-2.25-SB	2801056	1

Ordering data

Type	Order No.	Pcs. / Pkt.
C7/16-LAMBDA/4-2.25-BB	2801060	1
C7/16-LAMBDA/4-2.25-SB	2801059	1

CB device circuit breakers



Selective power distribution with high-quality device circuit breakers

Device circuit breakers are a key factor in high system availability. In the event of overload and short-circuit currents, they selectively shut down the faulty circuit.

Branch out

The device circuit breakers provide reliable protection even if your systems involve long cable paths. Together with the SFB technology* of the QUINT POWER power supply units, the special SFB trigger characteristic of the CB device circuit breakers ensures fast shutdown in the event of an error. This combination offers maximum protection against overload and short-circuit currents.

*SFB = Selective fuse breaking
Selective shutdown

Individual adaptation

You can pre-wire your systems with base elements and individually equip them with protective plugs on site. The device circuit breakers can also be quickly adapted to accommodate necessary changes in your system. Should you change a load, simply replace the relevant protective plug. Various tripping methods, characteristic curves, and nominal currents are available depending on the application.

Modular extension

It couldn't be easier. Enhance your system with additional device circuit breakers in no time at all. You can bridge the power distribution, remote signaling or even the auxiliary voltage for electronic circuit breakers without this resulting in significant wiring costs. The uniform, plug-in housing concept as well as the bridgeability of the base elements simplify installation.



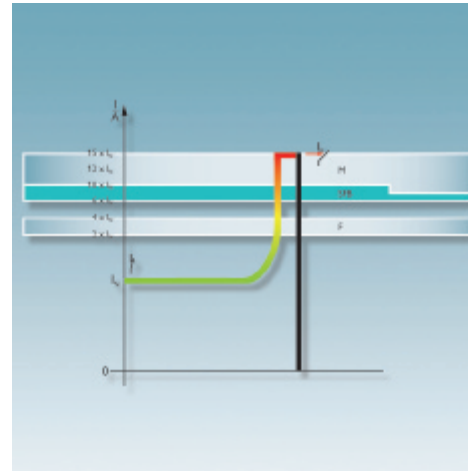
Latching

You can quickly and easily remove the plugs from the base element. The new latching ensures a secure fit in harsh environments and where there are vibrations in the installation environment. It holds the plug in place in the base element.



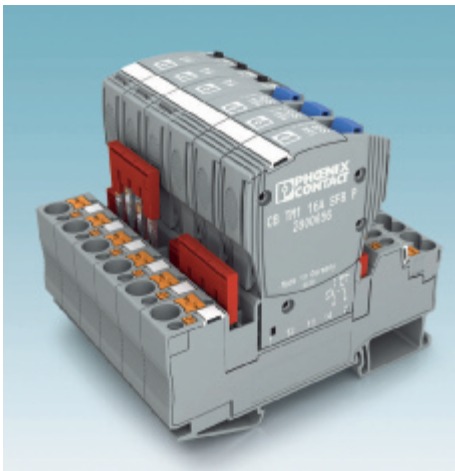
Coding

Straightforward coding means that components can be mounted on the base element according to individual requirements without any errors.



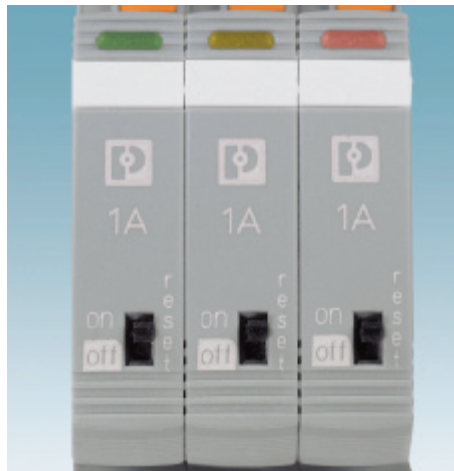
SFB trigger characteristic

Thermomagnetic device circuit breakers with the SFB trigger characteristic* provide maximum overcurrent protection – even in large systems with long cable paths.



Bridge

With the unique bridge system from our standard range, the device circuit breakers can be combined easily as per your requirements. Potentials of the same type can be connected quickly and safely.



Function display

Green: connected through
Yellow: current limitation
Red: switched off



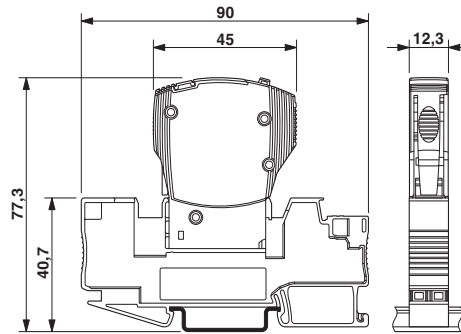
Push-in technology

The push-in connection terminal blocks enable tool-free conductor connection. Solid conductors or conductors with ferrules can be inserted directly into the terminal block.

Monitoring

Plug-in electronic circuit breakers

- Device circuit breakers for protecting against overcurrents and short circuits
- Integrated active current limitation
- Remote control possible
- Maximum ease of maintenance thanks to the two-piece design
- Snap-in function for secure hold and easy removal
- Plug coding possible
- Narrow design



The figure shows the complete module consisting of a base element and plug



1 N/O contact

Total width 12.3 mm

Technical Data

Rated data	Operating voltage Nominal current I_N
Disconnection	Switch-off time Switch off Current limitation
General data	Temperature range Degree of protection Standards/regulations

24 V DC
dependent on the article variant selected

see trigger characteristic
typ. $1.25 \times I_N$
active

0°C ... 50°C (without condensation)
IP30 (actuation area)
UL 2367/UL 508/CSA 22.2

Ordering data

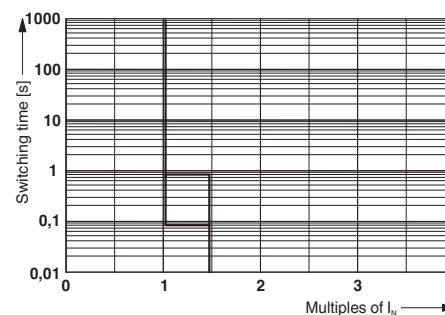
Description	Nominal current
Electronic circuit breaker, 1-pos.	
	1 A
	2 A
	3 A
	4 A
	6 A

Type	Order No.	Pcs. / Pkt.
CB E1 24DC/1A NO P	2800901	1
CB E1 24DC/2A NO P	2800902	1
CB E1 24DC/3A NO P	2800903	1
CB E1 24DC/4A NO P	2800904	1
CB E1 24DC/6A NO P	2800905	1

Accessories

Jumper plug , 0 volt distribution
Base element , input 1 x 6 mm ² /output 2 x 4 mm ²
Plug-in bridge , for cross connections in the bridge shaft

CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10
For FBS ..., see page 286		



Trigger characteristic



1 N/C contact



1 x Reset IN + 1 x Status OUT



1 x Control IN + 1 x Status OUT

Total width 12.3 mm

Total width 12.3 mm

Total width 12.3 mm

Technical Data
24 V DC dependent on the article variant selected
see trigger characteristic typ. $1.25 \times I_N$ active
0°C ... 50°C (without condensation) IP30 (actuation area) UL 2367/UL 508/CSA 22.2

Technical Data
24 V DC dependent on the article variant selected
see trigger characteristic typ. $1.25 \times I_N$ active
0°C ... 50°C (without condensation) IP30 (actuation area) UL 2367/UL 508/CSA 22.2

Technical Data
24 V DC dependent on the article variant selected
see trigger characteristic typ. $1.25 \times I_N$ active
0°C ... 50°C (without condensation) IP30 (actuation area) UL 2367/UL 508/CSA 22.2

Ordering data		
Type	Order No.	Pcs. / Pkt.
CB E1 24DC/1A NC P	2800915	1
CB E1 24DC/2A NC P	2800916	1
CB E1 24DC/3A NC P	2800917	1
CB E1 24DC/4A NC P	2800918	1
CB E1 24DC/6A NC P	2800919	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
CB E1 24DC/1A S-R P	2800908	1
CB E1 24DC/2A S-R P	2800909	1
CB E1 24DC/3A S-R P	2800910	1
CB E1 24DC/4A S-R P	2800911	1
CB E1 24DC/6A S-R P	2800912	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
CB E1 24DC/1A S-C P	2800922	1
CB E1 24DC/2A S-C P	2800923	1
CB E1 24DC/3A S-C P	2800924	1
CB E1 24DC/4A S-C P	2800925	1
CB E1 24DC/6A S-C P	2800926	1

Accessories		
Type	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10

Accessories		
Type	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10

Accessories		
Type	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10

For FBS ..., see page 286

For FBS ..., see page 286

For FBS ..., see page 286

Monitoring

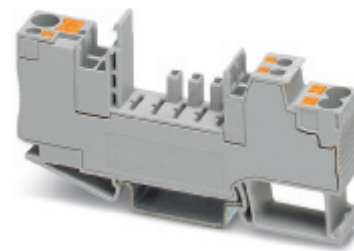
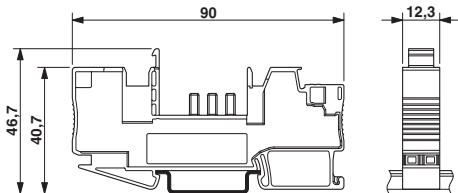
Base element and plug-in bridges

Base element with push-in technology for accommodating device circuit breakers

- For accommodating CB TM.../CB E... device circuit breakers
- 1-pos.
- DIN rail module
- With bridge shafts
- Push-in technology enables quick and easy installation
- Systematic structure with 1-channel base elements possible
- Accessories from the CLIPLINE complete range can be used
- Narrow design

Plug-in bridges for cross connection in the bridge shaft

- Bridging options for contacts 1, 11, and 12



Single-pos.

Total width 12.3 mm

Technical Data

Rated surge voltage	4 kV
General data	
Connection method	push-in technology
Temperature range	-30°C ... 60°C
Degree of protection	IP20
Inflammability class according to UL 94	V0
Standards/regulations	IEC 60947-7-1

Rated surge voltage	4 kV
General data	
Connection method	push-in technology
Temperature range	-30°C ... 60°C
Degree of protection	IP20
Inflammability class according to UL 94	V0
Standards/regulations	IEC 60947-7-1

Ordering data

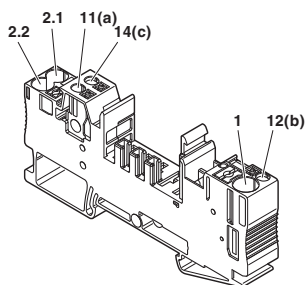
Description	Base element, input 1 x 6 mm ² /output 2 x 4 mm ²
-------------	---

Type	Order No.	Pcs. / Pkt.
CB 1/6-2/4 PT-BE	2800929	10

Accessories

Plug-in bridge, red	Number of positions
	2
	3
	4
	5
	10
	20
	50
Plug-in bridge, blue	Number of positions
	2
	3
	4
	5
	10
	20
	50
Plug-in bridge, gray	Number of positions
	2
	3
	4
	5
	10

Accessories	Order No.	Pcs. / Pkt.
FBS 2-6	3030336	50
FBS 3-6	3030242	50
FBS 4-6	3030255	50
FBS 5-6	3030349	50
FBS 10-6	3030271	10
FBS 20-6	3030365	10
FBS 50-6	3032224	10
FBS 2-6 BU	3036932	50
FBS 3-6 BU	3036945	50
FBS 4-6 BU	3036958	50
FBS 5-6 BU	3036961	50
FBS 10-6 BU	3032198	10
FBS 20-6 BU	3032208	10
FBS 50-6 BU	3032211	10
FBS 2-6 GY	3032237	50
FBS 3-6 GY	3032240	50
FBS 4-6 GY	3032279	50
FBS 5-6 GY	3032266	50
FBS 10-6 GY	3032253	10

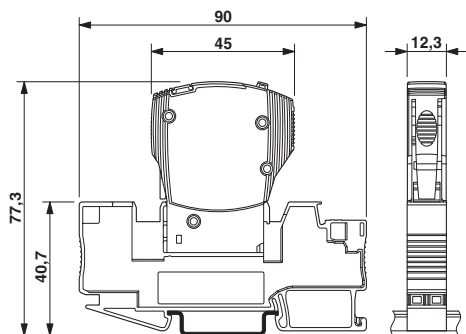


1	12 mm	0.5 - 6 mm ² AWG 20-10		
2.1 / 2.2	12 mm	0.25 - 6 mm ² AWG 24-10	0.2 - 4 mm ² AWG 24-12	
11(a)/12(b)/14(c)	8 mm	0.14 - 1.5 mm ² AWG 26-16	0.14 - 1 mm ² AWG 26-18	0.14 - 1.5 mm ² AWG 26-16

Connection of the cables

Plug-in thermomagnetic circuit breakers

- Device circuit breakers for protecting against overcurrents and short circuits
- SFB characteristic curve enables longer cables and release times < 10 ms
- Maximum ease of maintenance thanks to the two-piece design
- Snap-in function for secure hold and easy removal
- Plug coding possible
- Narrow design



The figure shows the complete module consisting of a base element and plug



Can be plugged in, SFB characteristic curve

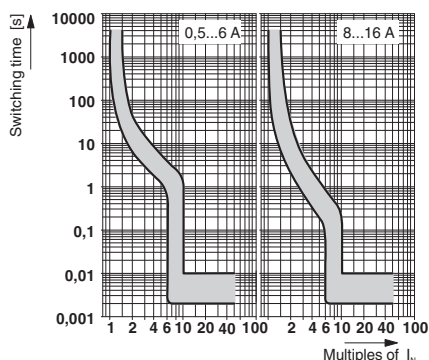
Total width 12.3 mm

Rated data
Rated voltage
Rated voltage
Rated current I_n
Disconnection
Switch-off time
Fuse type
Rated short-circuit switching capacity I_{cn}
Cycles, max.
General data
Temperature range
Degree of protection
Standards/regulations

Technical Data	
IEC	UL/CUL
240 V AC	277 V AC
50 V DC	50 V DC
dependent on the article variant selected	
see trigger characteristic	
SFB	
300 A (240 V AC)/600 A (50 V DC)	
6000 (at 1 x I_n)	
-30°C ... 60°C	
IP30 (actuation area)	
EN 60934/UL 1077/UL 508/CSA 22.2	

Description	Nominal current
Thermomagnetic circuit breaker, plug-in, 1-pos., signal contact 1 PDT	
	0.5 A
	1 A
	2 A
	3 A
	4 A
	5 A
	6 A
	8 A
	10 A
	12 A
	16 A
Thermomagnetic circuit breaker, plug-in, 2-pos., signal contact 1 PDT	
	0.5 A
	1 A
	2 A
	3 A
	4 A
	5 A
	6 A
	8 A
	10 A
	12 A
	16 A

Ordering data			
Type	Order No.	Pcs. / Pkt.	
CB TM1 0.5A SFB P	2800835	1	
CB TM1 1A SFB P	2800836	1	
CB TM1 2A SFB P	2800837	1	
CB TM1 3A SFB P	2800838	1	
CB TM1 4A SFB P	2800839	1	
CB TM1 5A SFB P	2800840	1	
CB TM1 6A SFB P	2800841	1	
CB TM1 8A SFB P	2800842	1	
CB TM1 10A SFB P	2800843	1	
CB TM1 12A SFB P	2800844	1	
CB TM1 16A SFB P	2800845	1	
CB TM2 0.5A SFB P	2800868	1	
CB TM2 1A SFB P	2800869	1	
CB TM2 2A SFB P	2800870	1	
CB TM2 3A SFB P	2800871	1	
CB TM2 4A SFB P	2800872	1	
CB TM2 5A SFB P	2800873	1	
CB TM2 6A SFB P	2800874	1	
CB TM2 8A SFB P	2800875	1	
CB TM2 10A SFB P	2800876	1	
CB TM2 12A SFB P	2800877	1	
CB TM2 16A SFB P	2800878	1	



Trigger characteristic in the DC range

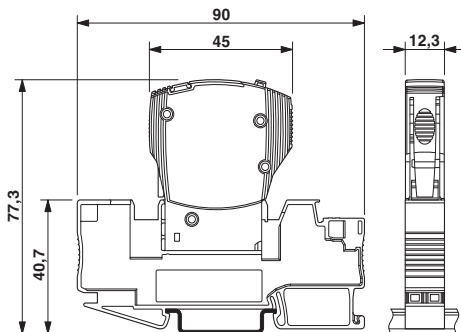
Jumper plug, 0 volt distribution
Base element, input 1 x 6 mm²/output 2 x 4 mm²

Accessories		
Type	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10

Monitoring

Plug-in thermomagnetic circuit breakers

- Device circuit breakers for protecting against overcurrents and short circuits
- Medium-blow and fast-blow tripping characteristics
- 1 and 2-pos. circuit breakers
- Maximum ease of maintenance thanks to the two-piece design
- Snap-in function for secure hold and easy removal
- Plug coding possible
- Narrow design



The figure shows the complete module consisting of a base element and plug



Can be plugged in, M1 characteristic curve, 1-pos.

Total width 12.3 mm

Technical Data

Rated data
Rated voltage
Rated voltage
Rated current I_n
Disconnection
Switch-off time
Fuse type
Rated short-circuit switching capacity I_{cs}
Cycles, max.
General data
Temperature range
Degree of protection
Standards/regulations

IEC	UL/CUL
240 V AC	277 V AC
50 V DC	50 V DC
dependent on the article variant selected	
see trigger characteristic	
normal blow	
300 A (240 V AC)/600 A (50 V DC)	
6000 (at $1 \times I_n$)	
-30°C ... 60°C	
IP30 (actuation area)	
EN 60934/UL 1077/UL 508/CSA 22.2	

Ordering data

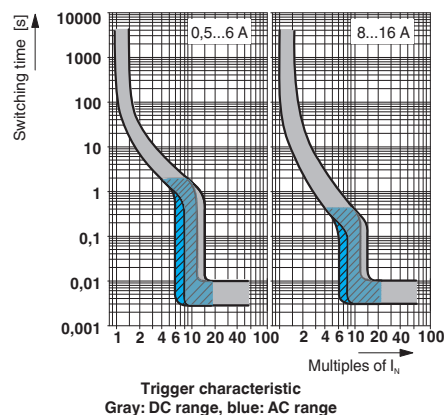
Description	Nominal current
Thermomagnetic circuit breaker, plug-in, signal contact 1 PDT	
	0.5 A
	1 A
	2 A
	3 A
	4 A
	5 A
	6 A
	8 A
	10 A
	12 A
	16 A

Type	Order No.	Pcs. / Pkt.
CB TM1 0.5A M1 P	2800846	1
CB TM1 1A M1 P	2800847	1
CB TM1 2A M1 P	2800848	1
CB TM1 3A M1 P	2800849	1
CB TM1 4A M1 P	2800850	1
CB TM1 5A M1 P	2800851	1
CB TM1 6A M1 P	2800852	1
CB TM1 8A M1 P	2800853	1
CB TM1 10A M1 P	2800854	1
CB TM1 12A M1 P	2800855	1
CB TM1 16A M1 P	2800856	1

Jumper plug, 0 volt distribution
Base element, input 1 x 6 mm²/output 2 x 4 mm²

Accessories

CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10





Can be plugged in, M1 characteristic curve, 2-pos.



Can be plugged in, F1 characteristic curve, 1-pos.



Can be plugged in, F1 characteristic curve, 2-pos.

Total width 24.6 mm

Total width 12.3 mm

Total width 24.6 mm

Technical Data	
IEC	UL/CUL
240 V AC	277 V AC
80 V DC	80 V DC
dependent on the article variant selected	
see trigger characteristic	
normal blow	
400 A (240 V AC)/600 A (80 V DC)	
6000 (240 V AC/1 x I _n)	
-30°C ... 60°C	
IP30 (actuation area)	
EN 60934/UL 1077/UL 508/CSA 22.2	

Technical Data	
IEC	UL/CUL
240 V AC	277 V AC
50 V DC	50 V DC
dependent on the article variant selected	
see trigger characteristic	
fast blow	
300 A (240 V AC)/600 A (50 V DC)	
6000 (at 1 x I _n)	
-30°C ... 60°C	
IP30 (actuation area)	
EN 60934/UL 1077/UL 508/CSA 22.2	

Technical Data	
IEC	UL/CUL
240 V AC	277 V AC
80 V DC	80 V DC
dependent on the article variant selected	
see trigger characteristic	
fast blow	
400 A (240 V AC)/600 A (80 V DC)	
6000 (240 V AC/1 x I _n)	
-30°C ... 60°C	
IP30 (actuation area)	
EN 60934/UL 1077/UL 508/CSA 22.2	

Ordering data		
Type	Order No.	Pcs. / Pkt.
CB TM2 0.5A M1 P	2800879	1
CB TM2 1A M1 P	2800880	1
CB TM2 2A M1 P	2800881	1
CB TM2 3A M1 P	2800882	1
CB TM2 4A M1 P	2800883	1
CB TM2 5A M1 P	2800884	1
CB TM2 6A M1 P	2800885	1
CB TM2 8A M1 P	2800886	1
CB TM2 10A M1 P	2800887	1
CB TM2 12A M1 P	2800888	1
CB TM2 16A M1 P	2800889	1

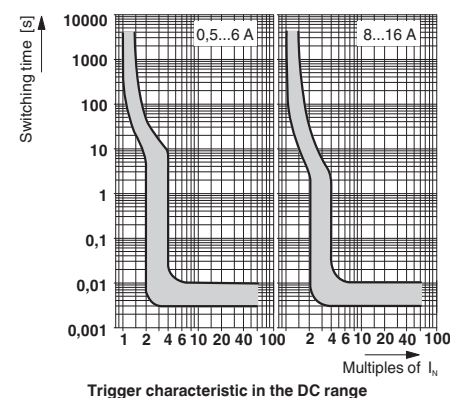
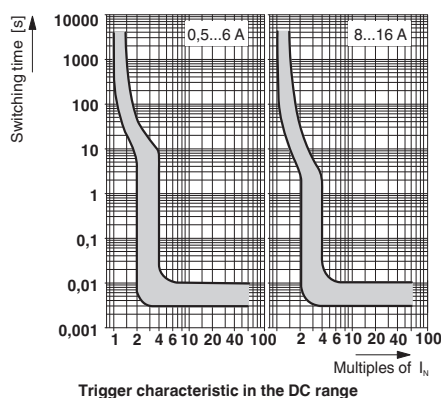
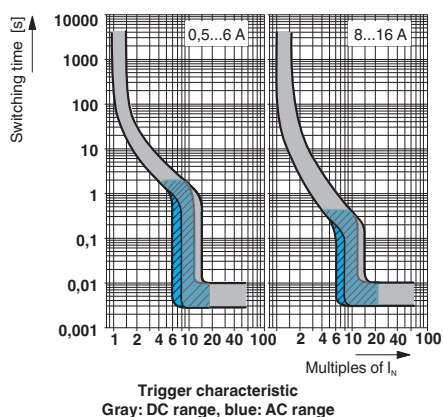
Ordering data		
Type	Order No.	Pcs. / Pkt.
CB TM1 0.5A F1 P	2800857	1
CB TM1 1A F1 P	2800858	1
CB TM1 2A F1 P	2800859	1
CB TM1 3A F1 P	2800860	1
CB TM1 4A F1 P	2800861	1
CB TM1 5A F1 P	2800862	1
CB TM1 6A F1 P	2800863	1
CB TM1 8A F1 P	2800864	1
CB TM1 10A F1 P	2800865	1
CB TM1 12A F1 P	2800866	1
CB TM1 16A F1 P	2800867	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
CB TM2 0.5A F1 P	2800890	1
CB TM2 1A F1 P	2800891	1
CB TM2 2A F1 P	2800892	1
CB TM2 3A F1 P	2800893	1
CB TM2 4A F1 P	2800894	1
CB TM2 5A F1 P	2800895	1
CB TM2 6A F1 P	2800896	1
CB TM2 8A F1 P	2800897	1
CB TM2 10A F1 P	2800898	1
CB TM2 12A F1 P	2800899	1
CB TM2 16A F1 P	2800900	1

Accessories		
Accessories	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10

Accessories		
Accessories	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10

Accessories		
Accessories	Order No.	Pcs. / Pkt.
CB PT BRIDGE	2801014	1
CB 1/6-2/4 PT-BE	2800929	10





INTERFACE Safety
PSR-MOTIONSTOP downtime and speed monitors page 293



INTERFACE Safety
PSR-SIL coupling relays Termination carrier for PSR-SIL coupling relay page 295
page 297



INTERFACE Relay
PR octal relays for high DC loads page 298



INTERFACE Relay
CONTACTRON hybrid motor starters with short-circuit protection page 301



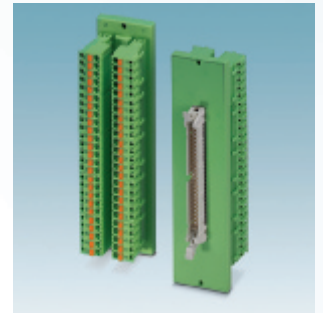
INTERFACE Relay
CONTACTRON hybrid motor starters with SmartWire-DT™ support page 303
SmartWire-DT™ accessories page 304



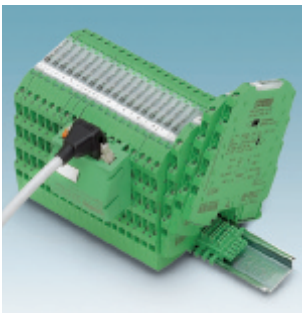
INTERFACE Cabling
VARIOFACE front adapter for Honeywell C300 page 306



INTERFACE Cabling
VARIOFACE system cable page 307



INTERFACE Cabling
VARIOFACE feed-through modules page 308



INTERFACE Analog
MINI Analog isolating amplifiers page 310
Termination carrier for MINI Analog isolating amplifier page 313



INTERFACE Ex
Termination carrier for MACX Analog Ex isolating amplifier page 315



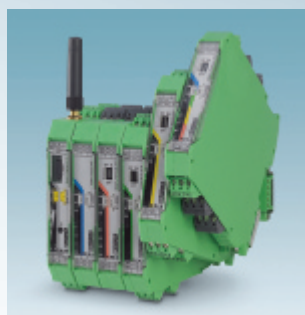
INTERFACE Serial
Factoryline fiber optic media converters page 317



INTERFACE Power Supply
QUINT UPS-IQ with integrated power storage device page 318
Data cable for QUINT UPS-IQ page 319
Power storage device for QUINT UPS-IQ page 320



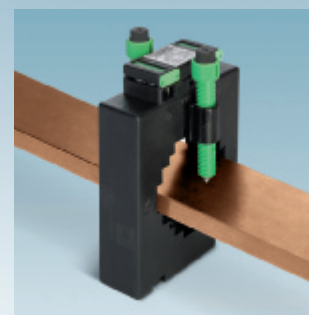
INTERFACE Power Supply
QUINT DC/DC converters page 322



INTERFACE Wireless
Radioline wireless system page 325



INTERFACE Monitoring
Extension module and bracket for
EMpro energy meters page 330
EV Charge Control
charging control page 331



INTERFACE Monitoring
Quick-action mechanism for
PACT current transformer page 333

Two-channel downtime and speed monitors



The parameterizable PSR-MOTIONSTOP downtime and speed monitor is used to monitor hazardous movements of a machine or system - and, in the event of an error, safely shut down the machine or system.

Essential safety-related functions according to EN 61800-5-2 covered

The integrated safe torque off (STO) safety function enables shutdown to be performed by immediately disabling the power to the drive units of a machine. Other safety-related movement functions can be implemented with PSR-MOTIONSTOP:

- SLS: safe limited speed
- SMS: safe speed monitoring
- SDI: safe direction

Depending on the external wiring, applications can be implemented up to Cat. 4/PL e (according to ISO 13849-1) and SIL 3 (according to IEC 61508).

Motor feedback via conventional encoder systems

The following sensors are suitable for movement acquisition:

- Incremental encoders (HTL and TTL)
- Sin/cos encoders
- Safe (certified) SIL encoders
- Proximity switches (2 and 3-wire initiators)

Existing motor feedback systems can be easily and quickly connected with PSR-MOTIONSTOP via pre-assembled cable adapters.

Removable operator interface and display unit

The removable operator interface and display unit (PSR-OP-UNIT) can be used for convenient parameterization of the basic device. During operation, the actual values and diagnostic information can be shown on the illuminated LCD display. The operator interface and display unit is not required to operate the basic device; in the case of a remote PSR-OP-UNIT, this ensures maximum protection against manipulation. One operator interface and display unit can be used to parameterize as many basic devices as required.

Option to connect mode selector switch and safety doors

One device can be used to monitor up to three different operating states (speeds) as well as downtime. In addition, safety doors or safety switches which enable and disable the monitoring function using secure monitoring inputs can be reliably evaluated.

Seamless service concept

Parameters can also be saved on the memory module (IFS-CONFSTICK), which is available as an accessory. In order for the right parameters to be made available quickly if service work needs to be carried out, the module is stored in the IFS-CONFSTICK storage area of the basic device.

Safe relay and semiconductor outputs

Relay and semiconductor outputs quickly and safely disable hazardous movements in the event of an error.

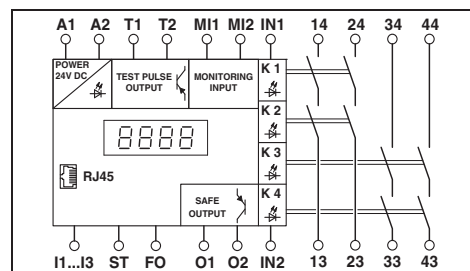
Two-channel downtime and speed monitors

- Option to connect incremental encoders and proximity switches
- With 4 safe relay outputs, 2 safe semiconductor outputs, 1 signal output
- Monitors up to 3 different speeds plus downtime
- Safe monitoring function (safety door connection) for activating/deactivating overspeed monitoring
- Manually monitored and automatic activation
- Narrow 35 mm housing
- Can be parameterized via the PSR-OP-UNIT operator interface and display unit
- Can be ordered with or without PSR-OP-UNIT operator interface and display unit
- Up to Cat. 4/PL e according to ISO 13849-1, SILCL 3 according to IEC 62061, SIL 3 according to IEC 61508



Safe downtime and speed monitors, parameterizable

Applied for:
UL Listed/CUL Listed/TUEV-RH



Technical Data

Input Data	24 V DC
Nominal input voltage U_N	0.85 ... 1.1
Permissible range (with reference to U_N)	150 mA
Typ. current consumption (with reference to U_N)	30 ms
Typ. response time (K1, K2) at U_N	15 ms
Typ. release time (K1, K2) at U_N	100 ms
Recovery time	
Output data	4 enabling current paths, 3 semiconductor outputs
Contact type	AgSnO ₂
Contact material	250 V AC/DC/10 V AC/DC
Max./min. switching voltage	5 A (N/O contact), 500 mA (semiconductor output)
Limiting continuous current	6 A (N/O contact)/10 mA
Max./min. inrush current	0.24 W
Min. switching power	10 A gL/gG NEOZED (N/O contact)
Short-circuit protection of the output circuits	
General data	
Ambient temperature range	-20°C ... 55°C
Air and creepage distances between the circuits	DIN EN 50178/VDE 0160
Rated surge voltage/insulation	4 kV/basic insulation
Screw connection solid/stranded/AWG	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 14
Spring-cage connection (solid/stranded/AWG)	0.2 - 1.5 mm ² /0.2 - 1.5 mm ² /24 - 16
Dimensions	35 mm/99 mm/124 mm
W/H/D	35 mm/99 mm/124 mm

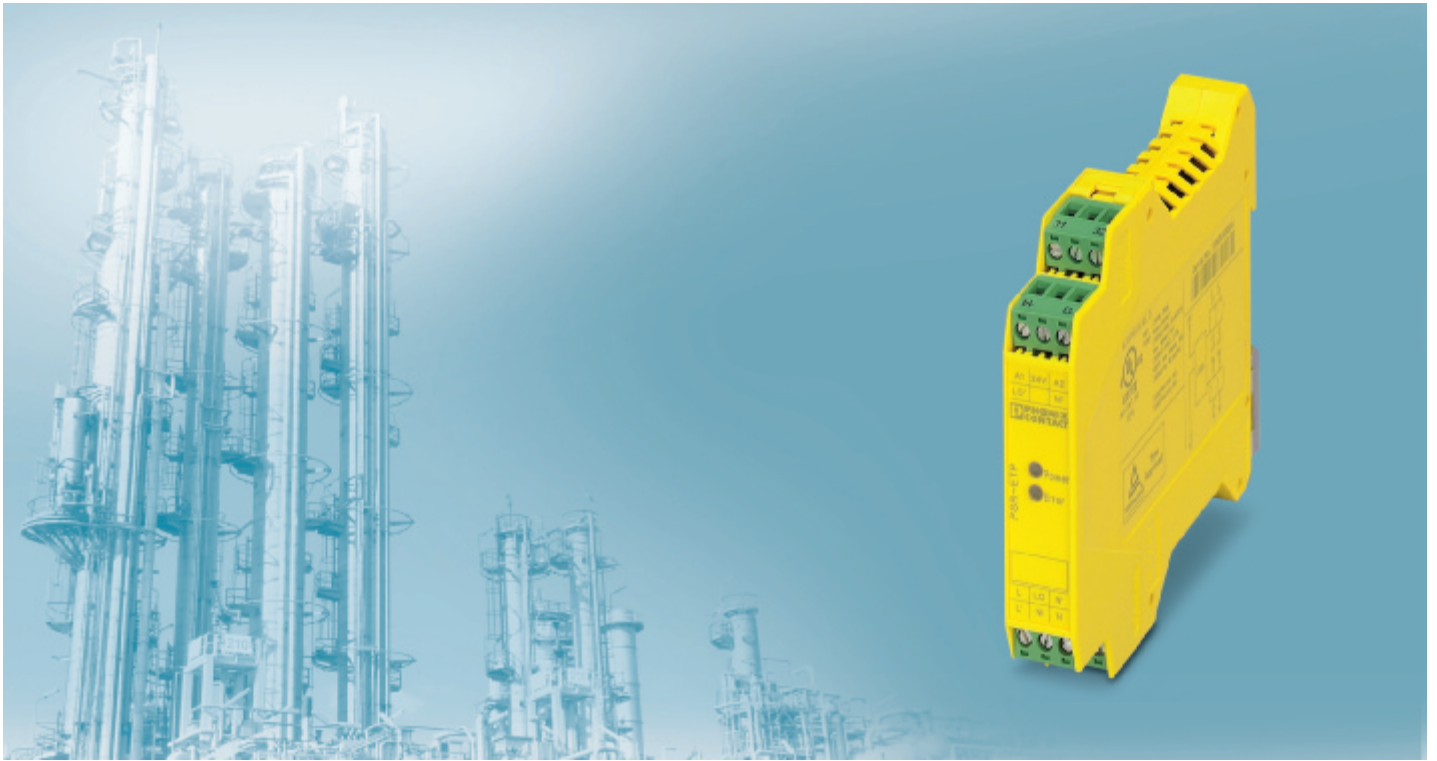
Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Downtime and speed monitor , 2-channel, 4 safe relay outputs, 2 safe semiconductor outputs, 1 error message output, including PSR-OP-UNIT operator interface and display unit			
With screw connection	PSR-SCP- 24DC/MSTO/D/4X1	2902363	1
With spring-cage connection	PSR-SPP- 24DC/MSTO/D/4X1	2902364	1
Downtime and speed monitor , 2-channel, 4 safe relay outputs, 2 safe semiconductor outputs, 1 error message output, basic device without PSR-OP-UNIT			
With screw connection	PSR-SCP- 24DC/MSTO/4X1	2902786	1
With spring-cage connection	PSR-SPP- 24DC/MSTO/4X1	2902787	1

Accessories

Accessories	Order No.	Pcs. / Pkt.
operator interface and display unit for entering parameters and displaying actual values, can be directly snapped onto PSR-MOTIONSTOP basic devices	2902578	1
Multi-functional memory block for the INTERFACE system	2986122	1

PSR-SIL coupling relay for F&G applications



Both safety-related circuit interrupts and the need to close circuits safely are becoming increasingly important. These modules for electrically isolating actuators and impedance matching are especially used in the process industry.

The PSR-ETP from Phoenix Contact is a coupling relay that has been specially developed for this purpose and is SIL 3 certified.

Compatible with a range of different higher-level control systems

Safe controllers are often capable of performing dynamic self-tests on their outputs or the existing wiring. If no appropriate measures are taken, these test pulses can often cause premature wear of the relays. The integrated test pulse filter and adapted current control circuit ensure both a long service life and a high level of PSR-ETP compatibility with the various safe higher-level control systems.

High level of safety and availability

With the PSR-ETP, particular emphasis was once again placed on carefully selecting the relay used. The combination of the relay and application-specific design create the ideal conditions for high levels of safety and availability.

Easy diagnostics

The optionally connectable line/load monitoring function, which can be configured according to the load, enables end-to-end diagnostics from the controller to the actuator.

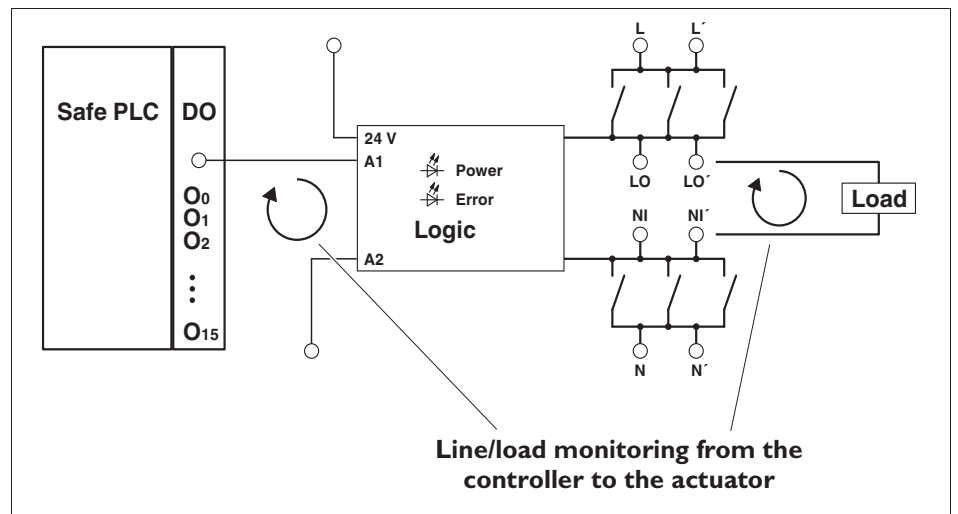
Diagnostic messages about wire breaks or missing/incorrect loads are sent via the existing wiring. This dispenses with the need for additional installation time and other digital inputs required for actuator readback.

System cabling

Moreover, termination carriers prewired by Phoenix Contact enable quick, error-free mounting and connection to conventional higher-level control systems.

Available approvals and characteristics

All certificates and characteristics are, of course, available for easy loop calculation, configuration, and document creation.



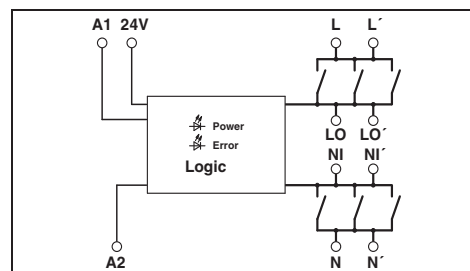
PSR-SIL coupling relay for F&G applications

- Couples digital output signals to I/O devices (valves, etc.) for electrical isolation and power adaptation
- Long service life, thanks to integrated test pulse filters
- Connectable, configurable open circuit and load monitoring
- Special design for avoiding spurious trips
- One enabling current path
- 17.5 mm slim housing
- Up to SIL 3 according to IEC 61508 (low demand)



Coupling relay for safe switch-on certified according to SIL 3

Applied for:
UL Listed/CUL Listed/TUEV-RH



Technical Data

Input Data	
Nominal input voltage U_N	24 V DC
Permissible range (with reference to U_N)	0.85 ... 1.1
Typ. current consumption (with reference to U_N)	75 mA
Typ. response time at U_N	30 ms
Recovery time	1 s
Output data	
Contact type	1 enabling current path
Contact material	AgCuNi, + 0.2 μ m Au
Max./min. switching voltage	250 V AC/15 V AC/DC
Limiting continuous current	5 A (N/O contact, pay attention to the derating)
Max./min. inrush current	5 A/100 mA
Min. switching power	1.5 W
Short-circuit protection of the output circuits	-
General data	
Ambient temperature range	-20°C ... 55°C
Air and creepage distances between the circuits	DIN EN 50178
Rated surge voltage/insulation	6 kV/safe isolation
Screw connection solid/stranded/AWG	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 12
Spring-cage connection (solid/stranded/AWG)	0.2 - 1.5 mm ² /0.2 - 1.5 mm ² /24 - 16
Dimensions	17.5 mm/99 mm/114.5 mm
W/H/D	Screw version 17.5 mm/112 mm/114.5 mm Spring-cage version

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
F&G coupling relay for failsafe controllers , one enabling current path, SIL 3 according to IEC 61508 (low demand)			
With screw connection	PSR-SCP- 24DC/ETP/1X1	2986711	1
With spring-cage connection	PSR-SPP- 24DC/ETP/1X1	2986562	1

INTERFACE Safety - PSR-SIL coupling relays

Termination carrier for PSR-SIL coupling relays



The **TC-... termination carriers** are compact solutions for conveniently and smoothly connecting standard DIN rail devices from the PSR range to output modules of automation systems using system cables (e.g., VARIOFACE system cabling).

PSR-SIL coupling relays are available for both ESD and F&G applications.

The integrated test pulse filter and tailored current control circuit ensure a long service life and optimum compatibility with various higher-level control systems.

All certificates and characteristics are available for easy loop calculation, configuration, and document creation.

The termination carriers combine the advantages of modular DIN rail devices with those offered by plug and play rapid cabling solutions to provide a consistent solution for system technology.

Compact

- Saves up to 30% of control cabinet space due to compact design
- Integrated end clamps
- Easily accessible terminal points, test sockets, and system plug-in connectors

Rugged and reliable

- Stable, vibration-resistant aluminum carrier device profile
- PCB is completely decoupled from modules. Modules are snapped onto integrated DIN rail profile

Flexible

- Profile sections without pitch markings
- Quick and safe module connection with plug-in cable sets
- Horizontal or vertical DIN rail mounting
- Can be flexibly adapted to suit any controller or higher-level control system
- Specific solutions tailored to your requirements on request
- Available pre-assembled with modules and wired, or for self-assembly



Select PSR-SIL coupling relay



Select termination carrier TC...



Select controller-specific front adapter and system cable



Solutions also available for MACX and MINI Analog

Termination carrier for PSR-SIL coupling relays

- Convenient and faultless connection using pre-assembled system cables
- 1:1 signal allocation to a 37-pos. D-SUB plug-in connector
- Redundant power supply, decoupled from diode and protected against polarity reversal
- Integrated undervoltage detection with separate signal path



Termination carrier for up to 16 PSR-FSP modules



Termination carrier for up to 16 PSR-ETP modules

Notes:
Cable and jumper plugs are not supplied as standard with the termination carriers.

Housing width 304 mm

Technical Data

General data	
Connection to the control system level	D-SUB pin strip
Number of positions	37
Max. operating voltage	< 50 V DC (per signal/channel)
Max. permissible current	1 A (signal/channel)
Rated insulation voltage	50 V
Surge voltage category	II
Pollution degree	2
Degree of protection	IP20
Ambient temperature range	-40°C ... 80°C
Inflammability class according to UL 94	V0
Dimensions W/H/D	304/170/160 mm
Supply	
Input voltage range	21.1 V DC ... 26.4 V DC
Redundant supply	yes, decoupled from diodes
Polarization and surge protection	yes
Fuse	2.5 A slow-blow
Status indication	2 x green LEDs (PWR1 and PWR2)
Undervoltage monitoring	at < 18 V (alarm contact, 1 N/O contact)

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Termination carrier for 16 coupling relays For safety-related switching off For safety-related switching on	TC-2D37SUB-DO16-ESD-AR-UNI	2902913	1

Accessories

Cable set without use of confirmation contact, suitable for PSR-FSP/Order No. 2981978	TC-C-PSR3-SC-A10000A20000	2903389	16
Cable set with use of confirmation contact, suitable for PSR-FSP/Order No. 2986960 and 2986575	TC-C-PSR3-SC-A10000A23132	2903390	16
Jumper plug for occupying unused module slots, suitable for PSR-FSP/Order No. 2986960 and 2986575	TC-C-PTSM-50-0000000J1J1	2903388	8
Cable set with 24 V module supply, suitable for PSR-ETP/Order No. 2986711	TC-C-PSR3-SC-A100V+A20000	2903391	16

Housing width 304 mm

Technical Data

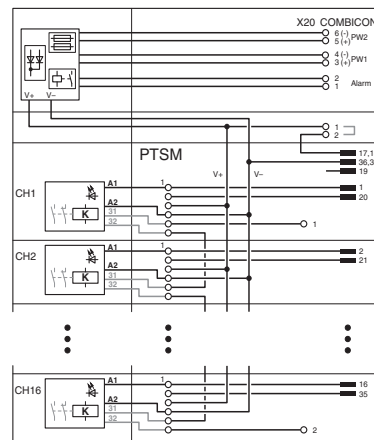
General data	
Connection to the control system level	D-SUB pin strip
Number of positions	37
Max. operating voltage	< 50 V DC (per signal/channel)
Max. permissible current	1 A (signal/channel)
Rated insulation voltage	50 V
Surge voltage category	II
Pollution degree	2
Degree of protection	IP20
Ambient temperature range	-40°C ... 80°C
Inflammability class according to UL 94	V0
Dimensions W/H/D	304/170/160 mm
Supply	
Input voltage range	21.1 V DC ... 26.4 V DC
Redundant supply	yes, decoupled from diodes
Polarization and surge protection	yes
Fuse	2.5 A slow-blow
Status indication	2 x green LEDs (PWR1 and PWR2)
Undervoltage monitoring	at < 18 V (alarm contact, 1 N/O contact)

Ordering data

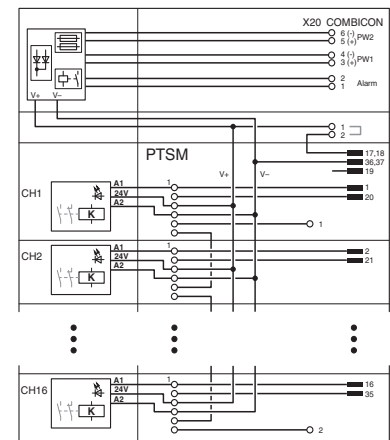
Description	Type	Order No.	Pcs. / Pkt.
Termination carrier for 16 coupling relays For safety-related switching off For safety-related switching on	TC-2D37SUB-DO16-F&G-AR-UNI	2902914	1

Accessories

Cable set without use of confirmation contact, suitable for PSR-FSP/Order No. 2981978	TC-C-PSR3-SC-A10000A20000	2903389	16
Cable set with use of confirmation contact, suitable for PSR-FSP/Order No. 2986960 and 2986575	TC-C-PSR3-SC-A10000A23132	2903390	16
Jumper plug for occupying unused module slots, suitable for PSR-FSP/Order No. 2986960 and 2986575	TC-C-PTSM-50-0000000J1J1	2903388	8
Cable set with 24 V module supply, suitable for PSR-ETP/Order No. 2986711	TC-C-PSR3-SC-A100V+A20000	2903391	16



TC-2D37SUB-DO16-ESD-AR-UNI connection scheme



TC-2D37SUB-DO16-F&G-AR-UNI connection scheme

INTERFACE Relay - PR octal relay

Octal relays for high DC loads

Plug-in octal relays with two N/O contacts connected in series to match the PR-3 relay base.

The relays are specially designed for switching high DC loads.

Further advantages:

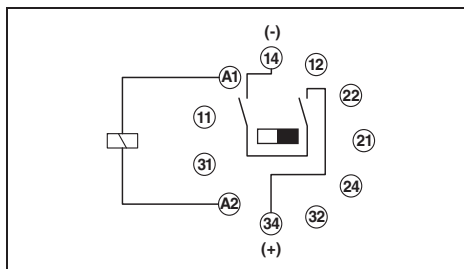
- Full shutdown by means of 2 x 1.7 mm contact opening
- With lockable manual operation
- Integrated status LED
- Integrated freewheeling diode with DC types



1 N/O contact, with blow magnet

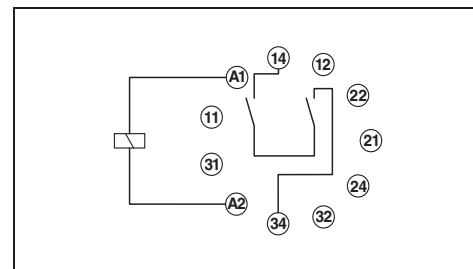


1 N/O contact



Technical Data

	①	②	③	④	⑤	⑥
refer to the diagram						
Typ. input current at U_N [mA]	55	13	7	100	22	11
Typ. response time at U_N [ms]	20	20	20			
Typ. response time at U_N (depending on phase relation) [ms]				5 - 20	5 - 20	5 - 20
Typ. release time at U_N [ms]	30	30	30			
Typ. release time at U_N (depending on phase relation) [ms]				5 - 20	5 - 20	5 - 20



Technical Data

	①	②	③	④	⑤	⑥
refer to the diagram						
Typ. input current at U_N [mA]	55	13	7	100	22	11
Typ. response time at U_N [ms]	20	20	20			
Typ. response time at U_N (depending on phase relation) [ms]				5 - 20	5 - 20	5 - 20
Typ. release time at U_N [ms]	30	30	30			
Typ. release time at U_N (depending on phase relation) [ms]				5 - 20	5 - 20	5 - 20

Input Data	
Permissible range (with reference to U_N)	
Typ. input current at U_N [mA]	
Typ. response time at U_N [ms]	
Typ. response time at U_N (depending on phase relation) [ms]	
Typ. release time at U_N [ms]	
Typ. release time at U_N (depending on phase relation) [ms]	
Output data	
Contact type	
Contact material	
Max. switching voltage	
Min. switching voltage	
Limiting continuous current	
Min. switching current	
Max. interrupting rating, ohmic load	
	250 V AC
General data	
Test voltage (winding/contact)	
Ambient temperature (operation)	
Nominal operating mode	
Mechanical service life	
Standards/regulations	
Mounting position/mounting	

Technical Data	
single contact, 1 N/O contact (series connection, 2 N/O contacts) with blowout magnet	
AgNi	
250 V AC/220 V DC	
10 V (at 10 mA)	
10 A	
10 mA (at 10 V)	
2500 VA	
2.5 kV _{rms} (50 Hz, 1 min.)	
-40°C ... 60°C	
100% operating factor	
approximately 10 ⁷ cycles	
IEC 61810, EN 60947	
any/on relay base PR3	

Technical Data	
single contact, 1 N/O contact (series connection, 2 N/O contacts)	
AgNi	
250 V AC/220 V DC	
10 V (at 10 mA)	
10 A	
10 mA (at 10 V)	
2500 VA	
2.5 kV _{rms} (50 Hz, 1 min.)	
-40°C ... 60°C	
100% operating factor	
approximately 10 ⁷ cycles	
IEC 61810, EN 60947	
any/on relay base PR3	

Ordering data

Description	Input voltage U_N
Plug-in octal relay for high DC loads	
	① 24 V DC
	② 110 V DC
	③ 220 V DC
	④ 24 V AC
	⑤ 120 V AC
	⑥ 230 V AC

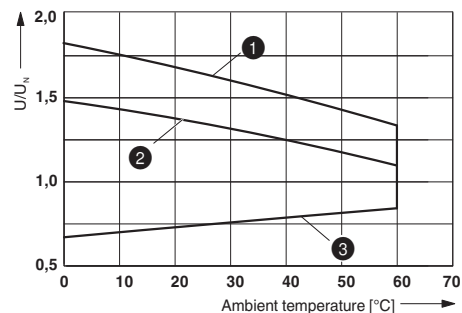
Type	Order No.	Pcs. / Pkt.
REL-OR/LDP- 24DC/1/MB	2901901	10
REL-OR/LDP-110DC/1/MB	2901902	10
REL-OR/LDP-220DC/1/MB	2901904	10
REL-OR/L- 24AC/1/MB	2901905	10
REL-OR/L-120AC/1/MB	2901906	10
REL-OR/L-230AC/1/MB	2901907	10

Ordering data

Type	Order No.	Pcs. / Pkt.
REL-OR/LDP- 24DC/1	2901908	10
REL-OR/LDP-110DC/1	2901909	10
REL-OR/LDP-220DC/1	2901910	10
REL-OR/L- 24AC/1	2901911	10
REL-OR/L-120AC/1	2901912	10
REL-OR/L-230AC/1	2901913	10

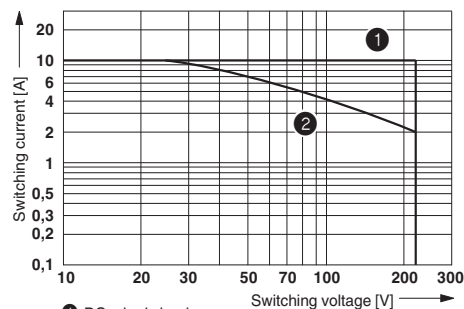
REL-OR.../1/MB (1 N/O contact with blow magnet)

Operating voltage range of the relay



- ① Maximum operating voltage without load current (0 A)
- ② Maximum operating voltage at limiting continuous current (10 A)
- ③ Minimum pick-up voltage without pre-excitation

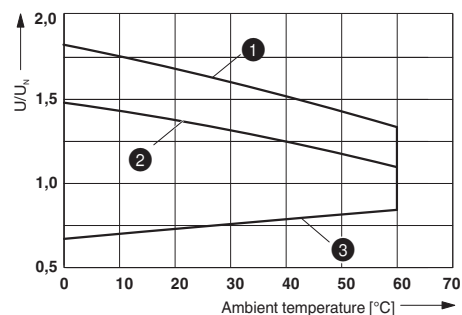
DC interrupting rating



- ① DC, ohmic load
- ② L/R = 40 ms

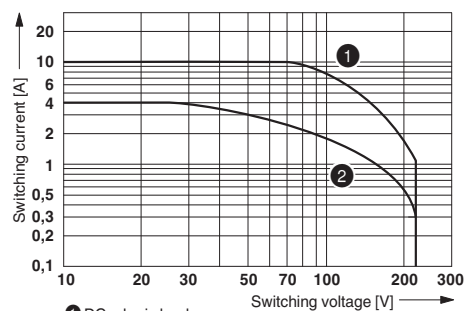
REL-OR.../1 (1 N/O contact)

Operating voltage range of the relay



- ① Maximum operating voltage without load current (0 A)
- ② Maximum operating voltage at limiting continuous current (10 A)
- ③ Minimum pick-up voltage without pre-excitation

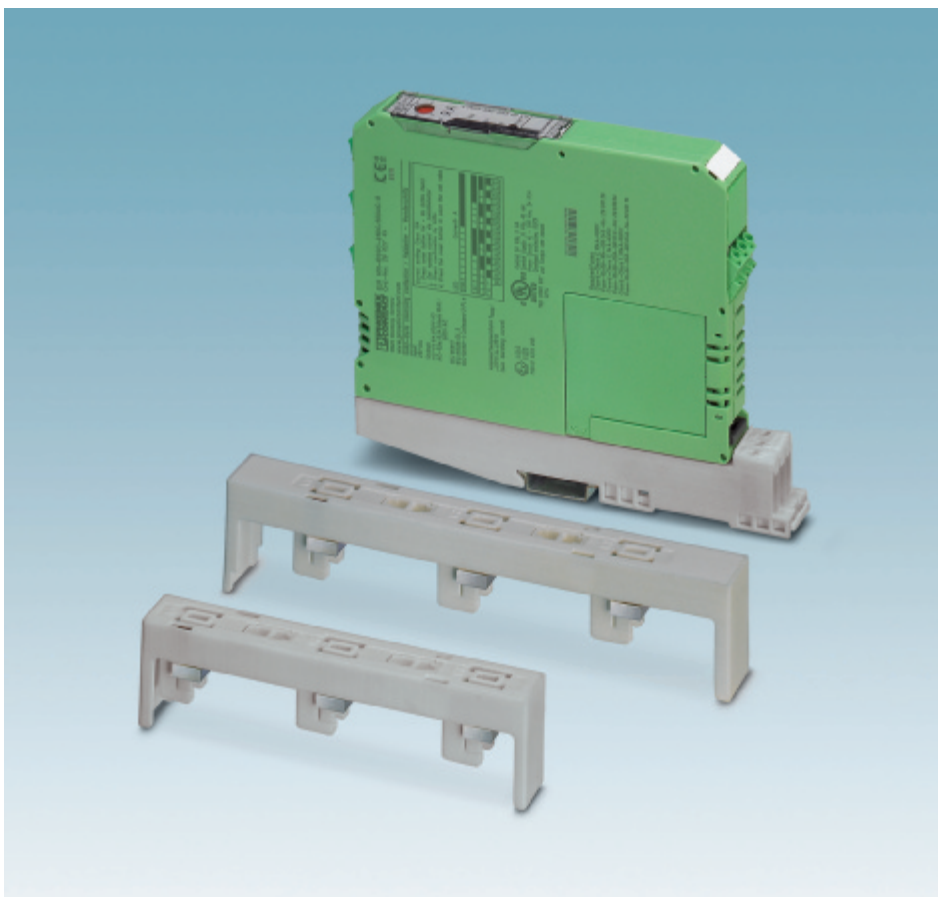
DC interrupting rating



- ① DC, ohmic load
- ② L/R = 40 ms

INTERFACE Relay - CONTACTRON hybrid motor starters

CONTACTRON hybrid motor starters with short-circuit protection



These short-circuit-proof 3-phase "4 in 1" hybrid motor starters for mounting on 30 mm DIN rails or 60 mm busbars combine four functions in one device: right contactor, left contactor, motor protection relay, and emergency stop up to category 3.

- They offer the following advantages:
- 22.5 mm wide
 - Bi-metal function can be set up to 9 A
 - Long service life
 - Space-saving
 - Reduced wiring
 - 3-phase loop bridging
 - Plug-in motor output terminal block
 - Coordination type 2 according to IEC/EN 60947-4-2

Input Data

Rated control supply voltage U_s
Rated control supply voltage range with reference to U_s

Rated control supply current I_s at U_s
Rated actuating voltage U_c R/L
Rated actuating voltage range with reference to U_c

Rated actuating current I_c at U_c
Input circuit
Operating voltage/status/error indicator

Output data load side

Output voltage range
Load current

Min. load current
Residual voltage
Output protection

General data

Rated insulation voltage
Rated surge voltage
Reversing frequency
Ambient temperature (operation)
Electrical service life
Standards/regulations
Degree of protection according to IEC 60529/EN 60529
Mounting position
Mounting
Screw connection solid/stranded/AWG
Dimensions W/H/D

Description

Short-circuit-proof hybrid motor starters

Hybrid motor starters
DIN rail adapter
Power rail adapter, 160 mm
Power rail adapter, 200 mm

Set consisting of short-circuit-proof hybrid-motor starter and DIN rail adapter

Fuse

Coordination type 2 to 10 kA/500 V
Coordination type 2 to 5 kA/400 V
Coordination type 1 to 30 kA/500 V



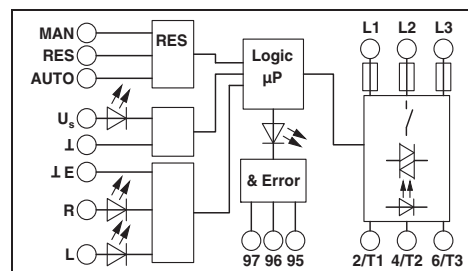
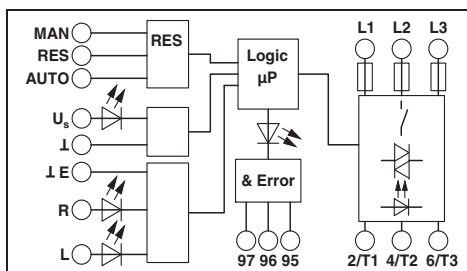
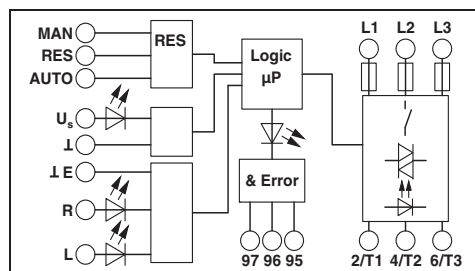
For reversing 3~ AC motors
up to 550 V AC/3 x 0.6 A



For reversing 3~ AC motors
up to 550 V AC/3 x 2.4 A



For reversing 3~ AC motors
up to 550 V AC/3 x 9 A



Technical Data

24 V DC
0.8 ... 1.25

40 mA
24 V DC
0.8 ... 1.25

5 mA
protection against polarity reversal, surge protection
green LED/yellow LED/red LED

42 V AC ... 550 V AC
max. 600 mA

75 mA
< 0.2 V
surge protection, short-circuit protection

500 V
6 kV/safe isolation
max. 2 Hz
-25°C ... 70°C
3 x 10⁷ cycles
DIN EN 50178/EN 60947
IP20
vertical (horizontal DIN rail)
can be aligned with spacing = 20 mm
0.14 - 2.5 mm²/0.14 - 2.5 mm²/26 - 12
22.5 mm/99 mm/114.5 mm

Technical Data

24 V DC
0.8 ... 1.25

40 mA
24 V DC
0.8 ... 1.25

5 mA
protection against polarity reversal, surge protection
green LED/yellow LED/red LED

42 V AC ... 550 V AC
max. 2.4 A

180 mA
< 0.3 V
surge protection, short-circuit protection

500 V
6 kV/safe isolation
max. 2 Hz
-25°C ... 70°C
3 x 10⁷ cycles
DIN EN 50178/EN 60947
IP20
vertical (horizontal DIN rail)
can be aligned with spacing = 20 mm
0.14 - 2.5 mm²/0.14 - 2.5 mm²/26 - 12
22.5 mm/99 mm/114.5 mm

Technical Data

24 V DC
0.8 ... 1.25

40 mA
24 V DC
0.8 ... 1.25

5 mA
protection against polarity reversal, surge protection
green LED/yellow LED/red LED

42 V AC ... 550 V AC
max. 9 A

1.5 A
< 0.5 V
surge protection, short-circuit protection

500 V
6 kV/safe isolation
max. 2 Hz
-25°C ... 70°C
3 x 10⁷ cycles
DIN EN 50178/EN 60947
IP20
vertical (horizontal DIN rail)
can be aligned with spacing = 20 mm
0.14 - 2.5 mm²/0.14 - 2.5 mm²/26 - 12
22.5 mm/99 mm/114.5 mm

Ordering data

Type	Order No.	Pcs. / Pkt.
ELR H51-IESSC-24DC500AC-06	2902746	1
EM RD-ADAPTER	2902747	1
EM RI-ADAPTER COMPACT	2902748	1
EM RI-ADAPTER CLASSIC	2902831	1
ELR H51-0.6-DIN-RAIL-SET	2902952	1

Ordering data

Type	Order No.	Pcs. / Pkt.
ELR H51-IESSC-24DC500AC-2	2902744	1
EM RD-ADAPTER	2902747	1
EM RI-ADAPTER COMPACT	2902748	1
EM RI-ADAPTER CLASSIC	2902831	1
ELR H51-2.4-DIN-RAIL-SET	2902953	1

Ordering data

Type	Order No.	Pcs. / Pkt.
ELR H51-IESSC-24DC500AC-9	2902745	1
EM RD-ADAPTER	2902747	1
EM RI-ADAPTER COMPACT	2902748	1
EM RI-ADAPTER CLASSIC	2902831	1
ELR H51-9-DIN-RAIL-SET	2902954	1

Accessories

FUSE-10X38-16A-GR	2903126	1
FUSE-10X38-20A-GR	2903384	10
FUSE-10X38-30A-MR	2903119	1

Accessories

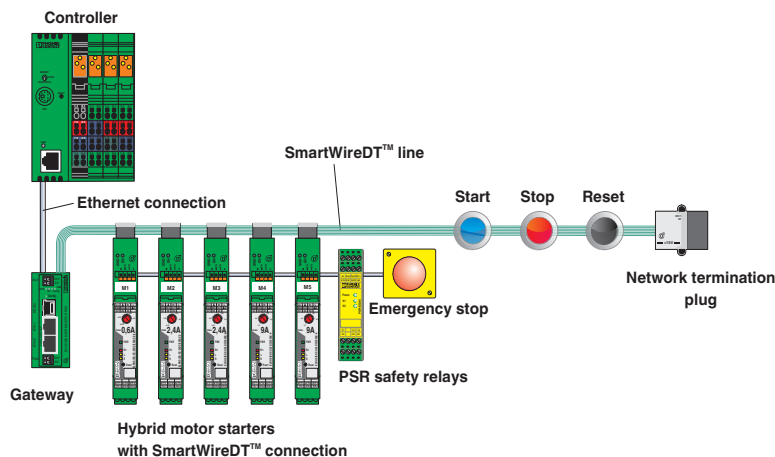
FUSE-10X38-16A-GR	2903126	1
FUSE-10X38-20A-GR	2903384	10
FUSE-10X38-30A-MR	2903119	1

Accessories

FUSE-10X38-16A-GR	2903126	1
FUSE-10X38-20A-GR	2903384	10
FUSE-10X38-30A-MR	2903119	1

INTERFACE Relay - CONTACTRON hybrid motor starters

CONTACTRON hybrid motor starters with SmartWire-DT™ support



Switch and reverse motors safely and reliably with CONTACTRON compact hybrid motor starters. The CONTACTRON "4 in 1" combines all the functions of a conventional reversing contactor circuit in a single device – for motors up to 4 kW, with a design width of just 22.5 mm.

The SmartWire-DT™ communication system makes the complex cabling of the control and signal levels easier and clearer. You can also combine the hybrid motor starters with standard fieldbus systems.

The hybrid motor starters, as well as the command and signaling devices, are directly connected to the controller with SmartWire-DT™ via a gateway. Safe shutdown is implemented with a PSR safety relay. Thanks to SmartWire-DT™, the amount of wiring is significantly reduced. You benefit from clearly arranged and compact control cabinets.

Notes:

Switching device technical data.

You can download the **SmartWire-DT™ Assist** software for easy creation of SmartWire-DT™ networks free of charge at www.phoenixcontact.com

SmartWire-DT™ is a registered trademark of Eaton Corporation.

Input Data

Rated control supply voltage U_s
Rated control supply voltage range with reference to U_s

Rated control supply current I_s at U_s
Rated actuating voltage U_c R/L
Rated actuating voltage range with reference to U_c

Rated actuating current I_c at U_c
Input circuit
Operating voltage/status/error indicator

Output data load side

Output voltage range
Load current

Surge current
Min. load current
Residual voltage
Leakage current
Output protection

General data

Rated insulation voltage
Rated surge voltage
Reversing frequency
Ambient temperature (operation)
Electrical service life
Standards/regulations
Degree of protection according to IEC 60529/EN 60529
Mounting position
Mounting
Screw connection solid/stranded/AWG

W/H/D

Safety data

EC-type examination certificate according to ATEX

Description

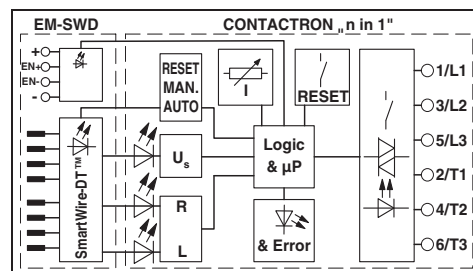
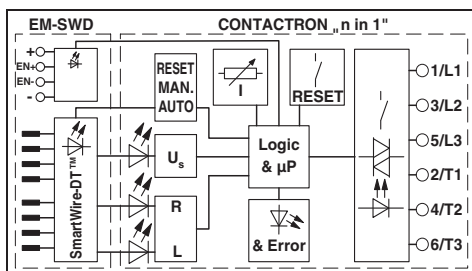
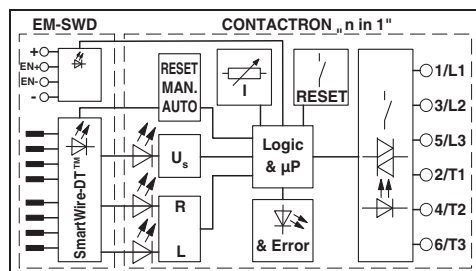
Reversing starter + emergency stop + motor protection + SmartWire-DT™ adapter as a set



Reversing starter + emergency stop + motor protection + SmartWire-DT™ adapter, as a set
550 V AC/3 x 0.6 A

Reversing starter + emergency stop + motor protection + SmartWire-DT™ adapter, as a set
550 V AC/3 x 2.4 A

Reversing starter + emergency stop + motor protection + SmartWire-DT™ adapter, as a set
550 V AC/3 x 9 A



Technical Data

24 V DC
0.8 ... 1.25

40 mA
24 V DC
0.8 ... 1.25

5 mA
protection against polarity reversal, surge protection
green LED/yellow LED/red LED

42 V AC ... 550 V AC
max. 600 mA (see derating curve)

100 A (t = 10 ms)
75 mA
< 0.3 V
0 mA
surge protection

500 V
6 kV/safe isolation
max. 2 Hz
-25°C ... 70°C
3 x 10⁷ cycles
DIN EN 50178/EN 60947
IP20
vertical (horizontal DIN rail)
can be aligned with spacing = 20 mm
0.14 - 2.5 mm²/0.14 - 2.5 mm²/26 - 12
22.5 mm/165 mm/114.5 mm

Ex II (2) G, Ex II (2) D
PTB 07 ATEX 3145

Ordering data

Type	Order No.	Pcs. / Pkt.
ELR H5-IES-SC-SWD/500AC-0,6	2903116	1

Technical Data

24 V DC
0.8 ... 1.25

40 mA
24 V DC
0.8 ... 1.25

5 mA
protection against polarity reversal, surge protection
green LED/yellow LED/red LED

42 V AC ... 550 V AC
max. 2.4 A (see derating curve)

100 A (t = 10 ms)
180 mA
< 0.3 V
0 mA
surge protection

500 V
6 kV/safe isolation
max. 2 Hz
-25°C ... 70°C
3 x 10⁷ cycles
DIN EN 50178/EN 60947
IP20
vertical (horizontal DIN rail)
can be aligned with spacing = 20 mm
0.14 - 2.5 mm²/0.14 - 2.5 mm²/26 - 12
22.5 mm/165 mm/114.5 mm

Ex II (2) G, Ex II (2) D
PTB 07 ATEX 3145

Ordering data

Type	Order No.	Pcs. / Pkt.
ELR H5-IES-SC-SWD/500AC-2	2903117	1

Technical Data

24 V DC
0.8 ... 1.25

40 mA
24 V DC
0.8 ... 1.25

5 mA
protection against polarity reversal, surge protection
green LED/yellow LED/red LED

42 V AC ... 550 V AC
max. 9 A (see derating curve)

100 A (t = 10 ms)
1.5 A
< 0.5 V
0 mA
surge protection

500 V
6 kV/safe isolation
max. 2 Hz
-25°C ... 70°C
3 x 10⁷ cycles
DIN EN 50178/EN 60947
IP20
vertical (horizontal DIN rail)
can be aligned with spacing = 20 mm
0.14 - 2.5 mm²/0.14 - 2.5 mm²/26 - 12
22.5 mm/165 mm/114.5 mm

Ex II (2) G, Ex II (2) D
PTB 07 ATEX 3145

Ordering data

Type	Order No.	Pcs. / Pkt.
ELR H5-IES-SC-SWD/500AC-9	2903118	1

INTERFACE Relay - CONTACTRON hybrid motor starters

SmartWire-DT™ accessories

With the "EM SWD-ADAPTER" SmartWire-DT™ adapter for the CONTACTRON 24 V DC "n in 1" devices, the device concerned can be seamlessly integrated into the fieldbus environment using SmartWire-DT™. Corresponding gateways are available for the following bus systems:

- PROFIBUS-DP
- CANopen
- Modbus TCP/Ethernet IP



SmartWire DT adapter



Gateways

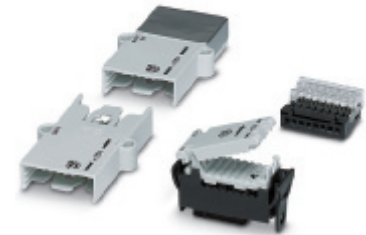
		Ordering data			Ordering data		
Description	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
SmartWire-DT™ adapter	green	EM SWD-ADAPTER	2902776	1			
CANopen gateway	green				EU5C-SWD-CAN PXC	2903098	1
PROFIBUS DP gateway	green				EU5C-SWD-DP PXC	2903100	1
Ethernet gateway	green				EU5C-SWD-EIP-MODTCP PXC	2903244	1

SmartWire-DT™ accessories

Accessories for SmartWire-DT™ and SmartWire-DT™ devices for connecting digital and analog input and output signals.



Input/output modules



Plug and coupler

		Ordering data			Ordering data		
Description	Color	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Digital module, 4 inputs, 4 outputs		EU5E-SWD-4D4D PXC	2903101	1			
Digital module, 4 inputs		EU5E-SWD-4DX PXC	2903102	1			
Digital module, 8 outputs		EU5E-SWD-X8D PXC	2903103	1			
Analog module, 2 inputs, 2 outputs		EU5E-SWD-2A2A PXC	2903104	1			
Network dummy plug					SWD4-RC8-10 PXC	2903106	1
Device plug, 8-pos.					SWD4-8SF2-5 PXC	2903107	1
Flat plug, 8-pos.					SWD4-8MF2 PXC	2903108	1
Coupling for 8-pos. flat plug					SWD4-8SFF2-5 PXC	2903109	1

SmartWire-DT™ accessories



Plug tools



Flat-ribbon cable, 8-pos.

Description	Color	Ordering data			Ordering data		
		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Pliers for device plugs		SWD4-CRP-1 PXC	2903110	1			
Pliers for flat plugs		SWD4-CRP-2 PXC	2903114	1			
Flat-ribbon cable, 8-pos., 100 m					SWD4-100LF-8-24 PXC	2903111	1
Flat-ribbon cable, 8-pos., 3 m					SWD4-3LF8-24-2S PXC	2903112	1

SmartWire-DT™ accessories

For supplying further SmartWire-DT™ devices and for additionally supplying the control voltage to motor starters and contactors.



Power feed

Description	Color	Ordering data		
		Type	Order No.	Pcs. / Pkt.
Power feed module for supplying further SmartWire-DT™ devices		EU5C-SWD-PF2-1 PXC	2903113	1

INTERFACE Cabling - VARIOFACE front adapters

Front adapter for Honeywell C300 controller input cards

This connection adapter can be easily fitted onto the C300 input cards. This enables you to connect 16 PLC modules using two V8 adapters via 15-pos. D-SUB cables.

The adapter offers the following features:

- Connection adapter with 15-pos. D-SUB plugs
- Transmission of 16 channels

A wide range of PLC-INTERFACE components complete the system concept.



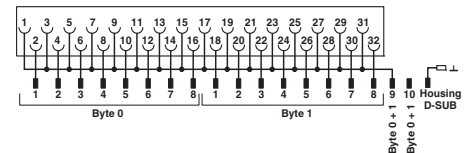
Honeywell C300 front adapter

Technical Data

Max. perm. operating voltage	24 V DC
Max. permissible current	1 A (per path)
Ambient temperature (operation)	-20°C ... 50°C
Ambient temperature (storage/transport)	-20°C ... 70°C
Mounting position	Any
Standards/regulations	DIN EN 50178

Ordering data

Description	No. of pos.	Type	Order No.	Pcs. / Pkt.
VARIOFACE front adapter for input modules				
TDIL01	15	FLKM-PA-2D15/HW/DI/C300	2901879	1
TDIL11				

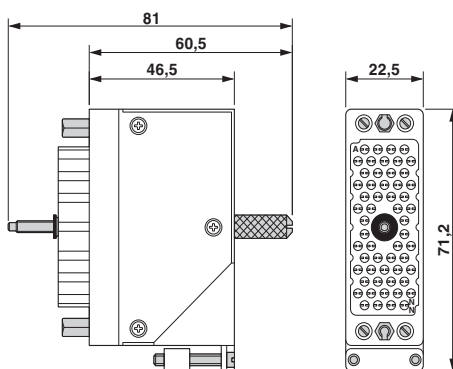


FLKM-PA-2D15/HW/DI/C300 connection scheme

System cable with a 56-pos. ELCO/EDAC plug-in connector and an open end

Assembled system cable for connecting 56-pos. EDAC plug-in connectors from the 516 series or ELCO plug-in connectors from the 8016 series.

- Single-sided 516 series EDAC socket plug-in connectors
- Metal housing with lateral cable outlet
- Keying sockets in location 1 by default
- Open end at the other end
- Single wire marking: 1, 2, 3, ... 53, 54, Y, Z (see pin assignment)
- Shield connection on both sides:
H05V-K 1 mm² cable, black, length: 0.5 m



56-pos. system cable

Notes:

The system cables are designed specifically for the UMK-EC56/56-XOR (2975900) and UMK-EC56/56-XOL (2975890) modules.

When using the UMK-EC56/FRONT 2,5V/R (2976161) or UMK-EC56/FRONT 2,5V/L (2976158) modules, the keying sockets must be adapted accordingly.

Observe the module and system cable layouts.

Max. perm. operating voltage
Max. perm. current carrying capacity per path
Max. conductor resistance
Ambient temperature (operation)
Shield

Conductor cross section
Conductor structure: stranded wires/material
Outside diameter

Technical Data

25 V AC/60 V DC
1.5 A
0.056 Ω/m
-20°C ... 60°C
Tinned copper-braided shield, approximately 85% covering

AWG 22/0.34 mm²
19/Cu uninsulated
14.2 mm

Ordering data

Description	No. of pos.	Cable length	Type	Order No.	Pcs. / Pkt.
Shielded round cable , single-sided with assembled EDAC socket plug-in connector and an open end					
	56	1 m	CABLE-EC56/F/OE/0,34/S/1,0M	2903395	1
	56	2 m	CABLE-EC56/F/OE/0,34/S/2,0M	2903396	1
	56	4 m	CABLE-EC56/F/OE/0,34/S/4,0M	2903397	1
	56	6 m	CABLE-EC56/F/OE/0,34/S/6,0M	2903398	1
	56	8 m	CABLE-EC56/F/OE/0,34/S/8,0M	2903399	1
	56	10 m	CABLE-EC56/F/OE/0,34/S/10,0M	2903400	1
	56	15 m	CABLE-EC56/F/OE/0,34/S/15,0M	2903401	1
	56	20 m	CABLE-EC56/F/OE/0,34/S/20,0M	2903402	1

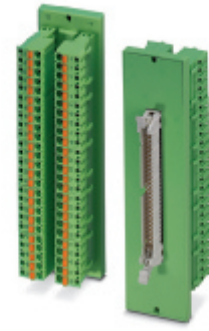
Pin assignment

Single wire marking	EDAC socket plug-in connector	Single wire marking	EDAC socket plug-in connector
Z	Z	31	m
1	A	32	n
2	B	33	p
3	C	34	r
4	D	35	s
5	E	36	t
6	F	37	u
7	H	38	v
8	J	39	w
9	K	40	x
10	L	41	y
11	M	42	z
12	N	43	AA
13	P	44	BB
14	R	45	CC
15	S	46	DD
16	T	47	EE
17	U	48	FF
18	V	49	HH
19	W	50	JJ
20	X	51	KK
21	a	52	LL
22	b	53	MM
23	c	54	NN
24	d	Y	Y
25	e		
26	f		
27	h		
28	j		
29	k		
30	l		

INTERFACE Cabling - VARIOFACE feed-through modules

Feed-through modules for IDC/FLK plug-in connectors (pitch 2.54 mm) with spring-cage connection

- 1:1 connection
- 10- to 50-pos.
- Plug-in push-in spring-cage connection
- Plug-in connector according to IEC 60603-13
- Short and long catches are supplied with the module
- Select housing cutout for side panel mounting according to dimensions table



With pin strip and push-in spring-cage connection

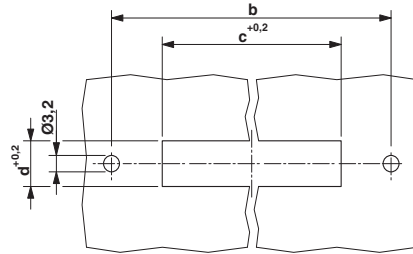
Technical Data

Operating voltage	< 50 V AC/60 V DC
Max. perm. current (per branch)	1 A
Ambient temperature (operation)	-20°C ... 50°C
Mounting position	Any
Standards/regulations	DIN EN 50178, IEC 60664, IEC 62103
Connection data solid/stranded/AWG	0,2 - 2,5 mm ² /0,2 - 2,5 mm ² /24 - 12

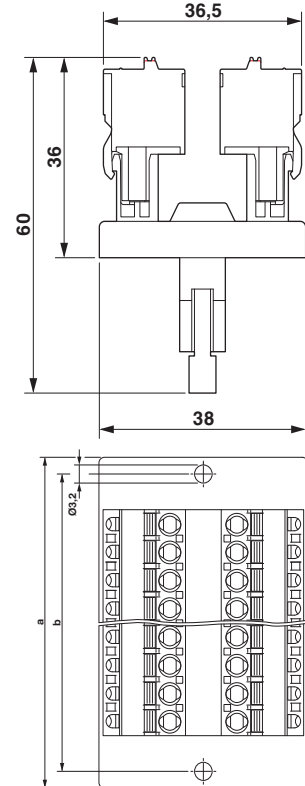
Ordering data

Description	No. of pos.	Module width W	Type	Order No.	Pcs. / Pkt.
VARIOFACE feed-through module, with pin strip					
	10	36.50	DFLK 10/FKCT	2903034	1
	14	36.50	DFLK 14/FKCT	2903035	1
	16	36.50	DFLK 16/FKCT	2903036	1
	20	36.50	DFLK 20/FKCT	2903038	1
	26	36.50	DFLK 26/FKCT	2903039	1
	34	36.50	DFLK 34/FKCT	2903041	1
	40	36.50	DFLK 40/FKCT	2903042	1
	50	36.50	DFLK 50/FKCT	2903043	1

Dimensioning of the housing cutout



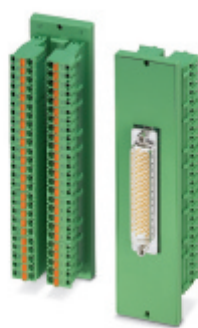
Dimensional drawing DFLK...FKCT



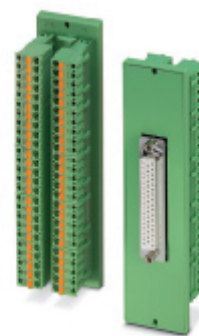
Type	a	b	c	d
DFLK 10/FKCT	58.4	52.5	40.1 + 0.2	9 + 0.2
DFLK 14/FKCT	58.4	52.5	40.1 + 0.2	9 + 0.2
DFLK 16/FKCT	58.4	52.5	40.1 + 0.2	9 + 0.2
DFLK 20/FKCT	68.4	62.5	45.2 + 0.2	9 + 0.2
DFLK 26/FKCT	83.4	77.5	52.8 + 0.2	9 + 0.2
DFLK 34/FKCT	103.4	97.5	63.0 + 0.2	9 + 0.2
DFLK 40/FKCT	128.4	122.5	70.6 + 0.2	9 + 0.2
DFLK 50/FKCT	143.4	137.5	83.3 + 0.2	9 + 0.2

Feed-through modules for D-SUB miniature plug-in connectors with spring-cage connection

- 1:1 connection
- 9 to 50-pos.
- Plug-in push-in spring-cage connection
- Plug-in connector according to IEC 60807-2
- D-SUB 4-40 UNC thread
- 9 to 37-pos. with separate ground tap
- 50-pos.: no ground tap
- Select housing cutout for side panel mounting according to dimensions table



With D-SUB pin strip and push-in spring-cage connection



With D-SUB socket and push-in spring-cage connection

Operating voltage	125 V AC/DC
Max. perm. current (per branch)	2.5 A
Ambient temperature (operation)	-20°C ... 50°C
Mounting position	Any
Standards/regulations	DIN EN 50178
Connection data solid/stranded/AWG	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 12

Technical Data

Operating voltage	125 V AC/DC
Max. perm. current (per branch)	2.5 A
Ambient temperature (operation)	-20°C ... 50°C
Mounting position	Any
Standards/regulations	DIN EN 50178
Connection data solid/stranded/AWG	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 12

Technical Data

Operating voltage	125 V AC/DC
Max. perm. current (per branch)	2.5 A
Ambient temperature (operation)	-20°C ... 50°C
Mounting position	Any
Standards/regulations	DIN EN 50178
Connection data solid/stranded/AWG	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 12

Description	No. of pos.	Module width W
VARIOFACE feed-through module, with D-subminiature plug-in connector		
	9	36.50
	15	36.50
	25	36.50
	37	36.50
	50	36.50

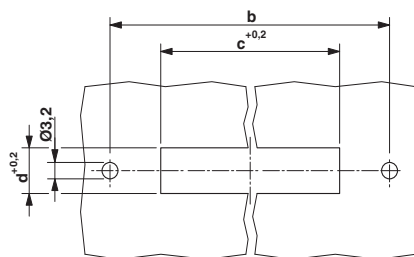
Ordering data

Type	Order No.	Pcs. / Pkt.
DFLK-D 9 SUB/M/FKCT	2903052	1
DFLK-D15 SUB/M/FKCT	2903054	1
DFLK-D25 SUB/M/FKCT	2903055	1
DFLK-D37 SUB/M/FKCT	2903056	1
DFLK-D50 SUB/M/FKCT	2903058	1

Ordering data

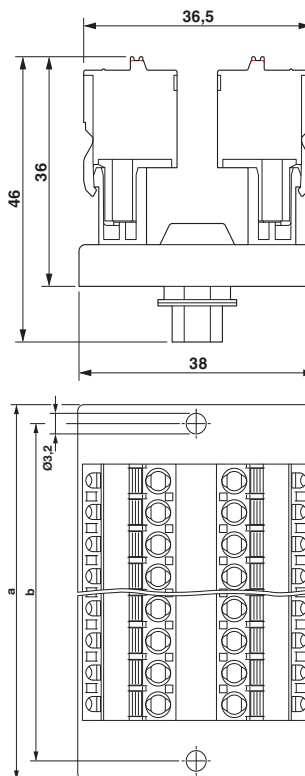
Type	Order No.	Pcs. / Pkt.
DFLK-D 9 SUB/F/FKCT	2903063	1
DFLK-D15 SUB/F/FKCT	2903065	1
DFLK-D25 SUB/F/FKCT	2903067	1
DFLK-D37 SUB/F/FKCT	2903069	1
DFLK-D50 SUB/F/FKCT	2903070	1

Dimensioning of the housing cutout



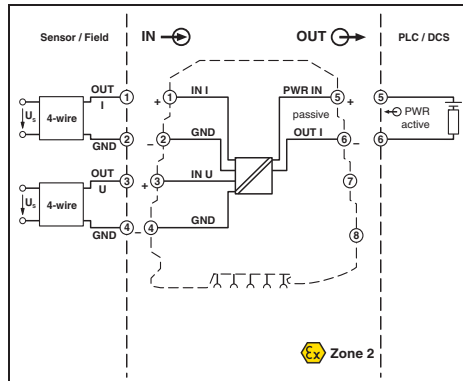
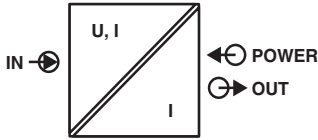
Type	a	b	c	d
DFLK-D 9 SUB/M/FKCT	58.4	52.5	40.2 + 0.2	13 + 0.2
DFLK-D15 SUB/M/FKCT	58.4	52.5	40.2 + 0.2	13 + 0.2
DFLK-D25 SUB/M/FKCT	83.4	77.5	54.2 + 0.2	13 + 0.2
DFLK-D37 SUB/M/FKCT	128.4	122.5	70.6 + 0.2	13 + 0.2
DFLK-D50 SUB/M/FKCT	143.4	137.5	67.8 + 0.2	15.8 + 0.2
DFLK-D 9 SUB/F/FKCT	58.4	52.5	40.2 + 0.2	13 + 0.2
DFLK-D15 SUB/F/FKCT	58.4	52.5	40.2 + 0.2	13 + 0.2
DFLK-D25 SUB/F/FKCT	83.4	77.5	54.2 + 0.2	13 + 0.2
DFLK-D37 SUB/F/FKCT	128.4	122.5	70.6 + 0.2	13 + 0.2
DFLK-D50 SUB/F/FKCT	143.4	137.5	67.8 + 0.2	15.8 + 0.2

Dimensional drawing DFLK-D...SUB...FKCT



INTERFACE Analog - MINI Analog isolating amplifiers

Analog IN/Analog OUT loop-powered isolator



Ex n



**Configurable,
up to 74 signal combinations,
loop-powered**

Housing width 6.2 mm

Technical Data

Input Data	Input signal (configurable using the DIP switch)
Maximum input signal	
Input resistance	
Output data	Output signal
Maximum output signal	
Load R_B	
Ripple	
General data	Supply voltage U_B
Current consumption	
Power consumption	
Maximum transmission error	
Temperature coefficient	
ZERO/SPAN adjustment	
Limit frequency (3 dB)	
Step response (10-90%)	
Electrical isolation	
Test voltage input/output	
Degree of protection	
Ambient temperature (operation)	
Mounting	
Housing material	
Dimensions W/H/D	
Screw connection solid/stranded/AWG	
Spring-cage connection (solid/stranded/AWG)	
Conformance/approvals	
Conformance	
ATEX	

U input	I input
2 ... 10 V, additional areas can be configured, see table	
< 40 V	< 50 mA (Dielectric strength up to 30 V)
approximately 100 k Ω (At ≤ 1 V, otherwise approximately 1 M Ω)	$\leq 50 \Omega$
4 ... 20 mA	
35 mA	
$((U_B - 8 \text{ V})/22 \text{ mA})$	
< 20 mV $_{pp}$ (at 500 Hz)	
8 V DC ... 30 V DC	
< 3.5 mA (without signal current)	
28 mW (without signal)	
< 0.1% (of final value)	
0.01%/K, typ. 0.005%/K	
$\pm 2\%/\pm 2\%$	
approximately 30 Hz	
approximately 16 ms	
basic insulation according to EN 61010	
1.5 kV (50 Hz, 1 min.)	
IP20	
-25°C ... 70°C	
any	
PBT	
6.2/93.1/102.5 mm	
0.2 ... 2.5 mm 2 /0.2 ... 2.5 mm 2 /26 - 12	
0.2 ... 2.5 mm 2 /0.2 ... 2.5 mm 2 /24 - 12	
CE-compliant	
Ex II 3 G Ex nA IIC T4 Gc X	

- Ultra-compact isolating amplifier for electrical isolation, conversion, and filtering of standard analog signals
- Supplied by an output loop
- Does not require any additional auxiliary voltage
- Up to 74 signal combinations can be configured using DIP switches
- Voltage input from mV voltages right up to 30 volts
- Current input from 2 mA right up to 40 mA
- 2-way isolation
- Standard configuration:
Input 2...10 V, output 4...20 mA

Notes:
Other input signals that have not been listed can be provided on request.
Information about power bridging, system cabling, and marking components can be found in the INTERFACE catalog or at www.phoenixcontact.com

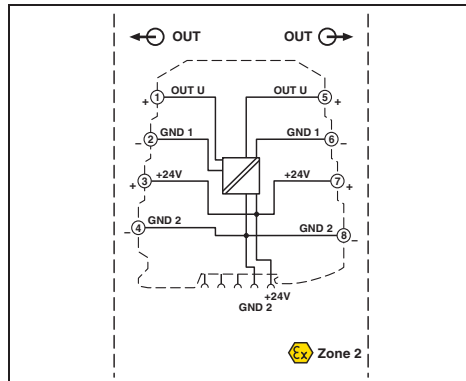
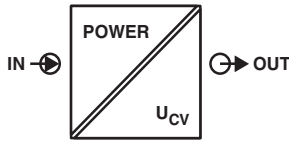
Description	
MCR loop-powered isolator	
	Screw connection spring-cage connection

Ordering data		
Type	Order No.	Pcs. / Pkt.
MINI MCR-SL-UI-I-LP-NC	2902829	1
MINI MCR-SL-UI-I-LP-SP-NC	2902830	1

Possible input signal ranges (configurable via DIP switch)

0...40 mA	0...30 V	0...10 V	2...10 V	0...1000 mV	± 30 V	± 10 V	± 1000 mV
0...30 mA	0...25 V	0...7.5 V		0...750 mV	± 25 V	± 7.5 V	± 750 mV
0...20 mA	4...20 mA	0...20 V	0...5 V	1...5 V	0...500 mV	± 20 V	± 5 V
0...12 mA		0...15 V	0...3 V		0...300 mV	± 15 V	± 3 V
0...10 mA	2...10 mA	0...12.5 V	0...2.5 V		0...250 mV	± 12.5 V	± 2.5 V
0...8 mA		0...12 V	0...2 V		0...200 mV	± 12 V	± 2 V
0...7.5 mA			0...1.5 V		0...150 mV	± 1.5 V	± 150 mV
0...6 mA			0...1.25 V		0...125 mV	± 1.25 V	± 125 mV
0...5 mA	1...5 mA		0...1.2 V		0...120 mV	± 1.2 V	± 120 mV
0...4 mA					0...100 mV		± 100 mV
0...3 mA					0...75 mV		± 75 mV
0...2.5 mA					0...60 mV		± 60 mV
0...2 mA					0...50 mV		± 50 mV

Accessories,
constant voltage source



Ex n



Configurable,
output signals 2.5 V/5 V/7.5 V/10 V

Housing width 6.2 mm

Technical Data

Input Data
Input signal
Output data
Output signal (can be configured using DIP switches)

9.6 ... 30 V

10 V DC
7.5 V DC
5 V DC
2.5 V DC
Approximately 32 mA
< 20 mV_{PP}

Short-circuit current
Ripple

General data

Supply voltage U_B
Power consumption
Maximum transmission error
Temperature coefficient
Electrical isolation
Test voltage input/output
Degree of protection
Ambient temperature (operation)
Housing material
Dimensions W/H/D
Screw connection solid/stranded/AWG
Spring-cage connection (solid/stranded/AWG)

9.6 V DC ... 30 V DC
< 600 mW (at 24 V IN)
≤ 0.1% (of final value)
< 0.01%/K, typ. < 0.002%/K
Basic insulation according to EN 61010
1.5 kV (50 Hz, 1 min.)
IP20
-20°C ... 65°C
PBT
6.2/93.1/102.5 mm
0.2 ... 2.5 mm²/0.2 ... 2.5 mm²/26 - 12
0.2 ... 2.5 mm²/0.2 ... 2.5 mm²/24 - 12

Conformance/approvals

Conformance
ATEX

CE-compliant
Ex II 3 G Ex nA IIC T4 Gc X

Ordering data

Description

MCR constant voltage source

Screw connection
spring-cage connection

Type

Order No.

Pcs. /
Pkt.

MINI MCR-SL-CVS-24-5-10-NC
MINI MCR-SL-CVS-24-5-10-SP-NC

2902822
2902823

1
1

- Constant voltage source for potentiometers, measuring bridges, encoders
- Highly precise
- Input signal corresponds to power supply
- Input signal and, in turn, the power supply can be provided via the foot element (T-connector)
- Standard configuration:
Output 10 V DC

Notes:

Information about power bridging, system cabling, and marking components can be found in the INTERFACE catalog or at www.phoenixcontact.com

INTERFACE Analog - MINI Analog isolating amplifiers

Termination carrier for MINI Analog isolating amplifier



TC... termination carriers are compact solutions for conveniently and smoothly connecting standard DIN rail isolating amplifiers from the MINI Analog series to input/output cards of automation systems using system cables.

MINI Analog is synonymous with efficient signal conditioning where space is tight. It enables you to record temperatures and convert, isolate, and filter signals. The narrow 6.2 mm measuring transducers offer maximum efficiency in terms of:

- Space requirements
- Costs
- Power consumption
- Planning and installation
- Configuration

The most compact isolating amplifiers combined with the most compact and flexible module carriers on the market enable you to achieve a hitherto unparalleled packing density in your control cabinet together with professional system cabling.

Compact

- The compact design associated with MINI Analog saves up to 65% of space in the control cabinet

Rugged and reliable

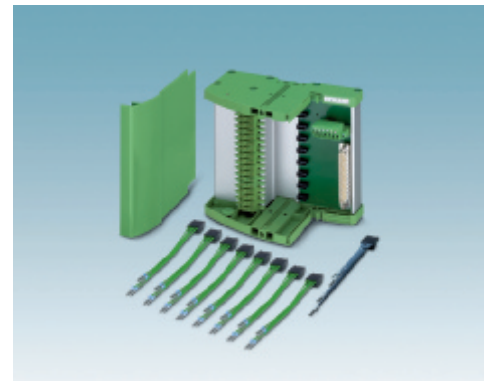
- Stable, vibration-resistant aluminum carrier device profile
- PCB is completely decoupled from isolating amplifiers
- PCB without active electronics
- Redundant supply via separate DIN rail module
- Horizontal or vertical DIN rail mounting

Flexible

- Profile sections without pitch markings
- Quick and safe module connection with plug-in cable sets
- Horizontal or vertical DIN rail mounting
- Can be flexibly adapted to suit any controller or higher-level control system
- Solutions tailored to your requirements on request
- Available pre-assembled with modules and wired, or for self-assembly



Select isolating amplifier



Select module carrier



Select controller-specific front adapter and system cable



Solutions also available for Safety and MACX Analog

Termination carrier for MINI Analog isolating amplifier

The **TC-D37SUB-ADIO16-M-P-UNI** universal termination carrier is a compact solution which connects isolating amplifiers from the MINI Analog series to input/output cards of automation systems.

The **TC-D37SUB-AIO16-M-PS-UNI** termination carrier version also enables the coupling and decoupling of HART signals.

- Connection of up to 16 channels
- Can be universally connected, thanks to 37-pos. D-SUB cable with open ends. This enables flexible connection to automation systems
- Redundant power supply, decoupled from diode via separate MINI MCR-PTB power module and MINI MCR-SL-TB feed-through terminal block



Notes:
You can find information about isolating amplifiers from the MINI Analog range in the INTERFACE catalog or at www.phoenixcontact.com
You can find information about available system cables for D-SUB connectors in the INTERFACE catalog or at www.phoenixcontact.com
Contact us: together, we can develop optimum solutions for your automation system with the termination carrier for MINI Analog.

General data
Connection to the control system level
Number of positions
Max. operating voltage
Max. permissible current
Rated insulation voltage
Surge voltage category
Pollution degree
Rated surge voltage
Air and creepage distances
Degree of protection
Ambient temperature range
Shock
Vibration (operation)
Inflammability class according to UL 94
Dimensions W/H/D
Power supply via power module
Input voltage range
Redundant supply
Polarization and surge protection
Fuse
Status indication

Housing width 136 mm

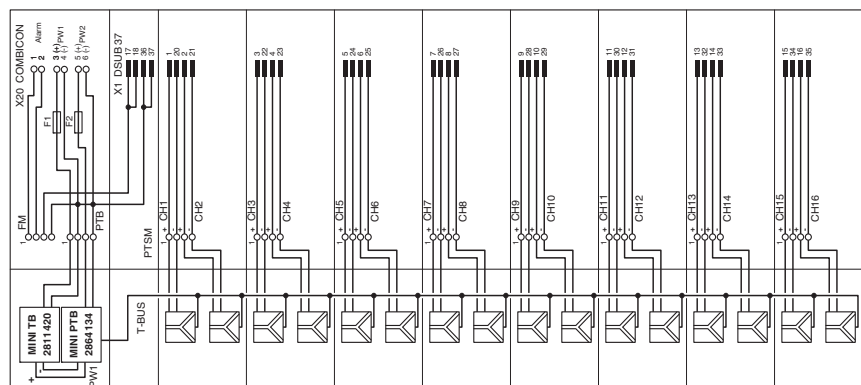
Technical Data
D-SUB pin strip
37
< 50 V DC (per signal/channel)
1 A (signal/channel)
50 V
II
2
0.5 kV
DIN EN 50178 (basic insulation)
IP20
-40°C ... 80°C (please observe module specifications)
15g, according to IEC 60068-2-27
2g, according to IEC 60068-2-6
V0
136/170/160 mm
Power supply via power module
19.2 V DC ... 30 V DC
yes, decoupled from diodes
yes
2.5 A slow-blow
2 x red LED (error)
1 x green LED (PWR)

Description
Module carrier for 16 MINI Analog channels, power and feed-through module
- With connection for MACX MCR-S-MUX HART multiplexer

Ordering data		
Type	Order No.	Pcs. / Pkt.
TC-D37SUB-ADIO16-M-P-UNI	2902933	1
TC-D37SUB-AIO16-M-PS-UNI	2902934	1

MCR power terminal
MINI Analog feed-through terminal block
HART multiplexer, 32-channel

Accessories		
MINI MCR-SL-PTB	2864134	1
MINI MCR-SL-TB	2811420	1
MACX MCR-S-MUX	2865599	1



TC-D37SUB-ADIO16-M-P-UNI and TC-D37SUB-AIO16-M-PS-UNI connection scheme

Termination carrier for MACX Analog Ex-isolating amplifiers



TC... termination carriers are compact solutions for quickly and smoothly connecting DIN rail devices from the MACX Analog Ex series to input/output cards of automation systems using system cables.

MACX Analog Ex is an innovative series of isolating amplifiers for Ex-i circuits and SIL applications according to IEC 61508 and offers the following advantages:

- Design width of only 12.5 mm (one and two-channel)
- Accurate signal transmission with low current consumption
- Safe 3-way electrical isolation
- Plug-in connection technology
- Extensive functions for analog and binary input and output signals

The termination carriers combine the advantages of modular DIN rail devices with those offered by plug and play rapid cabling solutions to provide a consistent solution for system technology.

Compact

- Saves up to 30% of space due to compact design

Rugged and reliable

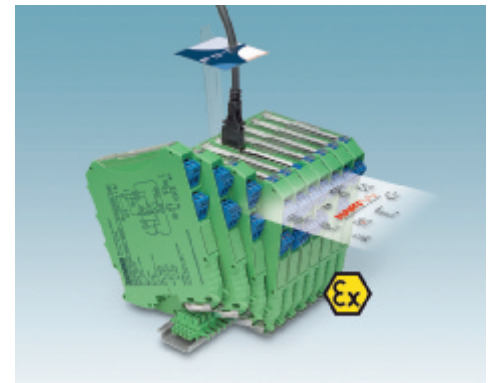
- Stable, vibration-resistant aluminum carrier device profile
- PCB is completely decoupled from modules
- PCB without active components
- Redundant supply and monitoring in separate DIN rail module

Easy maintenance

- Use of standard DIN rail devices
- Easy access to connection points
- Quick and safe module connection with plug-in and coded cable sets

Flexible

- Horizontal or vertical DIN rail mounting
- Profile section without pitch markings for I/O cards with specific number of channels
- Can be specifically adapted for I/O cards of various automation systems with different system plug types



MACX Analog Ex: single and two-channel Ex-i isolating amplifiers with only 12.5 mm overall width



Termination Carrier TC...EX... for MACX Analog Ex



Matched system cables and front adapters from the VARIOFACE range



Solutions also available for MINI Analog and Safety

Termination carrier for MACX Analog Ex-isolating amplifiers

The **TC-D37SUB-ADIO16-EX-P-UNI** universal termination carrier is a compact solution which connects isolating amplifiers from the MACX Analog Ex series to analog or binary input/output cards of automation systems.

The **TC-D37SUB-AIO16-EX-PS-UNI** termination-carrier design, when combined with the MACX MCR-S-MUX HART multiplexer, also enables communication between HART-capable field devices and a management system.

- Connection of up to 16 single-channel (Ex i)-isolating amplifiers
- Universal 1:1 signal routing to a 37-pos. D-SUB plug-in connector
- For system cables with D-SUB socket and open ends for universal connection
- Redundant supply and monitoring in separate DIN rail module

Notes:
You can find information about isolating amplifiers from the MACX Analog and MACX Analog Ex ranges in the INTERFACE catalog or at www.phoenixcontact.com
You can find information about available system cables for D-SUB plug-in connectors in the INTERFACE catalog or at www.phoenixcontact.com
Contact us: specific termination carriers designs for I/O modules of various automation systems are available, planned or can be implemented according to your specification.



General data
Connection to the control system level
Number of positions
Max. operating voltage
Max. permissible current
Rated insulation voltage
Surge voltage category
Pollution degree
Rated surge voltage
Air and creepage distances
Degree of protection
Ambient temperature range
Shock
Vibration (operation)
Inflammability class according to UL 94
Dimensions W/H/D
Power supply via power module
Input voltage range
Redundant supply
Polarization and surge protection
Fuse
Status indication
Switching output
Contact material
Maximum switching voltage

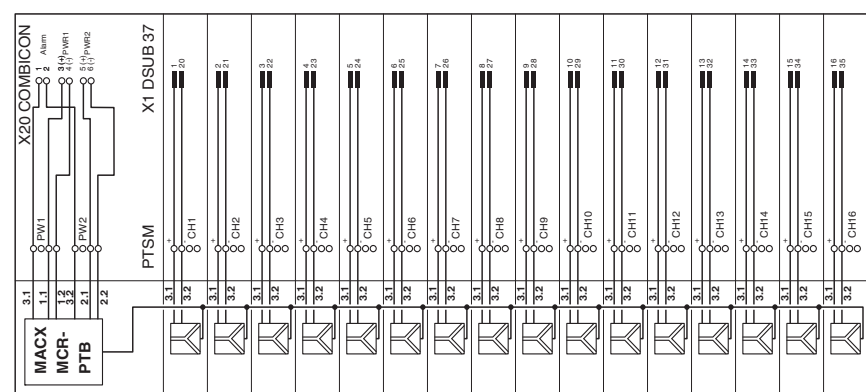
Housing width 244 mm
Technical Data
D-SUB pin strip
37
< 50 V DC (per signal/channel)
1 A (signal/channel)
50 V
II
2
0.5 kV
DIN EN 50178 (Basic insulation)
IP20
-40°C ... 80°C (please observe module specifications)
15g, according to IEC 60068-2-27
2g, according to IEC 60068-2-6
V0
244/170/160 mm
Power supply via power module
19.2 V DC ... 30 V DC
yes, decoupled from diodes
yes
5 A slow-blow (can be exchanged)
1 x red LED (error)
2 x green LEDs (PWR1 and PWR2)
1 PDT
Au
50 V DC (0.3 A)/30 V DC (2 A)/33 V AC (2 A)

Description
Universal termination carrier for 16 MACX MCR-EX isolators
- With connection for MACX MCR-S-MUX HART multiplexer

Ordering data		
Type	Order No.	Pcs. / Pkt.
TC-D37SUB-ADIO16-EX-P-UNI	2924854	1
TC-D37SUB-AIO16-EX-PS-UNI	2902932	1

Supply and error message module
HART multiplexer, 32-channel

Accessories		
MACX MCR-PTB	2865625	1
MACX MCR-PTB-SP	2924184	1
MACX MCR-S-MUX	2865599	1



TC-D37SUB-ADIO16-EX-P-UNI and TC-D37SUB-AIO16-EX-PS-UNI connection scheme

INTERFACE Serial - Factoryline fiber optic media converters

Media converters for converting 10/100 BASE-T(X) Ethernet for fiber optics

Devices with 1300 nm wavelength

The FL MC EF 1300... media converters convert the Ethernet interface for fiber optics. This provides maximum immunity to interference and maximum transmission ranges in industrial Ethernet applications.

Ethernet interface:

- RJ45 socket
- 10/100 Mbps
- Auto negotiation
- Auto-MDI/MDI-X
- Link fault pass through
- Signal LEDs for activity, link status, 10/100 Mbps

Fiber optic interface:

- B-FOC (ST®) or SC-DUPLEX
- Multi-mode or single-mode cable
- Signal LEDs for link status and far end fault signaling

Features:

- Backplane bus contact (DIN rail connector), enabling alternative or redundant 24 V power supply
- Link fault pass through (LFP) and far end fault (FEF) functions for easy connection monitoring. The connection status between the devices is monitored and signaled

Devices with WDM technology

The FL MC EF WDM... media converters enable full duplex communication with a single glass fiber via WDM technology (Wavelength Division Multiplex).

Features:

- 1310 nm and 1550 nm wavelengths for transmitting and receiving
- Single-mode fiberglass
- SC simplex connection

Application:

- Single-fiber transmission of optical signals in rotating applications with optical slip rings, e.g., wind power or automotive industry
- Doubling of the bandwidth or establishment of separate networks in existing wiring (separate outgoing/return line)



Ethernet



Single-fiber transmission
WDM technology

Supply	
Supply voltage	
Supply voltage	
Nominal current consumption	
FO interface	
Wavelength	
Transmission length incl. 3 dB system reserve	
Signal LEDs	
Ethernet interface	
Connection method	
Transmission speed	
Auto-negotiation modes	
Transmission length	
Link through	
MDI-/MDI-X switchover	
Signal LEDs	
General data	
Ambient temperature (operation)	
Electrical isolation	
Test voltage	
Dimensions	W/H/D
Conformance/approvals	
ATEX	
UL, USA/Canada	

Description
FO converter , for converting 10/100 BASE-TX to a single-mode optical fiber, WDM technology
WDM set with devices A and B, SC simplex connection
WDM device A, SC simplex connection
WDM device B, SC simplex connection
FO converter , for converting 10/100 BASE-TX to:
Multi-mode fiberglass (1300 nm), SC duplex connection
FO converter , for converting 10/100 BASE-TX to:
Single-mode fiberglass (1300 nm), SC duplex connection
FO converter , for converting 10/100 BASE-TX to:
Multi-mode fiberglass (1300 nm), B-FOC (ST®) connection

DIN rail connector
System power supply unit , primary-switched
Fiberglass single mode patch cable
PROFINET HCS GI cable , duplex, 200/230 µm, for indoor installation
Plug set for PROFINET HCS fibers (diameter of the individual elements: 2.2 mm), for self-assembly, with bend protection

Technical Data	
Supply voltage	18 V DC ... 30 V DC (screw connection) 18 V DC ... 30 V DC (as an alternative or redundant, via backplane bus contact and system current supply)
Nominal current consumption	≤ 100 mA (24 V DC)
Wavelength	1310/1550 nm
Transmission length incl. 3 dB system reserve	38 km (with F-E 9/125 0.36 dB/km) 34 km (with F-E 9/125 0.4 dB/km) 28 km (with F-E 9/125 0.5 dB/km)
Signal LEDs	Far end fault (red LED), link status (yellow LED)
Connection method	RJ45 socket, shielded
Transmission speed	10/100 Mbps
Auto-negotiation modes	Auto
Transmission length	100 m (twisted pair, shielded)
Link through	Link fault pass through
MDI-/MDI-X switchover	Auto-MDI(X)
Signal LEDs	Activity, link status, 10/100 Mbps
Ambient temperature (operation)	-40°C ... 65°C
Electrical isolation	(VCC//FE//Ethernet)
Test voltage	1.5 kV _{rms} (50 Hz, 1 min.)
Dimensions	22.5 mm/99 mm/114.5 mm
ATEX	Ex II 3 G Ex nA IIC T4 Gc X
UL, USA/Canada	-

Ordering data		
Type	Order No.	Pcs./Pkt.
FL MC EF WDM-SET SC	2902660	1
FL MC EF WDM-A SC	2902658	1
FL MC EF WDM-B SC	2902659	1

Accessories		
ME 22.5 TBUS 1,5/ 5-ST-3,81 GN	2707437	50
MINI-SYS-PS-100-240AC/24DC/1.5	2866983	1
FL SM PATCH 2,0 SC-SC	2901830	1



Ethernet



Multi-mode fiberglass SC duplex connection



Ethernet



Single-mode fiberglass SC duplex connection



Ethernet



Multi-mode fiberglass B-FOC (ST®) connection

Technical Data
18 V DC ... 30 V DC (screw connection) 18 V DC ... 30 V DC (as an alternative or redundant, via backplane bus contact and system current supply)
≤ 100 mA (24 V DC)
1310 nm 6.4 km (with F-G 50/125 0.7 dB/km F 1000) 2.8 km (with F-G 50/125 1.6 dB/km F 800) 10 km (with F-G 62.5/125 0.7 dB/km F 1000) 3 km (with F-G 62.5/125 2.6 dB/km F 600) 2 km (with 2GK200/230 GI-HCS) Far end fault (red LED), link status (yellow LED)
RJ45 socket, shielded 10/100 Mbps Auto 100 m (twisted pair, shielded) Link fault pass through Auto-MDI(X) Activity, link status, 10/100 Mbps
-40°C ... 65°C (VCC//FE//Ethernet) 1.5 kV _{rms} (50 Hz, 1 min.) 22.5 mm/99 mm/114.5 mm
Ex II 3 G Ex nA IIC T4 Gc X

Technical Data
18 V DC ... 30 V DC (screw connection) 18 V DC ... 30 V DC (as an alternative or redundant, via backplane bus contact and system current supply)
≤ 100 mA (24 V DC)
1310 nm 36 km (with F-E 9/125 0.36 dB/km) 32 km (with F-E 9/125 0.4 dB/km) 26 km (with F-E 9/125 0.5 dB/km) Far end fault (red LED), link status (yellow LED)
RJ45 socket, shielded 10/100 Mbps Auto 100 m (twisted pair, shielded) Link fault pass through Auto-MDI(X) Activity, link status, 10/100 Mbps
-40°C ... 65°C (VCC//FE//Ethernet) 1.5 kV _{rms} (50 Hz, 1 min.) 22.5 mm/99 mm/114.5 mm
Ex II 3 G Ex nA IIC T4 Gc X

Technical Data
18 V DC ... 30 V DC (screw connection) 18 V DC ... 30 V DC (as an alternative or redundant, via backplane bus contact and system current supply)
≤ 100 mA (24 V DC)
1310 nm 6.4 km (with F-G 50/125 0.7 dB/km F 1000) 2.8 km (with F-G 50/125 1.6 dB/km F 800) 10 km (with F-G 62.5/125 0.7 dB/km F 1000) 3 km (with F-G 62.5/125 2.6 dB/km F 600) 2 km (with 2GK200/230 GI-HCS) Far end fault (red LED), link status (yellow LED)
RJ45 socket, shielded 10/100 Mbps Auto 100 m (twisted pair, shielded) Link fault pass through Auto-MDI(X) Activity, link status, 10/100 Mbps
-40°C ... 65°C (VCC//FE//Ethernet) 1.5 kV _{rms} (50 Hz, 1 min.) 22.5 mm/99 mm/114.5 mm
Ex II 3 G Ex nA IIC T4 Gc X

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL MC EF 1300 MM SC	2902853	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL MC EF 1300 SM SC	2902856	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL MC EF 1300 MM ST	2902854	1

Accessories		
ME 22,5 TBUS 1,5/ 5-ST-3,81 GN	2707437	50
MINI-SYS-PS-100-240AC/24DC/1.5	2866983	1
FL FOC PN-C-HCS-GI-200/230	2313410	1
PSM-SET-SC-DUPLEX/2-HCS/PN	2313779	1

Accessories		
ME 22,5 TBUS 1,5/ 5-ST-3,81 GN	2707437	50
MINI-SYS-PS-100-240AC/24DC/1.5	2866983	1
FL SM PATCH 2,0 SC-SC	2901830	1

Accessories		
ME 22,5 TBUS 1,5/ 5-ST-3,81 GN	2707437	50
MINI-SYS-PS-100-240AC/24DC/1.5	2866983	1
FL FOC PN-C-HCS-GI-200/230	2313410	1
PSM-SET-B-FOC/4-HCS/PN	2313782	1

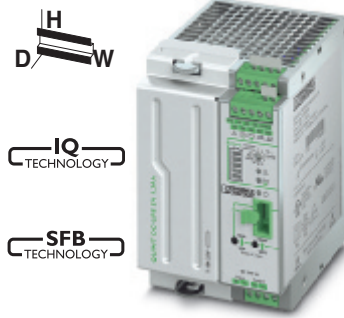
INTERFACE Power Supply - QUINT UPS-IQ

QUINT UPS-IQ with integrated power storage device

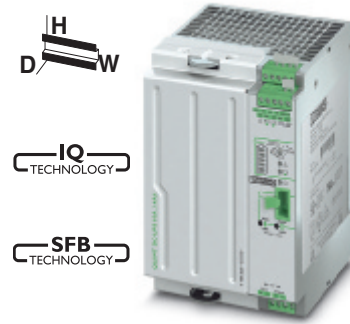
- The module combines the electronic switch-over unit and the power storage device in the same housing
- Power storage device using lead AGM technology

IQ technology for maximum system availability

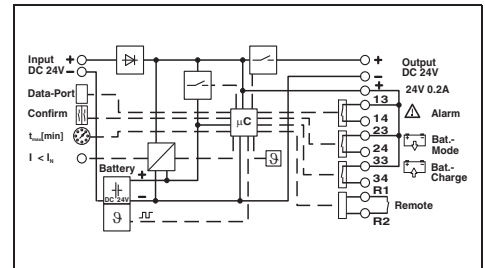
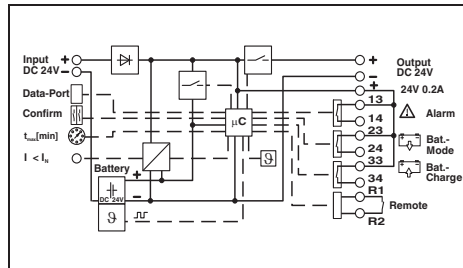
- **SOC (State Of Charge)**, indicates the remaining buffer time and charge state of the power storage device
- **SOH (State Of Health)**, indicates the remaining service life
- **SOF (State Of Function)**, reports on the performance of the power storage device
- Integrated temperature sensor for optimum charging



Uninterruptible power supply unit with integrated power storage, 24 V DC/24 V DC, 5 A, 1.3 Ah



Uninterruptible power supply unit with integrated power storage, 24 V DC/24 V DC, 10 A, 3.4 Ah



Technical Data

Input Data	
Nominal input voltage	24 V DC
DC input voltage range	18 V DC ... 30 V DC
Max. current consumption	7 A (24 V DC)
Output data	
Nominal output voltage	24 V DC
Output voltage range	19.2 V DC ... 27.6 V DC ($U_{OUT} = U_{BAT} - 0.5 \text{ V DC}$)
Output current	
Can be connected in parallel/series	5 A
Buffer period	yes/no
Max. power dissipation (normal mode/buffer mode)	50 min (1 A)/5 min (5 A) 1.4 W/1.3 W
Efficiency (typ.)	> 98.7% (with charged power storage device)
Signaling	
Signaling	LED, relay contact, interface/software
Interfaces	
IFS	
General data	
Storage medium	lead rechargeable battery module 1.3 Ah
Weight/dimensions W x H x D	2.2 kg/88 x 138 x 125 mm
Installation position	horizontal DIN rail NS 35, EN 60715
Spacing when mounting	can be aligned: horizontal 5 mm, vertical 50 mm
Connection method	plug-in screw connection
Input connection data (solid/stranded/AWG)	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /20 - 12
Output connection data (solid/stranded/AWG)	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /20 - 12
Signal connection data (solid/stranded/AWG)	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 12
Degree of protection/protection class	IP20/III
MTBF (IEC 61709, 40°C)	> 500000 h
Ambient temperature (operation)	0°C ... 40°C
Ambient temperature (storage/transport)	-15°C ... 40°C
Service life	6 years ... 9 years (20°C)
Latest startup	9 months (20°C ... 30°C) 6 months (30°C ... 40°C)
Standards/regulations	
Electromagnetic compatibility	conformance with EMC Directive 2004/108/EC
Electrical safety, safety transformer	EN 60950-1/VDE 0805 (SELV)
Electronic equipm. for electrical power installations	EN 50178/VDE 0160 (PELV)
UL approvals	UL applied for

Technical Data

Input Data	
Nominal input voltage	24 V DC
DC input voltage range	18 V DC ... 30 V DC
Max. current consumption	14 A (24 V DC)
Output data	
Nominal output voltage	24 V DC
Output voltage range	19.2 V DC ... 27.6 V DC ($U_{OUT} = U_{BAT} - 0.5 \text{ V DC}$)
Output current	
Can be connected in parallel/series	10 A
Buffer period	yes/no
Max. power dissipation (normal mode/buffer mode)	180 min (1 A)/10 min (10 A) 1.5 W/1.1 W
Efficiency (typ.)	> 98.4% (with charged power storage device)
Signaling	
Signaling	LED, relay contact, interface/software
Interfaces	
IFS	
General data	
Storage medium	lead rechargeable battery module, 3.4 Ah
Weight/dimensions W x H x D	3.8 kg/120 x 169 x 125 mm
Installation position	horizontal DIN rail NS 35, EN 60715
Spacing when mounting	can be aligned: horizontal 5 mm, vertical 50 mm
Connection method	plug-in screw connection
Input connection data (solid/stranded/AWG)	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /16 - 12
Output connection data (solid/stranded/AWG)	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /16 - 12
Signal connection data (solid/stranded/AWG)	0.2 - 2.5 mm ² /0.2 - 2.5 mm ² /24 - 12
Degree of protection/protection class	IP20/III
MTBF (IEC 61709, 40°C)	> 500000 h
Ambient temperature (operation)	0°C ... 40°C
Ambient temperature (storage/transport)	-15°C ... 40°C
Service life	6 years ... 9 years (20°C)
Latest startup	9 months (20°C ... 30°C) 6 months (30°C ... 40°C)
Standards/regulations	
Electromagnetic compatibility	conformance with EMC Directive 2004/108/EC
Electrical safety, safety transformer	EN 60950-1/VDE 0805 (SELV)
Electronic equipm. for electrical power installations	EN 50178/VDE 0160 (PELV)
UL approvals	UL applied for

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Power supply unit, uninterruptible	QUINT-UPS/ 24DC/ 24DC/ 5/1.3AH	2320254	1

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Power supply unit, uninterruptible	QUINT-UPS/ 24DC/ 24DC/10/3.4AH	2320267	1

Data cable for QUINT UPS-IQ

- Connection of the QUINT UPS-IQ uninterruptible power supply unit to higher-level controllers
- Connects the IFS data interface of the QUINT UPS-IQ uninterruptible power supply unit to the RS-232 connection of a controller, modem or COM server

You can find the required software components in the download area for the product.



IFS RS-232 data cable

Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Data cable for communication between higher-level controllers and QUINT UPS-IQ uninterruptible power supply units.	IFS-RS232-DATACABLE	2320490	1

INTERFACE Power Supply - QUINT UPS-IQ

Power storage device for QUINT UPS-IQ

Maintenance-free CAP UPS

- Dual layer capacitors
- Maintenance-free power storage device with > 500,000 charging cycles
- Communication with QUINT UPS-IQ
- Integrated temperature sensor
- Works reliably, even under extreme ambient temperatures of -40°C to +60°C

IQ technology for maximum system availability

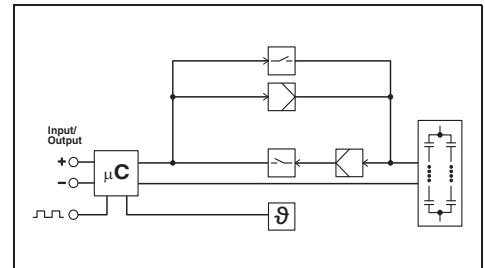
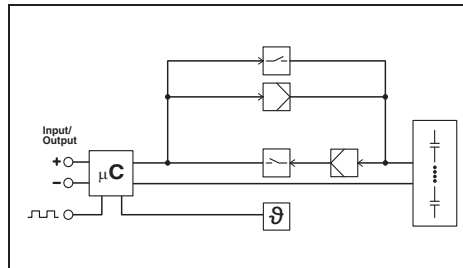
- **SOC (State Of Charge)**, indicates the remaining buffer time and charge state of the power storage device
- **SOH (State Of Health)**, indicates the remaining service life
- **SOF (State Of Function)**, reports on the performance of the power storage device



Maintenance-free power storage device,
24 V DC, 10 A, 10 kJ



Maintenance-free power storage device,
24 V DC, 20 A, 20 kJ



Technical Data

Technical Data

Input Data	
Nominal input voltage	24 V DC
DC input voltage range	18 V DC ... 30 V DC
Nominal capacity	10 kJ
Output data	
Nominal output voltage	24 V DC
Output voltage range	24 V DC ... 27 V DC
Output current	10 A/60 A
Output fuse	1x 25 A (internal)
Can be connected in parallel/series	yes/no
Buffer period	6 min (1 A)/33 s (10 A)
General data	
Storage medium	Dual layer capacitor
Weight/dimensions W x H x D	1.7 kg/126 x 130 x 126 mm
Degree of protection/protection class	IP20/III
Ambient temperature (operation)	-40°C ... 60°C
Ambient temperature (storage/transport)	-40°C ... 60°C
UL approvals	UL applied for
GL approvals	GL applied for

Nominal input voltage	24 V DC
DC input voltage range	18 V DC ... 30 V DC
Nominal capacity	20 kJ
Nominal output voltage	24 V DC
Output voltage range	24 V DC ... 27 V DC
Output current	20 A/120 A
Output fuse	2x 25 A (internal)
Can be connected in parallel/series	yes/no
Buffer period	12 min (1 A)/33 s (20 A)
Storage medium	Dual layer capacitor
Weight/dimensions W x H x D	2.9 kg/150 x 130 x 176 mm
Degree of protection/protection class	IP20/III
Ambient temperature (operation)	-40°C ... 60°C
Ambient temperature (storage/transport)	-40°C ... 60°C
UL approvals	UL applied for
GL approvals	GL applied for

Ordering data

Ordering data

Description	Power storage device
-------------	-----------------------------

Type	Order No.	Pcs. / Pkt.
UPS-CAP/24DC/10A/10KJ	2320377	1

Type	Order No.	Pcs. / Pkt.
UPS-CAP/24DC/20A/20KJ	2320380	1

Power storage device for QUINT UPS-IQ

BAT/VRLA-WTR UPS for temperatures from -40°C to +60°C

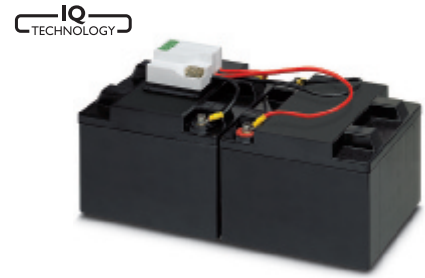
- Pure lead AGM technology
- Works reliably, even under extreme ambient temperatures of -40°C to +60°C
- Long buffer times for high currents
- Communication with QUINT UPS-IQ
- Integrated temperature sensor for optimum charging

IQ technology for maximum system availability

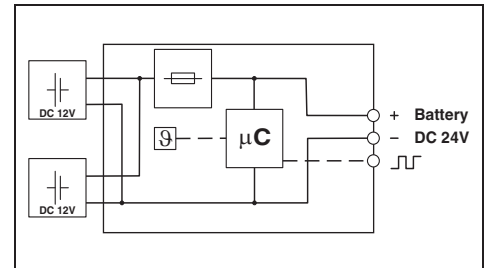
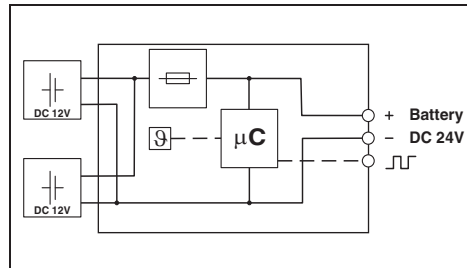
- **SOC (State Of Charge)**, indicates the remaining buffer time and charge state of the power storage device
- **SOH (State Of Health)**, indicates the remaining service life
- **SOF (State Of Function)**, reports on the performance of the power storage device



Power storage device with wide temperature range
24 V DC, 13 Ah



Power storage device with wide temperature range
24 V DC, 26 Ah



Technical Data

Technical Data

Input data/output data	
Nominal voltage	24 V DC
Nominal capacity	13 Ah
Output voltage range	19.2 V AC ... 27.6 V AC
Output current	50 A
Output fuse	2x 25 A
Can be connected in parallel/series	yes/no
Buffer period	50 min (10 A)/10 min (40 A)
General data	
Storage medium	Pure lead AGM
Weight/dimensions W x H x D	10 kg/178 x 168 x 171 mm
Degree of protection/protection class	IP20/III
Ambient temperature (operation)	-40°C ... 60°C
Ambient temperature (storage/transport)	-40°C ... 60°C
Service life	10 years ... 15 years (20°C)
Latest startup	9 months (20°C ... 30°C) 6 months (30°C ... 40°C)
UL approvals	UL applied for
GL approvals	GL applied for

Input data/output data	
Nominal voltage	24 V DC
Nominal capacity	26 Ah
Output voltage range	19.2 V AC ... 27.6 V AC
Output current	50 A
Output fuse	2x 25 A
Can be connected in parallel/series	yes/no
Buffer period	120 min (10 A)/30 min (40 A)
General data	
Storage medium	Pure lead AGM
Weight/dimensions W x H x D	20.5 kg/358 x 165 x 169 mm
Degree of protection/protection class	IP20/III
Ambient temperature (operation)	-40°C ... 60°C
Ambient temperature (storage/transport)	-40°C ... 60°C
Service life	10 years ... 15 years (20°C)
Latest startup	9 months (20°C ... 30°C) 6 months (30°C ... 40°C)
UL approvals	UL applied for
GL approvals	GL applied for

Ordering data

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Power storage device	UPS-BAT/VRLA-WTR/24DC/13AH	2320416	1

Description	Type	Order No.	Pcs. / Pkt.
Power storage device	UPS-BAT/VRLA-WTR/24DC/26AH	2320429	1

Accessories

Accessories

Mounting set	BATTERY MOUNTING KIT	2320788	1
--------------	----------------------	---------	---

Mounting set	BATTERY MOUNTING KIT	2320788	1
--------------	----------------------	---------	---

INTERFACE Power Supply - QUINT DC/DC converters

DC/DC converter with SFB technology

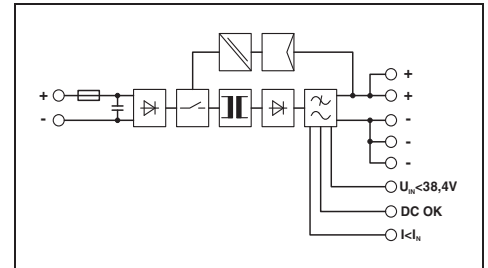
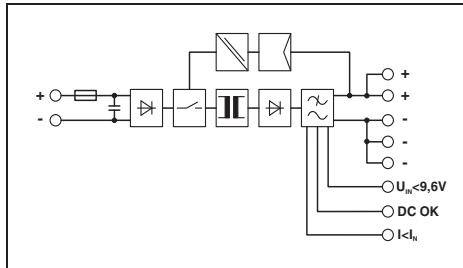
- Support conversion to various voltage levels
- Constant voltage: output voltage regenerated even at the end of long cables
- Electrical isolation: for setting up independent supply systems
- SFB technology: quick tripping of standard circuit breakers, thanks to the dynamic power reserve with up to 6 times the nominal current for 12 ms
- Reliable starting of heavy loads, thanks to the static POWER BOOST power reserve with permanently up to 125% of the nominal current
- Preventive function monitoring warns against critical operating states before errors occur



DC/DC converters
12 V DC/24 V DC, 5 A



DC/DC converters
48 V DC/24 V DC, 5 A



Technical Data

Input Data	
Nominal input voltage	12 V DC
DC input voltage range	9 V DC ... 18 V DC
Max. current consumption	15 A (12 V DC)
Inrush current limitation at 25°C (typ.)/I²t	< 12 A/< 0.3 A²s
Mains buffering (I _N , typ.)	> 3 ms (12 V DC)/-
Input fuse	25 A (slow-blow, internal)
Output data	
Nominal output voltage	24 V DC ±1%
Setting range of the output voltage	18 V DC ... 29.5 V DC (> 24 V constant capacity)
Output current/POWER BOOST/SFB (12 ms)	5 A/6.25 A/30 A
Magnetic fuse tripping	C2
Can be connected in parallel/series	yes/yes
Max. power dissipation (idling/nominal load)	2 W/13.5 W
Efficiency (typ.)	> 90% (12 V DC)
Residual ripple	< 75 mV _{pp}
Signaling	
Signaling DC OK	LED, active switching output
Boost signaling	LED, active switching output
U _{IN} signaling	LED, active switching output
General data	
Weight/dimensions W x H x D	0.4 kg/32 x 130 x 125 mm
Installation position	horizontal DIN rail NS 35, EN 60715
Spacing when mounting	can be aligned: horizontally 0 mm, vertically 50 mm
Connection method	plug-in screw connection
Input connection data (solid/stranded/AWG)	0.2 - 2.5 mm²/0.2 - 2.5 mm²/18 - 12
Output connection data (solid/stranded/AWG)	0.2 - 2.5 mm²/0.2 - 2.5 mm²/18 - 12
Signal connection data (solid/stranded/AWG)	0.2 - 2.5 mm²/0.2 - 2.5 mm²/18 - 12
Degree of protection/protection class	IP20/III
MTBF (IEC 61709, 40°C)	> 500000 h
Ambient temperature (operation)	-25°C ... 70°C (> 60°C derating)
Ambient temperature (storage/transport)	-40°C ... 85°C
Max. permissible relative humidity (operation)	≤ 95% (at 25°C, no condensation)
Standards/regulations	
Insulation voltage input/output	1 kV (routine test)/1.5 kV (type test)
Electromagnetic compatibility	conformance with EMC Directive 2004/108/EC
Electrical safety, safety transformer	EN 60950-1/VDE 0805 (SELV), EN 61558-2-17
Electronic equipm. for electrical power installations	EN 50178/VDE 0160 (PELV)
Safe isolation	DIN VDE 0100-410
UL approvals	UL/C-UL listed UL 508, UL/C-UL Recognized UL 60950

Technical Data	
Nominal input voltage	48 V DC
DC input voltage range	30 V DC ... 60 V DC
Max. current consumption	3.5 A (48 V DC)
Inrush current limitation at 25°C (typ.)/I²t	< 5 A/< 0.2 A²s
Mains buffering (I _N , typ.)	> 14 ms (48 V DC)/-
Input fuse	10 A (slow-blow, internal)
Output data	
Nominal output voltage	24 V DC ±1%
Setting range of the output voltage	18 V DC ... 29.5 V DC (> 24 V constant capacity)
Output current/POWER BOOST/SFB (12 ms)	5 A/6.25 A/30 A
Magnetic fuse tripping	C2
Can be connected in parallel/series	yes/yes
Max. power dissipation (idling/nominal load)	2.7 W/11 W
Efficiency (typ.)	> 91.5% (48 V DC)
Residual ripple	< 25 mV _{pp}
Signaling	
Signaling DC OK	LED, active switching output
Boost signaling	LED, active switching output
U _{IN} signaling	LED, active switching output
General data	
Weight/dimensions W x H x D	0.4 kg/32 x 130 x 125 mm
Installation position	horizontal DIN rail NS 35, EN 60715
Spacing when mounting	can be aligned: horizontally 0 mm, vertically 50 mm
Connection method	plug-in screw connection
Input connection data (solid/stranded/AWG)	0.2 - 2.5 mm²/0.2 - 2.5 mm²/18 - 12
Output connection data (solid/stranded/AWG)	0.2 - 2.5 mm²/0.2 - 2.5 mm²/18 - 12
Signal connection data (solid/stranded/AWG)	0.2 - 2.5 mm²/0.2 - 2.5 mm²/18 - 12
Degree of protection/protection class	IP20/III
MTBF (IEC 61709, 40°C)	> 500000 h
Ambient temperature (operation)	-25°C ... 70°C (> 60°C derating)
Ambient temperature (storage/transport)	-40°C ... 85°C
Max. permissible relative humidity (operation)	≤ 95% (at 25°C, no condensation)
Standards/regulations	
Insulation voltage input/output	1 kV (routine test)/1.5 kV (type test)
Electromagnetic compatibility	conformance with EMC Directive 2004/108/EC
Electrical safety, safety transformer	EN 60950-1/VDE 0805 (SELV), EN 61558-2-17
Electronic equipm. for electrical power installations	EN 50178/VDE 0160 (PELV)
Safe isolation	DIN VDE 0100-410
UL approvals	UL/C-UL listed UL 508, UL/C-UL Recognized UL 60950

Technical Data

Ordering data		
Type	Order No.	Pcs./ Pkt.
QUINT-PS/12DC/24DC/5	2320131	1

Ordering data		
Type	Order No.	Pcs./ Pkt.
QUINT-PS/48DC/24DC/5	2320144	1

INTERFACE Wireless - Radioline wireless system (2400 MHz)

Easy startup with I/O mapping - the Radioline wireless system



Radioline is the new wireless system for large systems and networks. Special features include extremely easy assignment of inputs and outputs by simply turning the thumb wheel - without any programming.

Radioline transmits I/O signals as well as serial data and is therefore very versatile. In addition, you can implement various network structures: from a simple point-to-point connection to complex mesh networks.

Thanks to the latest Trusted Wireless technology, Radioline is the ideal choice for industrial use.

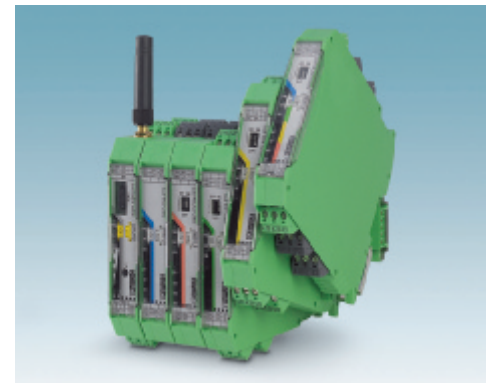
What advantages does I/O mapping offer?

I/O mapping makes it considerably easier to assign input and output signals in your systems. With a slight turn of the thumb wheel, you can distribute and multiply I/O signals freely in your network – without the need for any complex programming.

Trusted Wireless

Trusted Wireless technology is specifically designed for the reliable transmission of data and signals over long distances.

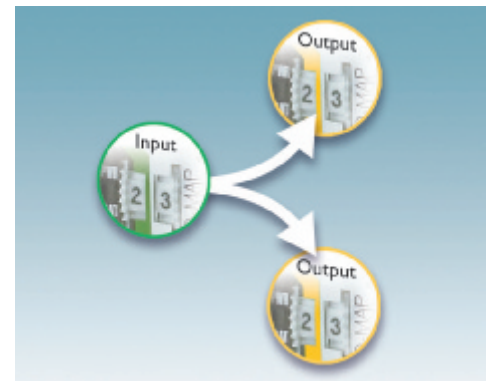
The new Version 2.0 also offers functions such as adjustable data rates, encryption, extended diagnostics, and parallel operation of multiple networks.



Easy installation - setting up, extending or replacing a wireless station in the control cabinet



Easy addressing - only one turn on the thumb wheel of the wireless station



Easy distribution - assigning inputs and outputs using the thumb wheel

Wireless module for bidirectional communication in the 2.4 GHz range

The **RAD-2400-IFS** wireless module supports the wireless connection of distributed controllers via the RS-232 and RS-485 interfaces. You can also collect and output I/O signals via extension modules.

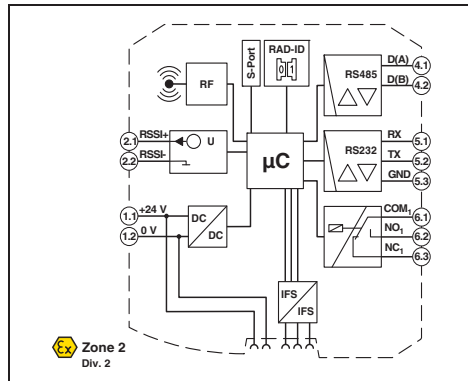
- New Trusted Wireless 2.0 technology
- Distribute signals at the turn of a switch (I/O mapping)
- 128-bit data encryption (AES)
- Wireless interface with adjustable data rate in the range from 16 to 250 kbps
- Wireless path diagnostics by means of integrated bar graph, RSSI output, and RF link relay
- Integrated RS-232 and RS-485 interface
- Up to 32 I/O extension modules per station can be connected via a T-connector
- Unique network addressing via plug-in configuration memory for secure, parallel operation of multiple networks

Applications

- I/O-to-I/O, I/O-to-serial, serial-to-serial
- Easy point-to-point or network connections such as star or mesh

Notes:

You can find other wireless systems as well as comprehensive accessories (e.g., antennas, connecting cables) on the Internet under www.phoenixcontact.net/catalog



Ex n



Wireless transceiver for serial interfaces (RS-232, RS-485), can be extended with I/O extension modules

Housing width 17.5 mm

Technical Data

Wireless path

Direction
Frequency range
Data rate (adjustable)
Transmission power
Number of channels
Security
Connection method
Serial port
Connection method
Serial transmission speed
Termination resistor (switchable via DIP switches)

Bi-directional
2.4002 GHz ... 2.4785 GHz
16 kbps/125 kbps/250 kbps
100 mW (adjustable)
8 x 53
128-bit data encryption
RSMA (female)
RS-232
COMBICON plug-in screw terminal block
0.3 ... 115.2 kbps
-
RS-485
COMBICON plug-in screw terminal block
0.3 ... 1500 kbps
390 Ω/150 Ω/390 Ω

Analog output

Signal range

Digital output

Contact type

Switching voltage

Switching current

RSSI voltage output

1 V ... 3 V

RF link relay output

PDT

30 V AC/60 V DC

500 mA

General data

Supply voltage
Current consumption
Degree of protection
Ambient temperature range
Permissible humidity (operation)
Housing material
Dimensions W/H/D
Screw connection solid/stranded/AWG

19.2 V DC ... 30.5 V DC
max. 65 mA (At 24 V DC, at 25°C)
IP20
-40°C ... 70°C
20% ... 85%
PA 6.6-FR
17.5/99/114.5 mm
0.2 ... 2.5 mm ² /0.2 ... 2.5 mm ² /24 - 14

Conformance/approvals

Conformance
ATEX
IECEX
UL, USA/Canada

CE compliance (R&TTE directive 1999/5/EC)
 Ex II 3 G Ex nA nC IIC T4 Gc X
 Applied for
 UL applied for

Description

Wireless module

Ordering data

Type	Order No.	Pcs. / Pkt.
RAD-2400-IFS	2901541	1

Conf. stick, configuration memory for network addressing

RF band 3
RF band 5
RF band 7

Accessories

RAD-CONF-RF3	2902814	1
RAD-CONF-RF5	2902815	1
RAD-CONF-RF7	2902816	1
RAD-MEMORY	2902828	1
RAD-CABLE-USB	2903447	1

Memory stick, for saving custom configuration data

USB cable, for diagnostics and extended configuration

INTERFACE Wireless - Radioline wireless system (2400 MHz)

I/O extension modules

- Easy I/O mapping via thumb wheel
- Digital wide-range inputs (0...250 V AC/DC)
- Digital relay outputs (24 V DC/250 V AC)
- Easy module replacement even during operation (hot swap)
- Channel-to-channel electrical isolation
- Extended temperature range -40°C to +70°C



**Analog/digital I/O extension module,
2 digital inputs/outputs and
1 analog input/output**



**Digital I/O extension module,
4 digital inputs**

Housing width 17.5 mm

Technical Data

Analog input	
Number of inputs	1
Resolution	16
Signal range (configurable using the DIP switch)	0 mA ... 20 mA/4 mA ... 20 mA
Accuracy	≤ 0.02% (@25°C)
Supply voltage for passive sensors (via terminal PWR1, +I1)	≥ 12 V DC
Digital input	
Number of inputs	2
Switching level	1 signal ("H") 10 V AC/DC ... 50 V AC/DC (low-voltage input) 50 V AC/DC ... 250 V AC/DC (high-voltage input)
Switching level	0 signal ("L") 0 V AC/DC ... 4 V AC/DC (low-voltage input) 0 V AC/DC ... 20 V AC/DC (high-voltage input)
Input frequency	≤ 2 Hz
Analog output	
Number of outputs	1
Signal range	0 mA ... 20 mA 0 V ... 10 V 4 mA ... 20 mA
Accuracy	≤ 0.02% (@25°C) typ. 0.5%
Load R _B	≤ 500 Ω ≥ 10 kΩ
Digital output	
Contact type	2 x Relay output
Switching voltage	250 V AC 24 V DC
Switching current	min./max. ≥ 10 mA/2 A
Switching frequency	2 Hz
General data	
Supply voltage	19.2 V DC ... 30.5 V DC (T-connector)
Current consumption	max. 95 mA (At 24 V DC, at 25°C)
Degree of protection	IP20
Ambient temperature range	-40°C ... 70°C
Housing material	PA 6.6-FR
Dimensions W/H/D	17.5/99/114.5 mm
Conformance/approvals	
Conformance	CE-compliant
ATEX	Ex II 3 G Ex nA nC IIC T4 Gc X
IECEX	applied for
UL, USA/Canada	UL applied for

Housing width 17.5 mm

Technical Data

Digital input	
Number of inputs	4
Switching level	10 V AC/DC ... 50 V AC/DC (low-voltage input) 50 V AC/DC ... 250 V AC/DC (high-voltage input)
Switching level	0 V AC/DC ... 4 V AC/DC (low-voltage input) 0 V AC/DC ... 20 V AC/DC (high-voltage input)
Input frequency	≤ 2 Hz
Analog output	
Number of outputs	-
Signal range	-
Accuracy	-
Load R _B	-
Digital output	
Contact type	-
Switching voltage	-
Switching current	-
Switching frequency	-
General data	
Supply voltage	19.2 V DC ... 30.5 V DC (T-connector)
Current consumption	max. 11 mA (At 24 V DC, at 25°C)
Degree of protection	IP20
Ambient temperature range	-40°C ... 70°C
Housing material	PA 6.6-FR
Dimensions W/H/D	17.5/99/114.5 mm
Conformance/approvals	
Conformance	CE-compliant
ATEX	Ex II 3 G Ex nA nC IIC T4 Gc X
IECEX	applied for
UL, USA/Canada	UL applied for

Ordering data

Description
Analog/digital I/O module
Digital input module
Digital output module
Analog input module
Analog output module

Type	Order No.	Pcs./ Pkt.
RAD-DAIO6-IFS	2901533	1

Ordering data

Type	Order No.	Pcs./ Pkt.
RAD-DI4-IFS	2901535	1

INTERFACE Wireless – RAD-Line wireless system (900 MHz)

RAD-Line Serial IO wireless system for bidirectional transmission of serial data and I/O signals

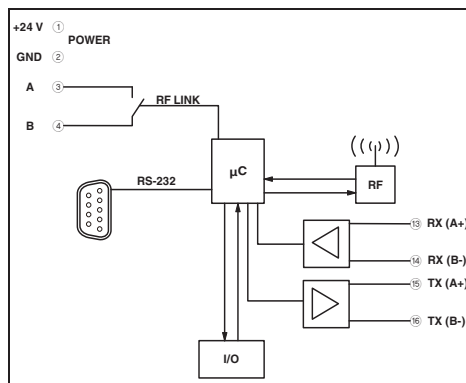
The **RAD-ISM-900-DATA-BD-PLUS** bi-directional wireless system allows wireless connection of several decentralized controllers and the transceiving of I/O signals from the field to a central location (controller).

- Operates in the license-free 902-928 MHz ISM band
- Frequency-hopping spread spectrum technology
- Provides an interface for transfer of I/O data between 900 MHz wireless and RS-232, RS-422, and RS-485 interfaces
- Programmable for point-to-point, point-to-multipoint, and multipoint-to-point configurations
- Up to 254 slaves may operate from a single master
- Integrated I/O allows connection directly to analog and digital inputs/outputs

Notes:

The basic software for the configuration and diagnostics of two network devices can be downloaded free of charge at www.phoenixcontact.com. A software license is required to perform the diagnostic functions for multiple network devices.

The products are offered exclusively for export outside the European Economic Area (EEA).



Wireless transceiver for serial interfaces (RS-232, RS-422/RS-485), with integrated inputs/outputs

Housing width 64 mm

Technical Data

Wireless path		
Direction		Bi-directional
Frequency range		902 MHz ... 928 MHz
Transmission power		1 W
Number of channels		4 x 63
Serial port		
Connection method		RS-232 RS-485/RS-422
		9-pos. D-SUB (socket) COMBICON plug-in screw terminal block
Serial transmission speed		1.2/2.4/9.6/19.2/38.4 kbps
Data format/encoding		Asynchronous
Data flow control/protocols		RTS/CTS
Analog input		
Number of inputs		8
Signal range		0 V ... 5 V
Input resistance		10 kΩ
Digital input		
Number of inputs		8
Switching level	1 signal ("H")	≥ 2.6 V DC
	0 signal ("L")	≤ 2.4 V DC
Pulse input		
Switching level	1 signal ("H")	≥ 2.6 V DC
	0 signal ("L")	≤ 2.4 V DC
Pulse time		5 ms (minimum)
Digital output		
Switching voltage		40 V DC
Switching current		500 mA (sinking)
General data		
Supply voltage		12 V DC ... 30 V DC
Current consumption	max.	5 A
Degree of protection		IP20
Ambient temperature range		-40°C ... 70°C
Housing material		polyamide PA non-reinforced with aluminum heatsink
Dimensions W/H/D		
Screw connection solid/stranded/AWG		0.2 ... 4 mm ² /0.2 ... 2.5 mm ² /24 - 14
Conformance/approvals		
FCC		Part 15.247

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Wireless module with serial interface and integrated analog/digital inputs/outputs	RAD-ISM-900-DATA-BD-PLUS	2902277	1

INTERFACE Monitoring - EMpro energy meters

Extension module

Plug-in special function module for the EEM-MA600 energy meter

EEM-TEMP-MA600

- Temperature recording for up to three PT 100 temperature sensors
- Temperature measuring range $-20^{\circ}\text{C} \dots +150^{\circ}\text{C}$
- Internal temperature recording of the ambient temperature $-10^{\circ}\text{C} \dots +55^{\circ}\text{C}$



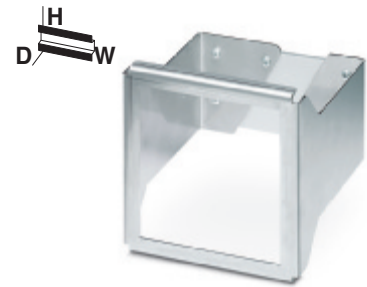
Temperature module

Technical Data		
Input Data	PT100 input: 2, 3, 4-wire	
Description of the input	$-20^{\circ}\text{C} \dots 150^{\circ}\text{C}$ (connected sensors)	
Temperature range	$-10^{\circ}\text{C} \dots 55^{\circ}\text{C}$ (in the immediate vicinity)	
Transmission error	0.5 K/m (2-wire)	
	0.25 K/m (3-wire)	
	0 K/m (4-wire)	
Basic accuracy	$\pm 1 \text{ K}$	
General data		
Supply voltage	9 V (via EEM-MA600)	
Degree of protection	IP20	
Ambient temperature range	$-10^{\circ}\text{C} \dots 55^{\circ}\text{C}$ (14°F to 131°F)	
Conformance/approvals		
Conformance	CE-compliant	
Ordering data		
Type	Order No.	Pcs. / Pkt.
EEM-TEMP-MA600	2901949	1

Description	Special function module (for EEM-MA600)
-------------	--

Measuring instrument bracket

- For mounting the EEM-MA600 or EEM-MA400 energy meters on a 35-mm DIN rail according to EN 60715



For mounting on DIN rails

Technical Data		
General data	Vibration resistance	
	57 Hz ... 150 Hz (2 g)	
	Weight	
	265 g	
	DIN rail clip material	
	aluminum, natural anodized	
	Fixing sheet material	
	stainless steel VA	
	Dimensions W/H/D	
	116/112/115 mm	
Ordering data		
Type	Order No.	Pcs. / Pkt.
EEM-MKT-DRA	2902078	1

Description	DIN rail adapter for EEM-MA600 and EEM-MA400 energy meters
-------------	---

EV charge control charging controller

EV charge control is the charging controller used to charge electrical vehicles on the 3-phase AC mains power supply according to IEC 61851-1. The control and monitoring functions that are defined here for charging mode 3 serve as the basis for the equipment.

- Control Pilot evaluation and control
- Monitoring of the PE protective ground connection
- Evaluation of the proximity
- Control of the charge contactor and locking actuators

Additional functions:

All necessary control functions are integrated into one device. No additional controller is required.

- Easy configuration directly on the device or via an integrated web server
- Adjustable charging current limiting 6...8 A
- Parameterizable automatic rejection of charging cables with low current carrying capacity
- Automatic or manual locking as well as selection of DC motor or magnetic locking actuators
- Optional locking confirmation and external enabling as a switching requirement
- Integration into your charging infrastructure via Ethernet interface (Modbus/TCP)
- Charging process enabling, status requests, and dynamic load management via remote access
- 4 digital inputs and 4 digital outputs
- 4 relay outputs



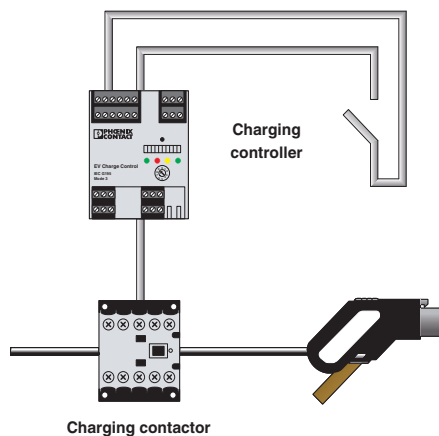
Housing width 71.6 mm

Technical Data

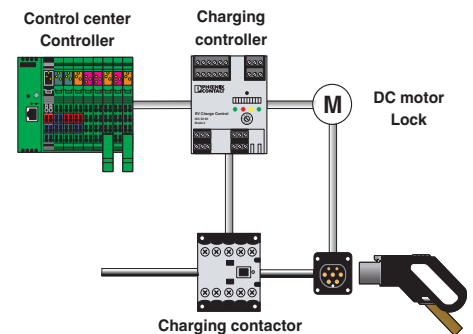
Input	Description of the input Input ranges	Digital input -3 V ... 5 V (off) 15 V ... 30 V (on)
Switching output	Output description Maximum switching voltage Max. switching current	Relay output C _{1,2} and V _{1,2} 250 V AC 6 A
Switching output	Output description Maximum switching voltage Max. switching current	Relay output R _{1,3} and R _{2,4} 30 V AC/DC 6 A
Switching output	Output description Maximum output voltage Maximum output current	Digital output 30 V 0.6 A
Ethernet interface	Connection method Transmission speed Transmission length	RJ45 socket 10/100 Mbps 100 m (with shielded, twisted-pair data cable)
General data	Supply voltage Max. current consumption Frequency range Degree of protection Ambient temperature range Dimensions W/H/D Screw connection solid/stranded/AWG	110 V AC ... 240 V AC (nominal voltage range) 95 V AC ... 264 V AC 40 mA 45 Hz ... 65 Hz IP20 -25°C ... 60°C 71.6/61/90 mm 0.2 ... 4 mm ² /0.2 ... 2.5 mm ² /24 - 12
Conformance/approvals	Conformance	CE-compliant

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
EV charge control charging controller	EM-CP-PP-ETH	2902802	1

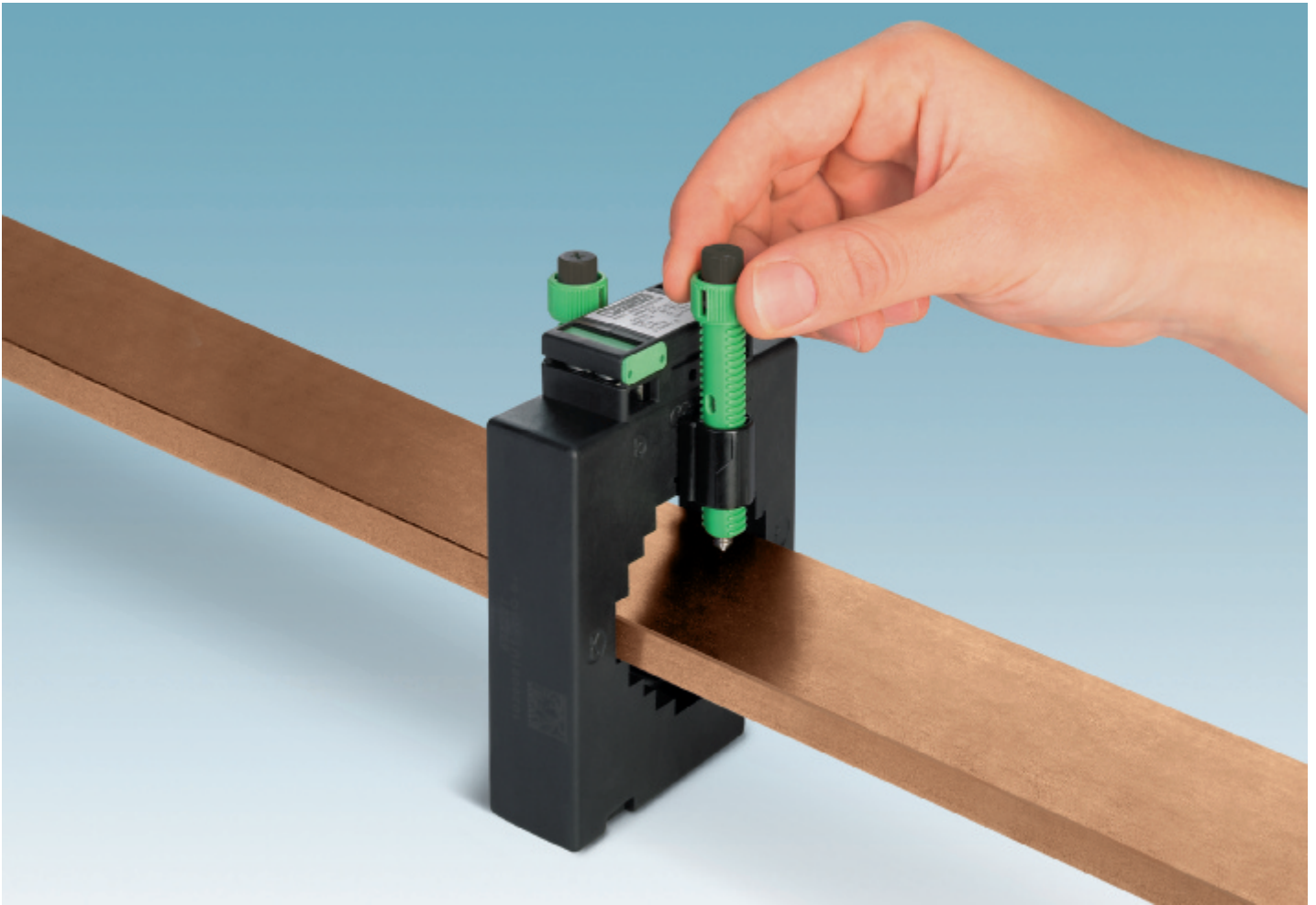


Simple charging point with permanently connected cable



EV charge control interacting with a central controller

Quick-action mechanism for PACT current transformers



The new PACT quick-action fastening mechanism enables you to install the current transformers far more quickly and easily.

The quick-action fastening mechanism offers the following advantages:

- No tools necessary for mounting
- Considerable reduction in installation time
- Extremely easy handling, thanks to secure fastening by pressing with finger
- Current transformers align themselves - no need for subsequent alignment

Install current transformers safely, reliably, and quickly

The quick-action fastening mechanism for PACT current transformers easily enables you to install five current transformers in the time it would usually take to install one current transformer with a standard fastening.

Fixing pins make up the main element of the quick-action fastening mechanism. The fixing pins contain screws that can be rotated via a knob to perform fastening. When the screws are tightened, the current transformers automatically align themselves with the power rail. This does away completely with time-consuming loosening, aligning, and fastening operations for the purpose of correction. The plastic coating of the fixing pins ensures contact safety (IP20).

The fixing pin knobs can be easily accessed from all sides for fastening. This makes new installation positions available in even the tightest of spaces, where installation of current transformers would previously have proven impossible.

This is particularly advantageous in supplies where three current transformers are arranged on top of one another. The fact that they are visually appealing is another added bonus.

Quick-action mechanism for PACT current transformers

- No tools necessary for mounting
- Extremely easy handling, thanks to secure fastening by pressing with finger

Suitable for the following current transformers:

- PACT MCR-V2-4012-70-...
- PACT MCR-V2-5012-85-...



Width of the holding latch: 13 mm

General data

Material	PA 6.6
Ambient temperature (operation)	-25°C ... 120°C
Weight	44 g

Technical Data

Material	PA 6.6
Ambient temperature (operation)	-25°C ... 120°C
Weight	44 g

Description

Quick-action fastening mechanism (set, consisting of two fixing pins and a holding latch)	
Fixing pin length	65 mm
Fixing pin length	40 mm

Ordering data

Type	Order No.	Pcs. / Pkt.
PACT-FAST-MNT-W13-L65	2276625	1
PACT-FAST-MNT-W13-L40	2276612	1

Quick-action mechanism for PACT current transformers

- No tools necessary for mounting
- Extremely easy handling, thanks to secure fastening by pressing with finger

Suitable for the following current transformers:

- PACT MCR-V2-3015-60-...
- PACT MCR-V2-6015-85-...
- PACT MCR-V2-6315-95-...

Notes:

The 16 mm wide quick-action mechanism can also be used for larger current transformers if the length of the fixing pins is sufficient.



Width of the holding latch: 16 mm

General data

Material	PA 6.6
Ambient temperature (operation)	-25°C ... 120°C
Weight	44 g

Technical Data

Material	PA 6.6
Ambient temperature (operation)	-25°C ... 120°C
Weight	44 g

Description

Quick-action fastening mechanism (set, consisting of two fixing pins and a holding latch)	
Fixing pin length	65 mm
Fixing pin length	40 mm

Ordering data

Type	Order No.	Pcs. / Pkt.
PACT-FAST-MNT-W16-L65	2276641	1
PACT-FAST-MNT-W16-L40	2276638	1



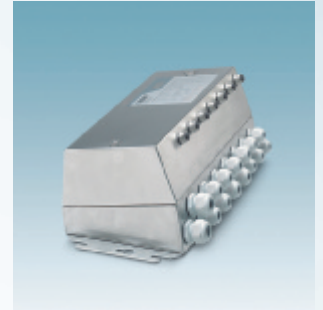
Control technology
Nanoline base unit
I/O expansion module page 336
 page 338



Control technology
Compact controllers
High-performance controllers page 340
 page 343



Safe control technology
Safe PROFINET gateway page 344



Drive technology
PROFINET motor starters page 345



Industrial Ethernet – Factoryline
PROFINET realtime switches page 346



Industrial Ethernet – Factoryline
Industrial managed switches
Lean Managed Switches page 348
 page 350



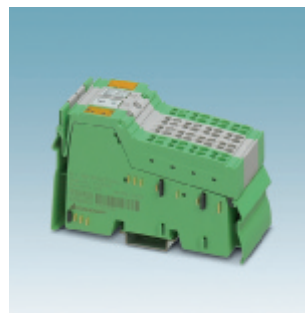
Industrial Ethernet – Factoryline
Security router page 352



Industrial Ethernet – Factoryline
WLAN access point
WLAN Ethernet port adapter page 354
 page 355



I/O systems – AxioLine
Bus coupler page 356
Digital input module page 357
Digital output modules page 358
Temperature module page 359
Position detection module page 360



I/O systems – Inline
Analog output terminal page 361
Communication terminal page 362
Power measurement terminal page 363



Operation and monitoring
Web panels page 364



Operation and monitoring
Touch panels page 365



Operation and monitoring
Box PCs page 366



Operation and monitoring
Panel PCs page 367



Operation and monitoring
Touch monitors page 368



Operation and monitoring
Panel PCs IP65 page 370

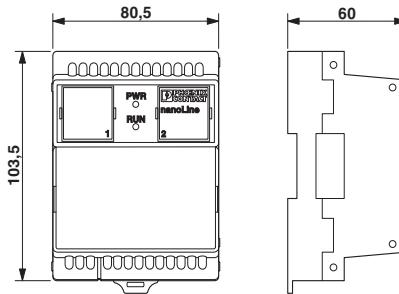
Control technology

Nanoline base unit

The Nanoline base units provide the starting point for a Nanoline system. Select one of the base units and then add the desired expansion and connectivity modules.

- Power supply options of 24 V DC 12 V DC or 110 ... 240 V AC
- Integrated digital and relay I/O and analog input options on the base unit, including 2 high-speed counters
- Additional digital and analog I/Os can be added via extension modules. Up to three modules can be added
- Optional operator panel can be mounted on the base unit or remotely mounted in a panel
- Integrated RTC (optional on some models)
- Optional USB, RS-232 or RS-485 modules available for connection to a PC for configuration download
- Optional RS-232 and RS-485 modules for communication with Modbus RTU client
- Intuitive programming language with options for flowcharts and ladder diagrams

The NLC-055... base unit supports 4 mathematical functions and includes 2 high-speed counters and 2 analog inputs.



24 V DC, 8 digital inputs, 2 analog inputs, and 4 relay outputs



Interfaces	
RS-232	
USB	
Power supply	
Supply voltage	
Supply voltage range	19 V DC ... 30 V DC
Typical current consumption	150 mA
Max. current consumption	250 mA
Digital inputs	
Number of inputs	8
Description of the inputs	EN 61131-2 type 1 NPN/PNP on 60 µs
Typical response time	
Digital outputs	
Number of outputs	4
Description of the outputs	relay output
Maximum output current per channel	5 A
Maximum output current per module/terminal block	20 A
Protective circuit	-
Analog input	
Number of inputs	2
Voltage input signal	0 V DC ... 10 V DC
Counter input	
Number of inputs	2
Input frequency	6 kHz
Software interfaces	
Programming tool	nanoNavigator 3 or above
Realtime clock	yes (battery-backed)
Precision	±2 s/day @ 25°C ±4 s/day @ -20°C... +60°C
General data	
Connection method	screw connection
Weight	262 g
Degree of protection	IP20
Ambient temperature (operation)	-25°C ... 60°C

Technical Data

slot 1	
slot 1	
Supply voltage	24 V DC (power available to the I/O and communication modules)
Supply voltage range	19 V DC ... 30 V DC
Typical current consumption	150 mA
Max. current consumption	250 mA
Number of inputs	8
Description of the inputs	EN 61131-2 type 1 NPN/PNP on 60 µs
Typical response time	
Number of outputs	4
Description of the outputs	relay output
Maximum output current per channel	5 A
Maximum output current per module/terminal block	20 A
Protective circuit	-
Number of inputs	2
Voltage input signal	0 V DC ... 10 V DC
Number of inputs	2
Input frequency	6 kHz
Programming tool	nanoNavigator 3 or above
Realtime clock	yes (battery-backed)
Precision	±2 s/day @ 25°C ±4 s/day @ -20°C... +60°C
Connection method	screw connection
Weight	262 g
Degree of protection	IP20
Ambient temperature (operation)	-25°C ... 60°C

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Nanoline controller , requires nanoNavigator 3 or newer			
- 8 digital inputs, 2 analog inputs, 4 DC relay outputs	NLC-055-024D-08I-04QRD-05A	2700464	1
- 8 digital inputs, 2 analog inputs and 4 PNP digital outputs			
- 8 digital inputs and 4 relay outputs			

Accessories

Programming software	Accessories	Order No.	Pcs. / Pkt.
Cover , replacement	NLC-NAV-01	2701221	1
Operator panel	NLC-OP1-COVER	2701276	1
Cap , replacement slot 1	NLC-MOD-CAP	2701289	1
Cap , replacement slot 2	NLC-MOD-CAP-PXC	2701292	1



12 V DC, 8 digital inputs, 2 analog inputs,
and 4 relay outputs



24 V DC, 8 digital inputs, 2 analog inputs,
and 4 PNP digital outputs



100...240 V AC, 8 digital inputs,
and 4 relay outputs

Technical Data
slot 1 slot 1
12 V DC (power available to the I/O and communication modules)
9 V DC ... 15 V DC 250 mA 400 mA
8 EN 61131-2 type 1 NPN/PNP on 20 µs
4 relay output 5 A 20 A -
2 0 V DC ... 10 V DC
2 6 kHz
nanoNavigator 3 or above yes (battery-backed) ±2 s/day @ 25°C ±4 s/day @ -20°C... +60°C
screw connection 262 g IP20 -25°C ... 60°C

Technical Data
slot 1 slot 1
24 V DC (power available to the I/O and communication modules)
19 V DC ... 30 V DC 100 mA 250 mA
8 EN 61131-2 type 1 NPN/PNP on 60 µs
4 digital passive output 500 mA 2 A thermal fuse
2 0 V DC ... 10 V DC
2 6 kHz
nanoNavigator 3 or above yes (battery-backed) ±2 s/day @ 25°C ±4 s/day @ -20°C... +60°C
screw connection 262 g IP20 -25°C ... 60°C

Technical Data
slot 1 slot 1
(power available to the I/O and communication modules)
100 V AC ... 240 V AC 50 mA (at 230 V AC) 70 mA (at 110 V AC)
8 EN 61131-2 type 1 NPN/PNP on 20 µs
4 relay output 5 A 20 A -
- -
- -
nanoNavigator 3 or above yes (battery-backed) ±2 s/day @ 25°C ±4 s/day @ -20°C... +60°C
screw connection 262 g IP20 -25°C ... 60°C

Ordering data		
Type	Order No.	Pcs. / Pkt.
NLC-055-012D-081-04QRD-05A	2700486	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
NLC-055-024D-081-04QTP-00A	2700453	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
NLC-055-100A-081-04QRA-05A	2700487	1

Accessories		
Type	Order No.	Pcs. / Pkt.
NLC-NAV-01	2701221	1
NLC-OP1-COVER	2701276	1
NLC-MOD-CAP	2701289	1
NLC-MOD-CAP-PXC	2701292	1

Accessories		
Type	Order No.	Pcs. / Pkt.
NLC-NAV-01	2701221	1
NLC-OP1-COVER	2701276	1
NLC-MOD-CAP	2701289	1
NLC-MOD-CAP-PXC	2701292	1

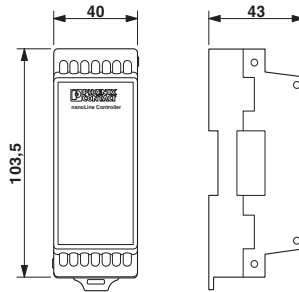
Accessories		
Type	Order No.	Pcs. / Pkt.
NLC-NAV-01	2701221	1
NLC-OP1-COVER	2701276	1
NLC-MOD-CAP	2701289	1
NLC-MOD-CAP-PXC	2701292	1

Control technology

Nanoline analog I/O extension module

Analog I/O extension modules provide additional inputs and outputs beyond what is available on the base unit. Different modules provide different configurations.

- A system may have up to 8 analog inputs and 8 analog outputs
- Configuration options for 0 ... 10 V DC, ± 10 V DC, 4 ... 20 mA, and 0 ... 20 mA inputs
- Configuration options for 0 ... 10 V DC, 4 ... 20 mA, and 0 ... 20 mA outputs
- Up to 3 modules can be added to the right side of a base unit
- Automatically recognized by the firmware
- I/O modules are electrically isolated
- Can be powered from a secondary power supply



I/O expansion module, 2 analog inputs, 2 analog outputs

Power supply for module electronics

Supply voltage

24 V DC

Analog inputs

Connection technology

screw connection

Number of inputs

2 (voltage or current can be chosen separately)

Description of the input

single ended

Precision

1%

Voltage input signal

0 V ... 10 V / -10 V ... 10 V

Current input signal

0 mA ... 20 mA / 4 mA ... 20 mA

Resolution A/D

12 bit (monotonic)

Limit frequency (3 dB)

5 Hz

Analog outputs

Connection technology

screw connection

Number of outputs

2

Precision

1%

D/A resolution

12

Voltage output signal

0 V ... 10 V

Load/output load voltage output

1000 Ω

Current output signal

0 mA ... 20 mA / 4 mA ... 20 mA

Load/output load current output

500 Ω

General data

Connection technology

screw connection

Ambient temperature (operation)

-25°C ... 60°C

Technical Data

Ordering data

Description

Nanoline controllers, I/O expansion module

2 analog inputs, 2 analog outputs

Type

NLC-IO-2AI-2AO-01

Order No.

2701040

Pcs. / Pkt.

1

Control technology

New compact controller versions with extended scope of functions

Class 100 compact controllers are at the heart of the Easy Automation system.

With the new generation of compact controllers (1x1 series), the firmware has built-in support for MODBUS/TCP. Moreover, all new versions offer the option of expanding the parameterization memory using an SD card.

They offer the following features:

- Integrated web server for visualization with WebVisit
- FTP server
- Flash file system
- Complete fieldbus master (4096 I/O points)
- Highly flexible, thanks to modular expandability
- Easy integration into existing networks
- Integration of IT standards such as FTP, HTTP, SNMP, SMTP, SQL, ODP, OPC, and many more
- Intuitive programming using PC Worx or PC Worx Express (IEC 61131–3)
- MODBUS/TCP IT standard integrated into the firmware
- Plug-in parameterization memory (SD card) option



Ethernet

Compact controller – basic device

Interfaces	INTERBUS local bus (master) Ethernet Parameterization/operation/diagnostics
INTERBUS master	Number of possible parameter channels Number of I/O nodes Number of supported devices
Direct I/Os	Number of inputs Number of outputs
IEC-61131 runtime system	Programmable under Processing speed
Program memory	Data memory Retentive data memory Number of data blocks Number of timers, counters Number of control tasks Realtime clock
Power supply	Supply voltage Supply voltage range Typical current consumption
General data	Width Height Depth Degree of protection Ambient temperature (operation)

Technical Data	
Inline data jumper	
RJ45 socket	
RS-232-C, 6-pos. MINI-DIN socket (PS/2), Ethernet 10/100 (RJ45)	
	max. 8
	max. 4096
	max. 63
	8
	4
	PC Worx in IEC 61131 1.7 ms (1 K mix instructions) 90 µs (1 K bit instructions) 192 kByte (16 K instructions (IL)) 192 kByte 8 kByte (NVRAM) (depends on data memory) (depends on data memory) 8 yes
	24 V DC 19.2 V DC ... 30 V DC 210 mA
	80 mm 119.8 mm 71.5 mm IP20 -25°C ... 55°C

Description	Compact controller , complete with accessories (connector plug and labeling field)
Programming cable	Parameterization memory , replaceable - 256 MB AX OPC SERVER , communication interface for OPC-compatible visualization with PC Worx-based controllers
WebVisit , development software for web-based visualizations	
Automation software	

Ordering data		
Type	Order No.	Pcs. / Pkt.
ILC 131 ETH	2700973	1

Accessories		
Type	Order No.	Pcs. / Pkt.
PRG CAB MINI DIN	2730611	1
AX OPC SERVER	2985945	1
WebVisit...	(see the AUTOMATION catalog)	
PC Worx ...	(see AUTOMATION catalog)	

Ethernet



Compact controller with remote bus support

Ethernet



Compact controller with two Ethernet ports and SD card slot

Ethernet



High-performance compact controller with integrated floating-point arithmetic

Technical Data
Inline data jumper
RJ45 socket
RS-232-C, 6-pos. MINI-DIN socket (PS/2), Ethernet 10/100 (RJ45)
max. 16
max. 4096
max. 128
8
4
PC Worx in IEC 61131
1.5 ms (1 K mix instructions)
90 μs (1 K bit instructions)
256 kByte (21 K instructions (IL))
256 kByte
8 kByte (NVRAM)
(depends on data memory)
(depends on data memory)
8
yes
24 V DC
19.2 V DC ... 30 V DC
210 mA
80 mm
119.8 mm
71.5 mm
IP20
-25°C ... 55°C

Technical Data
Inline data jumper
RJ45 socket
RS-232-C, 6-pos. MINI-DIN socket (PS/2), Ethernet 10/100 (RJ45)
max. 24
max. 4096
max. 128
8
4
PC Worx in IEC 61131
1.5 ms (1 K mix instructions)
90 μs (1 K bit instructions)
512 kByte (43 K instructions (IL))
512 kByte
48 kByte (NVRAM)
(depends on data memory)
(depends on data memory)
8
yes
24 V DC
19.2 V DC ... 30 V DC
210 mA
80 mm
119.8 mm
71.5 mm
IP20
-25°C ... 55°C

Technical Data
Inline data jumper
RJ45 socket
RS-232-C, 6-pos. MINI-DIN socket (PS/2), Ethernet 10/100 (RJ45)
max. 24
max. 4096
max. 128
8
4
PC Worx in IEC 61131
1.3 ms (1 K mix instructions)
90 μs (1 K bit instructions)
1 Mbyte (86 K instructions (IL))
1 Mbyte
48 kByte (NVRAM)
(depends on data memory)
(depends on data memory)
8
yes
24 V DC
19.2 V DC ... 30 V DC
210 mA
80 mm
119.8 mm
71.5 mm
IP20
-25°C ... 55°C

Ordering data		
Type	Order No.	Pcs. / Pkt.
ILC 151 ETH	2700974	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
ILC 171 ETH 2TX	2700975	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
ILC 191 ETH 2TX	2700976	1

Accessories		
Type	Order No.	Pcs. / Pkt.
PRG CAB MINI DIN	2730611	1
AX OPC SERVER	2985945	1

Accessories		
Type	Order No.	Pcs. / Pkt.
PRG CAB MINI DIN	2730611	1
SD FLASH 256MB	2988120	1
AX OPC SERVER	2985945	1

Accessories		
Type	Order No.	Pcs. / Pkt.
PRG CAB MINI DIN	2730611	1
SD FLASH 256MB	2988120	1
AX OPC SERVER	2985945	1

WebVisit... (see the AUTOMATION catalog)
PC Worx ... (see AUTOMATION catalog)

WebVisit... (see the AUTOMATION catalog)
PC Worx ... (see AUTOMATION catalog)

WebVisit... (see the AUTOMATION catalog)
PC Worx ... (see AUTOMATION catalog)

Control technology

New compact controller versions for use even in extreme ambient conditions

The new generation of compact controllers is suitable for applications with increased temperature requirements.

The firmware for these controllers also has built-in support for MODBUS/TCP. Moreover, all new versions offer the option of expanding the parameterization memory using an SD card.

They offer the following features:

- Extended temperature range of -40°C to $+55^{\circ}\text{C}$
- Integrated web server for visualization with WebVisit
- FTP server
- Flash file system
- Complete fieldbus master (4096 I/O points)
- Highly flexible, thanks to modular expandability
- Easy integration into existing networks
- Integration of IT standards such as FTP, HTTP, SNMP, SMTP, SQL, ODP, OPC, and many more
- Intuitive programming using PC Worx or PC Worx Express (IEC 61131-3)
- MODBUS/TCP IT standard integrated into the firmware
- Plug-in parameterization memory (SD card) option



Ethernet

Compact controller with extended temperature range

Interfaces	
INTERBUS local bus (master)	
Ethernet	
Parameterization/operation/diagnostics	
INTERBUS master	
Number of possible parameter channels	max. 8
Number of I/O nodes	max. 4096
Number of supported devices	max. 63
Direct I/Os	
Number of inputs	8
Number of outputs	4
IEC-61131 runtime system	
Programmable under	PC Worx in IEC 61131
Processing speed	1.7 ms (1 K mix instructions) 90 μs (1 K bit instructions)
Program memory	
Data memory	192 kByte (16 K instructions (IL))
Retentive data memory	192 kByte (21 K instructions (IL))
Number of data blocks	8 kByte (NVRAM) (depends on data memory)
Number of timers, counters	(depends on data memory)
Number of control tasks	8
Realtime clock	yes
Power supply	
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Typical current consumption	210 mA
General data	
Width	80 mm
Height	119.8 mm
Depth	71.5 mm
Degree of protection	IP20
Ambient temperature (operation)	-40°C ... 55°C

Technical Data		
ILC 131 ETH/XC	ILC 151 ETH/XC	
Inline data jumper RJ45 socket		
RS-232-C, 6-pos. MINI-DIN socket (PS/2), Ethernet 10/100 (RJ45)		
max. 8	max. 4096	max. 16
max. 63		max. 128
IEC-61131 runtime system		
Programmable under		
Processing speed		
1.7 ms (1 K mix instructions) 90 μs (1 K bit instructions)	1.5 ms (1 K mix instructions) 90 μs (1 K bit instructions)	
192 kByte (16 K instructions (IL))	256 kByte (21 K instructions (IL))	256 kByte
8 kByte (NVRAM) (depends on data memory) (depends on data memory)		
8		
yes		
Power supply		
Supply voltage		
Supply voltage range		
Typical current consumption		
General data		
Width		
Height		
Depth		
Degree of protection		
Ambient temperature (operation)		

Description
Inline controller , complete with accessories (connector plug and labeling field)
Programming cable
AX OPC SERVER , communication interface for OPC-compatible visualization with PC Worx-based controllers
WebVisit, development software for web-based visualizations
Automation software

Ordering data		
Type	Order No.	Pcs./Pkt.
ILC 131 ETH/XC	2701034	1
ILC 151 ETH/XC	2701141	1

Accessories		
Type	Order No.	Pcs./Pkt.
PRG CAB MINI DIN	2730611	1
AX OPC SERVER	2985945	1
WebVisit... (see the AUTOMATION catalog)		
PC Worx ... (see AUTOMATION catalog)		

RFC class 400 high-performance controllers

RFC class 400 high-performance controllers can be used in complex applications where maximum performance is required.

The RFC 460R PN 3TX redundancy PLC is a new addition to the high-performance controller range. This controller enables you to set up a redundant solution based on PROFINET. Setting up a redundant system increases productivity and ensures system availability.

The pair of redundant controllers automatically synchronizes itself via the integrated synchronization interface. The redundancy-capable I/O devices are connected to both controllers using the PROFINET protocol.

Depending on the application, the redundant controllers can be used up to 80 km apart. This flexible structure is made possible by the freedom to choose between different SFP modules.

This redundancy solution using the RFC 460R PN 3TX controller excels, thanks to:

- Simple handling
- Automatic system configuration using AutoSync technology
- Flexible selection of distances between the controllers (up to 80 km), thanks to SFP modules
- Diagnostics display with plain text messages



Redundancy PLC

Interfaces

Ethernet
Synchronization interface
Other interfaces
IEC-61131 runtime system
Processing speed

Program memory
Data memory
Retentive data memory
Number of data blocks
Number of timers, counters
Number of control tasks
Realtime clock

Power supply
Supply voltage
Supply voltage range

Typical current consumption

General data

Width
Height
Depth
Degree of protection
Ambient temperature (operation)

Description

High-availability **remote field controller**, thanks to redundancy function
- 3 x 10/100 Ethernet, PROFINET IO controller

Parameterization memory

- 256 MB

Slot module for synchronization port

- Distances of up to 550 m
- Distances of up to 30 km
- Distances of up to 80 km

Synchronization cable for FL SFP SX

- Length 1 m
- Length 2 m
- Length 5 m

Fan module for remote field controller

AX OPC SERVER, communication interface for OPC-compatible visualization with PC Worx-based controllers

WebVisit, development software for web-based visualizations

Automation software

Technical Data

3x RJ45 sockets
SFP port
2 x USB

0.007 ms (1 K mix instructions)
2 µs (1 K bit instructions)
Typ. 8 Mbyte (680 K instructions (IL))
16 Mbyte
120 kByte (NVRAM)
(depends on data memory)
(depends on data memory)
1
integrated (battery backup)

24 V DC
19.2 V DC ... 30 V DC (including ripple)

1 A

124 mm
185 mm
190 mm
IP20
0°C ... 55°C (from 45°C only with fan module)

Ordering data

Type	Order No.	Pcs. / Pkt.
RFC 460R PN 3TX	2700784	1

Accessories

CF FLASH 256MB	2988780	1
FL SFP SX	2891754	1
FL SFP LX	2891767	1
FL SFP LH	2989912	1
FL MM PATCH 1,0 LC-LC	2989158	1
FL MM PATCH 2,0 LC-LC	2989255	1
FL MM PATCH 5,0 LC-LC	2901799	1
RFC DUAL-FAN	2730239	1
AX OPC SERVER	2985945	1
WebVisit... (see the AUTOMATION catalog)		
PC Worx ... (see AUTOMATION catalog)		

Safe control technology

Safe PROFINET gateway

The FL PN/PN SDIO-2TX/2TX safe PROFINET gateway enables you to implement emergency stop concepts across systems.

The PROFINET gateway offers the following features:

- Coupling of two PROFINET systems
- Transmission of standard I/O data via PROFINET
- Transmission of safe I/O data via PROFIsafe
- Redundant power supply
- Controller-independent

Within a PROFIsafe system, the safety functions associated with the following requirements are supported:

- Up to SIL 3 according to EN 61508
- Up to SIL CL 3 according to EN IEC 62061
- Up to PL e according to EN ISO 13849-1

**PROFI
NET**



Safe PROFINET gateway

Supply	
Supply voltage	24 V DC
Supply voltage range	18.5 V DC ... 30 V DC (including ripple)
Max. current consumption	max. 250 mA
Programming data	
IN and OUT process data	128 Byte (2 bytes of safe IO process data)
General data	
Weight	550 g
Width	130 mm
Height	27 mm
Depth	145 mm
Ambient temperature (operation)	-25°C ... 55°C

Description	
Safe PROFINET gateway	

Color marking for FL CAT ...patch...	
- Blue	
- Red	
Lockable security element for FL PATCH...	
Key for FL PATCH GUARD	
Security element for FL CAT ...patch...	

Technical Data

Supply	
Supply voltage	24 V DC
Supply voltage range	18.5 V DC ... 30 V DC (including ripple)
Max. current consumption	max. 250 mA
Programming data	
IN and OUT process data	128 Byte (2 bytes of safe IO process data)
General data	
Weight	550 g
Width	130 mm
Height	27 mm
Depth	145 mm
Ambient temperature (operation)	-25°C ... 55°C

Ordering data

Type	Order No.	Pcs. / Pkt.
FL PN/PN SDIO-2TX/2TX	2700651	1

Accessories

FL PATCH CCODE BU	2891291	20
FL PATCH CCODE RD	2891893	20
FL PATCH GUARD	2891424	20
FL PATCH GUARD KEY	2891521	1
FL PATCH SAFE CLIP	2891246	20

PROFINET realtime switches

The new IRT switches are particularly suitable for high-performance PROFINET networks.

The FL SWITCH IRT switches use built-in ERTEC (Enhanced Real Time Ethernet Controller) technology to forward PROFINET data packets at the fastest possible speeds via the cut through process.

In addition, PROFINET data packets are always delivered with the highest priority to the receiver independently of other data traffic.

The FL SWITCH IRT switches can be fully configured and monitored via STEP7 and PC WORX.

Features:

- Easy integration into a PROFINET network
- Extended temperature range (-25°C...60°C)
- POF interfaces for use in areas heavily affected by EMC
- Path length measurement
- Fiber optic diagnostics
- MRP client

Ethernet



2 RJ45 ports and 2 POF SCRJ ports

Ethernet interface	
Number of ports	2 (RJ45 ports)
Transmission speed	10/100 Mbps
Connection method	RJ45
Fiber optic interface	
Number of ports	2
Transmission speed	100 Mbps (full duplex)
Wavelength	650 nm
Transmission length	up to 250 m (depending on the fiber used)
Function	
Basic functions	cut-through/store-and-forward switch complies with IEEE 802.3 2 priority classes in accordance with IEEE802.1 P, TCP/IP protocol, DCP capable, integrated web server function, PROFINET IO device
Status and diagnostic indicators	2 status LEDs per Ethernet port: LINK and activity, supply voltage U_{s1} and U_{s2} (redundant supply voltage) as well as BF
Network expansion parameters	
Cascading depth	line and star structure: as desired
Maximum conductor length (twisted pair)	100 m
Power supply	
Supply voltage	24 V DC
Residual ripple	3.6 V _{PP}
Supply voltage range	18.5 V DC ... 30.2 V DC
Typical current consumption	235 mA (at $U_S = 24$ V DC)
General data	
Weight	450 g
Width	128 mm
Height	95 mm
Depth	69 mm
Degree of protection	IP20
Ambient temperature (operation)	-25°C ... 60°C
Permissible humidity (operation)	5% ... 95% (no condensation)

Technical Data	
cut-through/store-and-forward switch complies with IEEE 802.3 2 priority classes in accordance with IEEE802.1 P, TCP/IP protocol, DCP capable, integrated web server function, PROFINET IO device	
2 status LEDs per Ethernet port: LINK and activity, supply voltage U_{s1} and U_{s2} (redundant supply voltage) as well as BF	
line and star structure: as desired	
100 m	
24 V DC	
3.6 V _{PP}	
18.5 V DC ... 30.2 V DC	
235 mA (at $U_S = 24$ V DC)	
450 g	
128 mm	
95 mm	
69 mm	
IP20	
-25°C ... 60°C	
5% ... 95% (no condensation)	

Description	
Ethernet switch for PROFINET applications	
- 2 RJ45 ports, 2 POF SCRJ ports	
- 1 RJ45 port, 3 POF SCRJ ports	
Configuration memory, replaceable	
Patch cable, CAT6, pre-assembled (see AUTOMATION catalog)	

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH IRT 2TX 2POF	2700691	1
Accessories		
FL MEM PLUG	2891259	1
FL CAT6 PATCH ...		

Ethernet




1 RJ45 port and 3 POF SCRJ ports

Technical Data

1 (RJ45 ports)
10/100 Mbps
RJ45

3
100 Mbps (full duplex)
650 nm
up to 250 m (depending on the fiber used)

cut-through/store-and-forward switch complies with IEEE 802.3 2 priority classes in accordance with IEEE802.1 P, TCP/IP protocol, DCP capable, integrated web server function, PROFINET IO device

2 status LEDs per Ethernet port: LINK and activity, supply voltage U_{s1} and U_{s2} (redundant supply voltage) as well as BF

line and star structure: as desired
100 m

24 V DC
3.6 V_{pp}
18.5 V DC ... 30.2 V DC
270 mA (at $U_s = 24$ V DC)

450 g
128 mm
95 mm
69 mm
IP20
-25°C ... 60°C
5% ... 95% (no condensation)

Ordering data

Type	Order No.	Pcs. / Pkt.
FL SWITCH IRT TX 3POF	2700692	1

Accessories

FL MEM PLUG	2891259	1
FL CAT6 PATCH ...		

Industrial Ethernet – Factoryline

FL SWITCH 3000 industrial managed switches

The FL SWITCH 3000 industrial managed switches provide scalable power for application flexibility and ease of use.

The complete and compact range of 10/100 Mbps models, available with 5 or 8 RJ45 ports, one or two multimode fiber ports, and a wide or standard temperature range, can be integrated into a wide range of applications. Access to functions can be customized for different users, displaying only the applicable functions (security, redundancy, performance, etc.) for that user, greatly reducing complexity and simplifying maintenance.

Features:

- Standard (-10°C... 60°C) and wide temperature (-40°C... 75°C) devices available
- Extended Ring Redundancy provides a 15 ms recovery time
- Web customization combines ease of use with scalable functionality
- Powerful performance, security, and redundancy options

Ethernet



5/8 RJ45 ports

		Technical Data	
		FL SWITCH 3005	FL SWITCH 3008
Ethernet interface			
Number of ports		5 (RJ45 ports)	8 (RJ45 ports)
Transmission speed		10/100 Mbps (RJ45) (with autonegotiation)	
Connection method		RJ45 socket, auto negotiation, and autocrossing	
Fiber optic interface			
Number of ports		-	
Transmission speed		-	
Connection method		-	
Transmission length		-	
Function			
Basic functions		managed switch	
Status and diagnostic indicators		LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
Network expansion parameters			
Cascading depth		network, linear, and star structure: any	
Maximum conductor length (twisted pair)		100 m	
Power supply			
Supply voltage		24 V DC	
Residual ripple		3.6 V _{pp}	
Supply voltage range		12 V DC ... 48 V DC	
Typical current consumption		200 mA (24 V DC)	210 mA (24 V DC)
General data			
Weight		920 g	940 g
Width		54.4 mm	
Height		146.4 mm	
Depth		125 mm	
Degree of protection		IP20	
Ambient temperature (operation)		-10°C ... 60°C	
Permissible humidity (operation)		5% ... 95% (no condensation)	
Noise emission		EN 61000-6-4	
Noise immunity		EN 61000-6-2:2005	
Description			
Ethernet switch			
- 5 RJ45 ports			
- 8 RJ45 ports			
Ethernet switch, wide temperature			
- 5 RJ45 ports			
- 8 RJ45 ports			
- 4 RJ45 ports, 1 SC FO port			
- 4 RJ45 ports, 1 ST FO port			
- 6 RJ45 ports, 2 SC FO ports			
- 6 RJ45 ports, 2 ST FO ports			
Lockable security element for FL PATCH...			
Key for FL PATCH GUARD			
Patch cable, CAT5, pre-assembled (see AUTOMATION catalog)			
		Ordering data	
	Type	Order No.	Pcs. / Pkt.
	FL SWITCH 3005	2891030	1
	FL SWITCH 3008	2891031	1
		Accessories	
	FL PATCH GUARD	2891424	20
	FL PATCH GUARD KEY	2891521	1
	FL CAT5 PATCH ...		

Ethernet



5/8 RJ45 ports

Ethernet



4 RJ45 ports and 1 FO port

Ethernet



6 RJ45 ports and 2 FO ports

Technical Data	
FL SWITCH 3005T	FL SWITCH 3008T
5 (RJ45 ports) 10/100 Mbps (RJ45) (with autonegotiation) RJ45 socket, auto negotiation, and autocrossing	8 (RJ45 ports) 10/100 Mbps (RJ45) (with autonegotiation) RJ45 socket, auto negotiation, and autocrossing
-	-
-	-
-	-
managed switch	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
network, linear, and star structure: any 100 m	
24 V DC 3.6 V _{PP} 12 V DC ... 48 V DC 200 mA (24 V DC)	210 mA (24 V DC)
920 g	940 g
54.4 mm 146.4 mm 125 mm IP20 -40°C ... 75°C 5% ... 95% (no condensation) EN 61000-6-4 EN 61000-6-2:2005	

Technical Data	
FL SWITCH 3004T-FX	FL SWITCH 3004T-FX ST
10/100 Mbps RJ45 socket, auto negotiation, and autocrossing	4 (RJ45 ports) 10/100 Mbps (RJ45) RJ45 socket, auto negotiation, and autocrossing
1 (FO port) 100 Mbps (SC-D, full duplex) SC-Duplex 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	100 Mbps (ST, full duplex) ST format 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)
managed switch	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
network, linear, and star structure: any 100 m	
24 V DC 3.6 V _{PP} 12 V DC ... 48 V DC 230 mA (24 V DC)	
920 g	930 g
54.4 mm 146.4 mm 125 mm IP20 -40°C ... 75°C 5% ... 95% (no condensation) EN 61000-6-4 EN 61000-6-2:2005	

Technical Data	
FL SWITCH 3006T-2FX	FL SWITCH 3006T-2FX ST
10/100 Mbps (RJ45) (with autonegotiation) RJ45 socket, auto negotiation, and autocrossing	6 (RJ45 ports) 10/100 Mbps (RJ45) (with autonegotiation) RJ45 socket, auto negotiation, and autocrossing
100 Mbps (SC-D, full duplex) SC-Duplex 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	2 (FO ports) 100 Mbps (ST, full duplex) ST format 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)
managed switch	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
network, linear, and star structure: any 100 m	
24 V DC 3.6 V _{PP} 12 V DC ... 48 V DC 330 mA (24 V DC)	
960 g	955 g
54.4 mm 146.4 mm 125 mm IP20 -40°C ... 75°C 5% ... 95% (no condensation) EN 61000-6-4 EN 61000-6-2:2005	

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH 3005T	2891032	1
FL SWITCH 3008T	2891035	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH 3004T-FX	2891033	1
FL SWITCH 3004T-FX ST	2891034	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH 3006T-2FX	2891036	1
FL SWITCH 3006T-2FX ST	2891037	1

Accessories		
FL PATCH GUARD	2891424	20
FL PATCH GUARD KEY	2891521	1
FL CAT5 PATCH ...		

Accessories		
FL PATCH GUARD	2891424	20
FL PATCH GUARD KEY	2891521	1
FL CAT5 PATCH ...		

Accessories		
FL PATCH GUARD	2891424	20
FL PATCH GUARD KEY	2891521	1
FL CAT5 PATCH ...		

Lean Managed Switches

The new ... E versions of the Lean Managed Switches are characterized by their wide variety of interfaces and easy integration into Ethernet/IP networks. They also feature factory-activated multicast filtering.

As with all Lean Managed Switches, they also offer the following properties, making them highly suitable for automation networks:

- Extended temperature range of -40°C to $+70^{\circ}\text{C}$
- Redundancy with RSTP
- Web-based management, SNMP
- VLAN
- Multicast source detection
- DHCP server
- Configuration saved on an external PC



5 RJ45 ports

Technical Data	
Ethernet interface	
Number of ports	5 (RJ45 ports)
Transmission speed	10/100 Mbps
Connection method	RJ45
Fiber optic interface	
Number of ports	-
Connection method	-
Wavelength	-
Transmission length	-
Other connections	
Serial RS-232	RS-232-C, 6-pos. MINI-DIN socket (PS/2)
Function	
Basic functions	Store-and-forward switch complies with IEEE 802.3 2, priority classes according to IEEE 802.1 P TCP/IP protocol, BOOTP-compatible, port mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), DHCP server
Supported browsers	Internet Explorer 5.5 or higher
SNMP – Simple Network Management Protocol	supported SNMP-MIBs: Enterprise, MIB II, Bridge
Redundancy	Rapid Spanning Tree 802.1w, Fast Ring Detection
Power supply	
Supply voltage	24 V DC
Residual ripple	3.6 V _{PP}
Supply voltage range	18.5 V DC ... 30.5 V DC
Typical current consumption	250 mA (at U _S = 24 V DC)
General data	
Weight	230 g
Width	45 mm
Height	99 mm
Depth	112 mm
Degree of protection	IP20
Ambient temperature (operation)	-40°C ... 70°C
Permissible humidity (operation)	30% ... 95% (no condensation)
Noise emission	EN 61000-6-3/-4
Noise immunity	EN 61000-6-2:2005

Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Lean Managed Switch , preconfigured for Ethernet/IP			
- 5 RJ45 ports			
- 4 RJ45 ports, 1 SC fiber optics port (multi-mode)			
- 4 RJ45 ports, 1 ST fiber optics port (multi-mode)			
- 4 RJ45 ports, 1 SC fiber optics port (single-mode)			
- 4 RJ45 ports, 1 ST fiber optics port (single-mode)			
- 4 RJ45 ports, 2 ST fiber optics ports (multi-mode)			
- 4 RJ45 ports, 2 ST fiber optics ports (single-mode)			
	FL SWITCH LM 5TX-E	2989336	1



4 RJ45 ports and 1 FO port



4 RJ45 ports and 1 SM FO port



4 RJ45 ports and 2 FO ports

Technical Data	
FL SWITCH LM 4TX/1FX-E	FL SWITCH LM 4TX/1FX ST-E
4 (RJ45 ports) 10/100 Mbps RJ45	
1 (SC multi-mode) SC duplex 1300 nm	1 (ST multi-mode) ST Simplex 1300 nm
11000 m (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	36000 m (fiberglass with F-G 9/125 0.36 dB/km)
6400 m (fiberglass with F-G 50/125 0.7 dB/km F1200)	32000 m (fiberglass with F-G 9/125 0.4 dB/km)
3000 m (fiberglass with F-G 62.5/125 2.6 dB/km F600)	26000 m (fiberglass with F-G 9/125 0.5 dB/km)
2800 m (fiberglass with F-G 50/125 1.6 dB/km F800)	-
RS-232-C, 6-pos. MINI-DIN socket (PS/2)	
Store-and-forward switch complies with IEEE 802.3 2, priority classes according to IEEE 802.1 P TCP/IP protocol, BootP-compatible, port mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), DHCP server	
Internet Explorer 5.5 or higher supported SNMP-MIBs: Enterprise, MIB II, Bridge	
Rapid Spanning Tree 802.1w, Fast Ring Detection	
24 V DC 3.6 V _{PP} 18.5 V DC ... 30.5 V DC 400 mA (at U _S = 24 V DC)	
230 g 45 mm 99 mm 112 mm IP20 -40°C ... 70°C 30% ... 95% (no condensation) EN 61000-6-3/-4 EN 61000-6-2:2005	

Technical Data	
FL SWITCH LM 4TX/1FX SM-E	FL SWITCH LM 4TX/1FX SM ST-E
4 (RJ45 ports) 10/100 Mbps RJ45	
1 (SC single-mode) SC duplex 1300 nm	1 (ST single-mode) ST Simplex 1300 nm
36000 m (fiberglass with F-G 9/125 0.36 dB/km)	32000 m (fiberglass with F-G 9/125 0.4 dB/km)
26000 m (fiberglass with F-G 9/125 0.5 dB/km)	-
RS-232-C, 6-pos. MINI-DIN socket (PS/2)	
Store-and-forward switch complies with IEEE 802.3 2, priority classes according to IEEE 802.1 P TCP/IP protocol, BootP-compatible, port mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), DHCP server	
Internet Explorer 5.5 or higher supported SNMP-MIBs: Enterprise, MIB II, Bridge	
Rapid Spanning Tree 802.1w, Fast Ring Detection	
24 V DC 3.6 V _{PP} 18.5 V DC ... 30.5 V DC 400 mA (at U _S = 24 V DC)	
230 g 45 mm 99 mm 112 mm IP20 -40°C ... 70°C 30% ... 95% (no condensation) EN 61000-6-3/-4 EN 61000-6-2:2005	

Technical Data	
FL SWITCH LM 4TX/2FX ST-E	FL SWITCH LM 4TX/2FX SM ST-E
4 (RJ45 ports) 10/100 Mbps RJ45	
2 (ST multi-mode) ST Simplex 1300 nm	2 (ST single-mode) ST Simplex 1300 nm
11000 m (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	36000 m (fiberglass with F-G 9/125 0.36 dB/km)
6400 m (fiberglass with F-G 50/125 0.7 dB/km F1200)	32000 m (fiberglass with F-G 9/125 0.4 dB/km)
3000 m (fiberglass with F-G 62.5/125 2.6 dB/km F600)	26000 m (fiberglass with F-G 9/125 0.5 dB/km)
2800 m (fiberglass with F-G 50/125 1.6 dB/km F800)	2800 m
RS-232-C, 6-pos. MINI-DIN socket (PS/2)	
Store-and-forward switch complies with IEEE 802.3 2, priority classes according to IEEE 802.1 P TCP/IP protocol, BootP-compatible, port mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), DHCP server	
Internet Explorer 5.5 or higher supported SNMP-MIBs: Enterprise, MIB II, Bridge	
Rapid Spanning Tree 802.1w, Fast Ring Detection	
24 V DC 3.6 V _{PP} 18.5 V DC ... 30.5 V DC 400 mA (at U _S = 24 V DC)	
230 g 45 mm 99 mm 112 mm IP20 -40°C ... 70°C 30% ... 95% (no condensation) EN 61000-6-3/-4 EN 61000-6-2:2005	

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH LM 4TX/1FX-E	2989433	1
FL SWITCH LM 4TX/1FX ST-E	2989530	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH LM 4TX/1FX SM-E	2989637	1
FL SWITCH LM 4TX/1FX SM ST-E	2989734	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL SWITCH LM 4TX/2FX ST-E	2989831	1
FL SWITCH LM 4TX/2FX SM ST-E	2989938	1

Industrial Ethernet – Factoryline

Security routers for industrial applications

The compact and fanless DIN rail devices in an industrial metal housing have an SD card slot at the front for configuration memory. The SD cards can be used for starting up or replacing the devices quickly and easily.

The devices feature an extended temperature range and contain a buffered realtime clock and trusted platform module (TPM) for secure and reliable key generation and management.

The FL MGuard RS4000 ... devices provide high-availability high-end security for industry and a remote maintenance infrastructure for the secure and reliable connection of machines and systems.

The FL MGuard RS2000 ... devices are designed for price-conscious applications with fewer complex requirements and allow secure and reliable remote maintenance of machines and systems in the field via the Internet. In this context, they are used as industrial remote service routers with a simplified configuration.



Router with intelligent firewall

Ethernet interface	
Number of ports	2
Transmission speed	10/100 Mbps
Connection method	RJ45
Function	
Basic functions	
SNMP – Simple Network Management Protocol	SNMPv1, v2, v3
Security functions	
Dynamic Host Configuration Protocol (DHCP) support	Server or Relay Agent client
Network Time Protocol (NTP) client	as per protocol 802.2
Link Layer Discovery Protocol (LLDP)	up to 35 Mbps
VPN throughput	0 (as an option, 10 tunnels up to 250 tunnels, with additional license FL MGuard LIC VPN-10/ Order No. 2700194 or FL MGuard LIC VPN-250/ Order No. 2700193 or 2700192)
Number of VPN tunnels	-
Encryption methods	-
Internet Protocol Security (IPsec) mode	-
Authentication	-
Data integrity	-
1:1 Network Address Translation (NAT) in the VPN	-
Firewall data throughput	up to 99 Mbps
Firewall rules	configurable stateful inspection firewall with full scope of functions
Filtering	MAC and IP addresses, ports, protocols
Protection against	IP spoofing, DoS and Syn Flood Protection
Routing	standard routing, NAT, 1:1-NAT, port forwarding
Power supply	
Supply voltage	24 V DC
Typical current consumption	100 mA
General data	
Width	45 mm
Ambient temperature (operation)	-20°C ... 60°C

Technical Data

Router with intelligent firewall (VPN, 10 tunnels as an option, up to 250 possible with additional license), CIFS Integrity Monitoring (as an option), metal housing, slot for SD memory card, extended temperature range, high-performance firewall/VPN (as an option): up to 99 Mbps/35 Mbps (as an option)	
SNMPv1, v2, v3	
Server or Relay Agent client	
as per protocol 802.2	
up to 35 Mbps	
0 (as an option, 10 tunnels up to 250 tunnels, with additional license FL MGuard LIC VPN-10/ Order No. 2700194 or FL MGuard LIC VPN-250/ Order No. 2700193 or 2700192)	
-	
-	
-	
-	
up to 99 Mbps	
configurable stateful inspection firewall with full scope of functions	
MAC and IP addresses, ports, protocols	
IP spoofing, DoS and Syn Flood Protection	
standard routing, NAT, 1:1-NAT, port forwarding	

Description
Router/firewall, replaceable memory - 2 x WAN interface (1 x RJ45, 1 x V.24/RS-232), 1 x LAN interface (RJ45)
Router/firewall with VPN, replaceable memory - 2 x WAN interface (1 x RJ45, 1 x V.24/RS-232), 1 x LAN interface (RJ45) - 1 x WAN interface (RJ45), 1 x LAN interface (RJ45)

Ordering data

Type	Order No.	Pcs. / Pkt.
FL MGuard RS4000 TX/TX	2700634	1

Parameterization memory, can be replaced with MRM function
Parameterization memory, replaceable
License to configure and operate 10 VPN tunnels on FL MGuard
License to configure and operate 250 VPN tunnels on FL MGuard
License to configure any number of tunnels and operate 250 VPN tunnels on FL MGuard

Accessories

FL SD FLASH/MRM	2700270	1
SD FLASH 256MB	2988120	1
FL MGuard LIC VPN-10	2700194	1
FL MGuard LIC VPN-250	2700193	1
FL MGuard LIC VPN-250 GROUP	2700192	1

Central device management software for FL MGuard devices
--

FL MGuard DM ... (see software)



Router with intelligent firewall and VPN



Router with simplified 2-click firewall and VPN

Technical Data
2
10/100 Mbps RJ45
Router with intelligent firewall and VPN for 10 tunnels (up to 250 supported with optional additional license), CIFS Integrity Monitoring (as an option), metal housing, slot for SD memory card, extended temperature range, high-performance firewall/VPN: up to 99 Mbps/35 Mbps
SNMPv1, v2, v3
Server or Relay Agent client as per protocol 802.2 up to 35 Mbps 10 (As an option, up to 250, with additional license FL MGuard LIC VPN-250/ Order No. 2700193 or 2700192)
DES, 3DES, AES-128, -192, -256 ESP-Tunnel/ESP-Transport X.509v3 certificates with RSA or PSK MD5, SHA-1 supported up to 99 Mbps configurable stateful inspection firewall with full scope of functions
MAC and IP addresses, ports, protocols IP spoofing, DoS and Syn Flood Protection standard routing, NAT, 1:1-NAT, port forwarding
24 V DC 100 mA
45 mm -20°C ... 60°C

Technical Data
2
10/100 Mbps RJ45
Router with simplified 2-click firewall and VPN for 2 tunnels (fixed), metal housing, slot for SD memory card, extended temperature range, high-performance firewall/VPN: up to 99 Mbps/35 Mbps
SNMPv1, v2, v3
Server or Relay Agent client as per protocol 802.2 up to 35 Mbps 2 (fixed)
DES, 3DES, AES-128, -192, -256 ESP-Tunnel/ESP-Transport X.509v3 certificates with RSA or PSK MD5, SHA-1 supported up to 99 Mbps simplified 2-click stateful inspection firewall
incoming or outgoing traffic - standard routing, NAT, 1:1-NAT, port forwarding
24 V DC 100 mA
45 mm -20°C ... 60°C

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL MGuard RS4000 TX/TX VPN	2200515	1
Accessories		
FL SD FLASH/MRM	2700270	1
SD FLASH 256MB	2988120	1
FL MGuard LIC VPN-250	2700193	1
FL MGuard LIC VPN-250 GROUP	2700192	1
FL MGuard DM ... (see software)		

Ordering data		
Type	Order No.	Pcs. / Pkt.
FL MGuard RS2000 TX/TX VPN	2700642	1
Accessories		
FL SD FLASH/MRM	2700270	1
SD FLASH 256MB	2988120	1
FL MGuard DM ... (see software)		

WLAN access point

The latest generation of WLAN modules offers maximum reliability, data throughput, and range.

Features:

- Extremely compact metal housing
- High 802.11n performance
- Rugged transmission, thanks to MIMO antenna technology
- Central cluster management

WLAN



**WLAN access point/2.4 GHz, 5 GHz client
802.11 a/b/g/n**

Technical Data		
Wireless interface		
Wireless standard	IEEE 802.11 b/g/a/n	
Frequency band	ISM 2.4 GHz/5 GHz ISM	
Transmission power	max. 23 dBm (EIRP)	
Antenna connection method	RSMA (female)	
Number	3	
Antenna		
Assembly instructions	antennas not included in scope of supply	
Ethernet interfaces		
Number	2	
Connection method	RJ45 socket	
Power supply for module electronics		
Supply voltage	24 V DC	
Connection method	via COMBICON	
Supply voltage range	9 V DC ... 30 V DC	
Supply current	200 mA	
Security		
	802.11i WPA PSK (preshared key) WPA2 AES TKIP supports 802.1X/RADIUS MAC filter	
Function		
Operating modes	access point/client adapter/repeater/WDS bridge	
Basic functions		
	SNMP(V2/V3), CLI, WPS, DHCP, DCP, BootP, HTTP, HTTPS, syslog, fast roaming, SD card, dual FW image, 1 x DI, 1 x DO, 2 x Ethernet 10/100 Mbit, auto crossover, auto negotiation, MODE button	
Configuration		
	cluster management, web-based management, WPS	
General data		
Wireless licenses	EU, more countries in e-shop	
Weight	418 g	
Width	40 mm	
Height	109 mm	
Depth	109 mm	
Degree of protection	IP20	
Ambient temperature (operation)	-25°C ... 60°C (extended temperature range on request)	
Permissible humidity (operation)	10% ... 80% (no condensation)	
Air pressure (operation)	800 hPa ... 1080 hPa (up to 2000 m above mean sea level)	
Shock according to IEC 60068-2-27:1997	30 g	
Vibration (operation) according to IEC 60068-2-6:1982	5 g	
Description		
Wireless LAN Access Point - WLAN 802.11 a,b,g,n, frequency 2.4 GHz, 5 GHz, IP20		
Ordering data		
Type	Order No.	Pcs. / Pkt.
FL WLAN 5100	2700718	1
Accessories		
SD FLASH 256MB	2988120	1
Parameterization memory, replaceable		

WLAN Ethernet port adapter

Reliable, safe, and fast communication with mobile or moving automation and production systems.

Features:

- Realtime access to network resources and service information
- Increase in productivity and faster decision processes
- Proven compact housing
- Integrated antenna
- WLAN 5 GHz

WLAN

WLAN client, 5 GHz, integrated antenna, 802.11 a/n

Technical Data			
Wireless interface	IEEE 802.11 a/n		
Wireless standard	5 GHZ ISM		
Frequency band	max. 20 dBm (EIRP)		
Transmission power			
Antenna	permanently installed		
Connection method	internal circularly polarized panel antenna		
Assembly instructions			
Ethernet interfaces	M 12 plug-in connector (D-encoded, female)		
Connection method			
Power supply for module electronics			
Supply voltage	24 V DC		
Connection method	M12 plug-in connector (A-encoded, male)		
Supply voltage range	9 V DC ... 30 V DC		
Supply current	76 mA		
Security	802.11i WPA PSK (preshared key) WPA2 AES WEP 64 bit/128 bit TKIP supports 802.1X/RADIUS		
Function	Ethernet client adapter		
Operating modes			
Basic functions	SNMP (V1), DHCP, DCP, LLDP, syslog, fast roaming, trigger input, MODE button		
Configuration	web-based management, TCP/IP management		
General data	Europe, USA, Canada, additional countries in the e-shop		
Wireless licenses			
Weight	120 g		
Width	66 mm		
Height	91 mm		
Depth	34 mm		
Degree of protection	IP65		
Ambient temperature (operation)	-40°C ... 65°C		
Permissible humidity (operation)	5% ... 90% (no condensation)		
Air pressure (operation)	795 hPa ... 1080 hPa (up to 2000 m above mean sea level)		
Mounting type	wall mounting		
Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Wireless LAN Ethernet port adapter - WLAN 802.11 a,n, frequency 5 GHz, IP65	FL WLAN EPA 5N	2700488	1
Accessories			
Assembled Ethernet cable	VS-M12MS-IP20-93E-LI/2,0	1406056	1
Power supply cable	SAC-4P- 2,0-PUR/M12FS	1533576	1

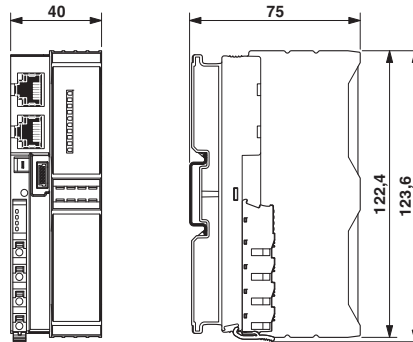
Axioline bus coupler for sercos III

The Axioline bus coupler is the link between the Axioline system and the higher-level sercos III network.

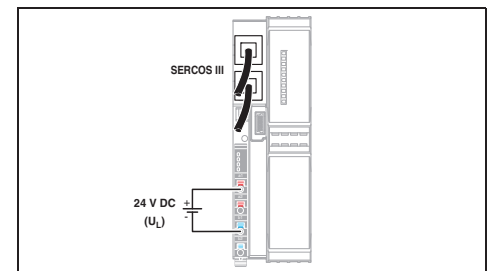
For startup tests, the Axioline station can be started up independently of the higher-level network via either the service interface or an Ethernet port on the bus coupler using the Startup+ software.

Features:

- sercos III
- Minimum sercos III cycle time of 31.25 μ s
- 2 RJ45 connections (with integrated switch)
- Up to 63 additional Axioline devices can be connected
- Typical cycle time of the Axioline system bus is around 10 μ s
- Runtime in bus coupler is negligible (almost 0 μ s)
- Firmware can be updated
- Diagnostic and status indicators



sercos III bus coupler



Interface	
Fieldbus system	sercos III
Connection method	RJ45 socket, auto negotiation
Number	2
Transmission speed	100 Mbps (full duplex)
Transmission length	max. 100 m
sercos III	
Device profile	FSP_IO
Equipment type	sercos slave
Update rate	31.25 μ s
Service interface	
Connection method	IFS-USB-PROG-ADAPTER
Local bus interface	
Name	axio bus
Connection method	connection for bus base module
Transmission speed	100 Mbps
Number of supported devices	max. 63 (per station)
Power supply for module electronics	
Supply of communications power U_L	24 V DC
Maximum permissible voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Communications power U_{bus}	5 V DC (via bus base module)
Current supply at U_{bus}	2 A
Protective circuit	surge protection of the supply voltage polarity reversal protection of the supply voltage
General data	
Connection method	spring-cage connection with direct plug-in technology
Connection data solid/stranded/AWG	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16
Weight	173 g

Technical Data

Technical Data		
sercos III	sercos III	
RJ45 socket, auto negotiation	RJ45 socket, auto negotiation	
2	2	
100 Mbps (full duplex)	100 Mbps (full duplex)	
max. 100 m	max. 100 m	
sercos III		
FSP_IO	FSP_IO	
sercos slave	sercos slave	
31.25 μ s	31.25 μ s	
Service interface		
IFS-USB-PROG-ADAPTER	IFS-USB-PROG-ADAPTER	
Local bus interface		
axio bus	axio bus	
connection for bus base module	connection for bus base module	
100 Mbps	100 Mbps	
max. 63 (per station)	max. 63 (per station)	
Power supply for module electronics		
24 V DC	24 V DC	
19.2 V DC ... 30 V DC (including all tolerances, including ripple)	19.2 V DC ... 30 V DC (including all tolerances, including ripple)	
5 V DC (via bus base module)	5 V DC (via bus base module)	
2 A	2 A	
surge protection of the supply voltage	surge protection of the supply voltage	
polarity reversal protection of the supply voltage	polarity reversal protection of the supply voltage	
General data		
spring-cage connection with direct plug-in technology	spring-cage connection with direct plug-in technology	
0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16	
173 g	173 g	

Ordering data

Type	Order No.	Pcs. / Pkt.
AXL BK S3	2688116	1

Accessories

IFS-USB-PROG-ADAPTER	2811271	1
----------------------	---------	---

Description	
Axioline bus coupler	
- For sercos III	
Programming adapter with USB interface	

Axiline digital input module

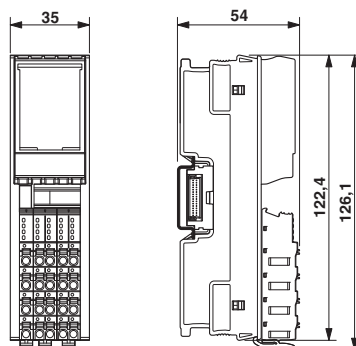
This module is designed for use within an Axiline station.

The digital input modules are used to connect 24 V DC sensors.

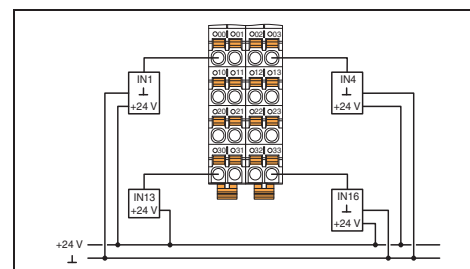
The filter times can be adjusted on the module.

Features:

- 16 digital inputs according to EN 61131-2 type 1 and type 3
- 24 V DC/2.4 mA
- Connection of sensors in single-wire technology
- Minimum update time < 100 μ s, bus synchronous
- Filter times can be set in three increments: < 100 μ s, 1000 μ s or 3000 μ s
- Maximum input frequency: 5 kHz
- Stored device rating plate
- Diagnostic and status indicators



16 inputs



Local bus interface		Technical Data	
Name	Axio bus		
Connection method	bus base module		
Power supply for module electronics	5 V DC (via bus base module)		
Communications power U_{bus}	120 mA		
Current consumption from U_{bus}			
I/O supply	24 V DC		
Supply of digital input modules U_i	19.2 V DC ... 30 V DC including all tolerances, including ripple		
Maximum permissible voltage range			
Current consumption from U_i	20 mA		
Protective circuit	surge protection of the supply voltage polarity reversal protection of the supply voltage		
Digital inputs			
Connection technology	1-wire		
Maximum number of inputs	16		
Description of the inputs	EN 61131-2 types 1 and 3		
Nominal input voltage U_{IN}	24 V DC		
Nominal input current at U_{IN}	2.4 mA		
Input filter time	3000 μ s (default) 1000 μ s < 100 μ s		
Protective circuit	polarity reversal protection of the inputs		
General data			
Connection method	spring-cage connection with direct plug-in technology		
Connection data solid/stranded/AWG	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16		
Weight	133 g		
Width	35 mm		
Height	126.1 mm		
Depth	54 mm		
Description		Ordering data	
Axiline digital input module, complete with accessories (bus base module)		Type	Order No.
- 16 inputs		AXL DI 16/1	2688310
		Pcs. / Pkt.	1
Axiline bus base module (replacement part)		Accessories	
		AXL BS	2688129
			5

I/O systems

Axioline digital output modules

These modules are designed for use within an Axioline station.

The digital output modules are used to output 24 V DC signals.

Features:

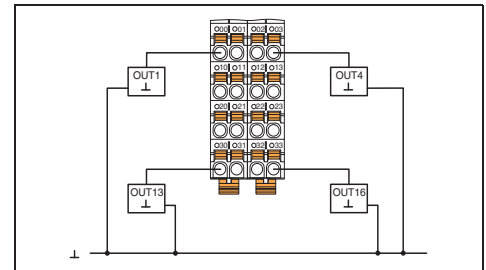
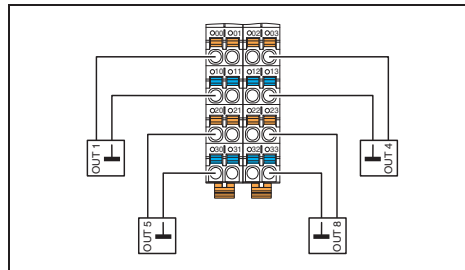
- Short-circuit-proof outputs
- Local single-channel diagnostics
- Output behavior can be adjusted for when local bus communication is aborted



8 outputs, 2 A



16 outputs, 500 mA



Technical Data

Local bus interface	
Name	Axio bus
Connection method	bus base module
Power supply for module electronics	
Communications power U_{BUS}	5 V DC (via bus base module)
Current consumption from U_{BUS}	150 mA
I/O supply	
Supply of digital output modules U_{O}	24 V DC
Maximum permissible voltage range	19.2 V DC ... 30 V DC including all tolerances, including ripple
Current consumption from U_{O}	16 A (external fuse)
Protective circuit	surge protection of the supply voltage polarity reversal protection of the supply voltage
Digital outputs	
Connection technology	2-wire
Maximum number of outputs	8
Output voltage	24 V
Maximum output current per channel	2 A
Maximum output current per module	16 A (external fuse)
Behavior with overload	shutdown with automatic restart
Protective circuit	short-circuit protection, overload protection of the outputs
General data	
Connection method	spring-cage connection with direct plug-in technology
Connection data solid/stranded/AWG	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16
Weight	136 g
Width	35 mm
Height	126.1 mm
Depth	54 mm

Technical Data

Local bus interface	
Name	Axio bus
Connection method	bus base module
Power supply for module electronics	
Communications power U_{BUS}	5 V DC (via bus base module)
Current consumption from U_{BUS}	120 mA
I/O supply	
Supply of digital output modules U_{O}	24 V DC
Maximum permissible voltage range	19.2 V DC ... 30 V DC including all tolerances, including ripple
Current consumption from U_{O}	8 A (external fuse)
Protective circuit	surge protection of the supply voltage polarity reversal protection of the supply voltage
Digital outputs	
Connection technology	1-wire
Maximum number of outputs	16
Output voltage	24 V
Maximum output current per channel	500 mA
Maximum output current per module	8 A (external fuse)
Behavior with overload	shutdown with automatic restart
Protective circuit	short-circuit protection, overload protection of the outputs
General data	
Connection method	spring-cage connection with direct plug-in technology
Connection data solid/stranded/AWG	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16
Weight	134 g
Width	35 mm
Height	126.1 mm
Depth	54 mm

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Axioline digital output module , complete with accessories (bus base module)			
- 8 outputs	AXL DO 8/2-2A	2688381	1
- 16 outputs			

Accessories

Axioline bus base module (replacement part)	AXL BS	2688129	5
--	--------	---------	---

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Axioline digital output module , complete with accessories (bus base module)			
- 16 outputs	AXL DO 16/1	2688349	1

Accessories

Axioline bus base module (replacement part)	AXL BS	2688129	5
--	--------	---------	---

Axioline temperature module

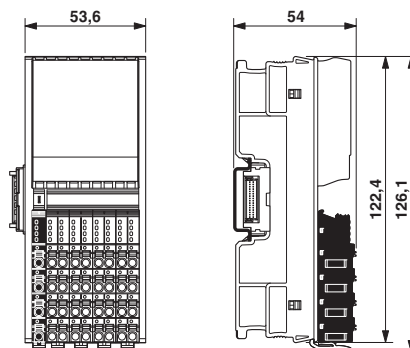
This module is designed for use within an Axioline station.

The AXL UTH 8 module is used to detect thermal voltages generated by different types of thermocouple sensor. These are often used to measure high temperatures.

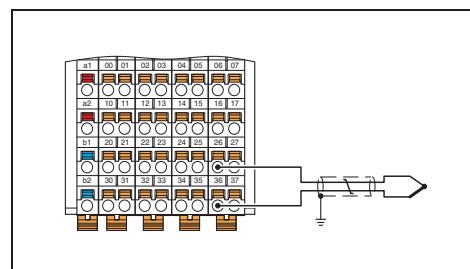
The connection is always established using 2-wire technology.

Features:

- 8 channels for thermocouples, 1 channel for heating current acquisition
- High-resistance isolated inputs
- Supported sensor types: B, C, E, J, K, L, N, R, S, T, U, W, HK
- Linear voltage signal -100 mV to +100 mV
- Parameterizable input filters
- 16 bit measured value resolution
- Accuracy $\pm 0.5^{\circ}\text{C}$
- Internal/external cold junction compensation
- Support for grounded sensors
- High common mode noise reduction



8 UTH inputs



Technical Data

Local bus interface	
Name	Axio bus
Connection method	bus base module
Power supply for module electronics	
Communications power U_{bus}	5 V DC (via bus base module)
Current consumption from U_{bus}	max. 180 mA
I/O supply	
Supply of analog modules U_A	24 V DC
Maximum permissible voltage range	19.2 V DC ... 30 V DC including all tolerances, including ripple
Protective circuit	surge protection of the supply voltage polarity reversal protection of the supply voltage
Analog inputs	
Connection technology	2-wire (shielded)
Number of inputs	8 (for thermocouples or linear voltage)
Protective circuit	short-circuit protection, overload protection of the inputs transient protection of inputs
Sensor types that can be used (TC)	U, T, L, J, E, K, N, S, R, B, C, W, HK
Linear voltage range	-100 mV ... 100 mV
Characteristics	
Measured value representation	16 bits (15 bits + sign bit)
Input filter time	40 ms/60 ms/100 ms/120 ms (adjustable)
Accuracy	Typ. $\pm 0.5^{\circ}\text{C}$
General data	
Connection method	spring-cage connection with direct plug-in technology
Connection data solid/stranded/AWG	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16
Weight	203 g

Ordering data

Type	Order No.	Pcs. / Pkt.
AXL UTH 8	2688417	1

Accessories

Axioline bus base module (replacement part)	AXL BS	2688129	5
Axioline shield connection set	AXL SHIELD SET	2700518	1

Description

Axioline analog input module, complete with accessories (bus base module)

- 8 inputs for connection of thermocouple sensors

I/O systems

Axioline position detection module

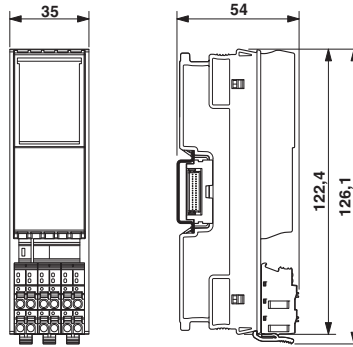
This module is designed for use within an Axioline station.

It is used to detect positions using an absolute encoder with an SSI interface.

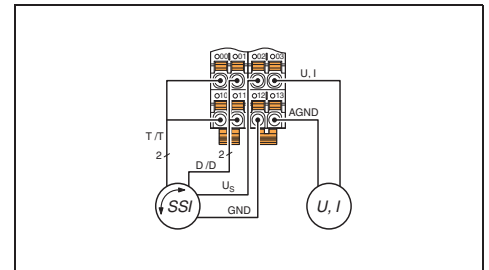
At the same time, an analog output can be used for defining the setpoint of a drive controller, for example.

Features:

- Position detection using absolute encoders with SSI interface
- Encoder resolution up to 56 bits
- Transmission frequency of up to 2 MHz
- Gray or binary code
- Reversal of direction of rotation
- Synchronized transmission of encoder values
- Detailed encoder diagnostics
- Current and voltage measuring ranges
- 16-bit resolution of the analog output value
- D/A conversion time typically 5 μ s



1 SSI interface for absolute encoder,
1 analog output



Technical Data		
Local bus interface		
Name	Axio bus	
Connection method	bus base module	
Power supply for module electronics		
Communications power U_{bus}	5 V DC (via bus base module)	
Current consumption from U_{bus}	max. 140 mA	
I/O supply		
Supply U_i	24 V DC 19.2 V DC ... 30 V DC (including all tolerances, including ripple)	
Protective circuit	surge protection protection against polarity reversal transient protection	
Encoder inputs		
Input name	SSI interface	
Number of inputs	1	
Transmission frequency	2 MHz	
Adjustable resolution	8 ... 56	
Analog outputs		
Connection technology	2-wire (shielded, twisted pair)	
Number of outputs	1	
Voltage output signal	0 V ... 5 V/-5 V ... 5 V/0 V ... 10 V/-10 V ... 10 V	
Current output signal	0 mA ... 20 mA/4 mA ... 20 mA/-20 mA ... 20 mA	
Load/output load current output	max. 500 Ω	
Protective circuit	surge protection short-circuit and overload protection transient protection	
Precision	typ. 0.1% (of output range final value)	
Characteristics		
Representation of output values	16 bits (15 bits + sign)	
General data		
Connection method	spring-cage connection with direct plug-in technology	
Connection data solid/stranded/AWG	0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16	
Weight	135 g	
Ambient temperature (operation)	-25°C ... 60°C	
Ordering data		
Description		
Axioline special function module - 1 SSI interface for absolute encoder, 1 analog output	Order No. 2688433	Pcs. / Pkt. 1
Axioline bus base module (replacement part)	Order No. 2688129	Pcs. / Pkt. 5
Axioline shield connection set	Order No. 2700518	Pcs. / Pkt. 1
Accessories		
AXL BS	Order No. 2688129	Pcs. / Pkt. 5
AXL SHIELD SET	Order No. 2700518	Pcs. / Pkt. 1

Inline analog output terminal

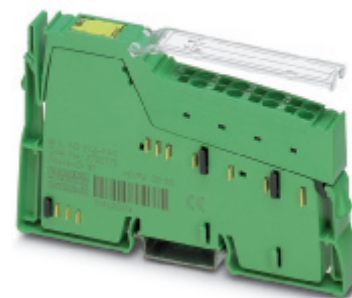
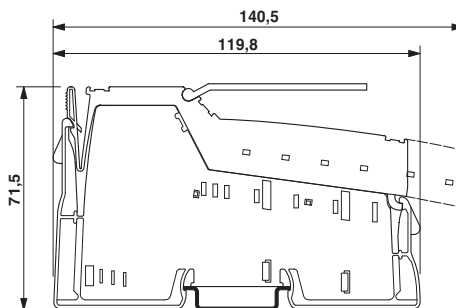
This module is designed for use within an Inline station.

With an overall width of only 12 mm, the IB IL AO 2/UI-PAC analog Inline terminal is a compact alternative for outputting current and voltage signals. Two analog outputs function synchronously with the local bus with a resolution of 11 bits plus sign bit.

Connection of the actuators is established using 2-wire technology.

Features:

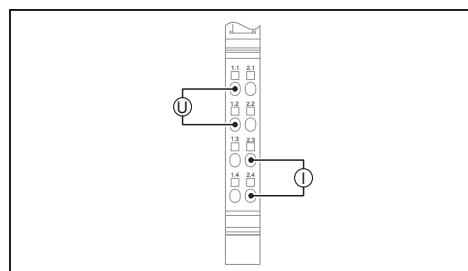
- 2 analog output channels
- 2-wire connection technology
- ± 10 V, 0...10 V, 0...20 mA, 4...20 mA, ± 20 mA
- 11 bit resolution (plus sign bit)
- Typically 0.1% accuracy (relative to output range final value)
- D/A conversion time typically 10 μ s
- Bus-synchronous process data mode
- 450 Ω load (current signal)
- Selectable output format (IL and S7)



2 outputs



Applied for: UL Listed/CUL Listed



Technical Data

Local bus interface	
Connection method	Inline data jumper
Power supply for module electronics	
I/O supply voltage U_{ANA}	24 V DC
Current consumption from U_{ANA}	typ. 24 mA (idling)
Communications power U_L	7.5 V DC (via voltage jumper)
Current consumption from U_L	typ. 55 mA
Analog outputs	
Connection technology	2-wire (shielded, twisted pair)
Number of outputs	2
Voltage output signal	0 V ... 10 V/-10 V ... 10 V
Load/output load voltage output	> 1 k Ω
Current output signal	0 mA ... 20 mA/4 mA ... 20 mA/-20 mA ... 20 mA
Load/output load current output	$\leq 450 \Omega$
Protective circuit	short-circuit and overload protection transient protection
Characteristics	
Representation of output values	12 bits (11 bits + sign bit)
Process data update	(bus-synchronous)
General data	
Connection method	spring-cage connection
Connection data solid/stranded/AWG	0.08 ... 1.5 mm ² /0.08 ... 1.5 mm ² /28 - 16
Weight	66 g
Width	12.2 mm

Ordering data

Description	Type	Order No.	Pcs. / Pkt.
Inline analog output terminal , complete with accessories (connector plug and labeling field)	IB IL AO 2/UI-PAC	2700775	1

Accessories

Plugs	IB IL SCN-8	2726337	10
--------------	--------------------	---------	----

I/O systems

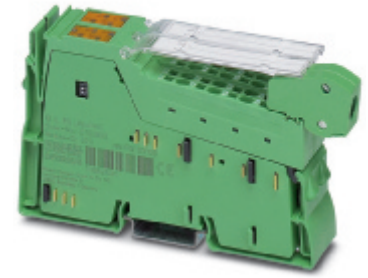
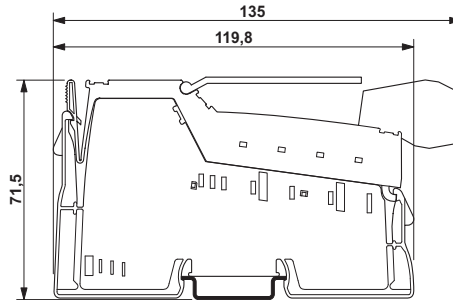
Inline communication terminal

This module is designed for use within an Inline station.

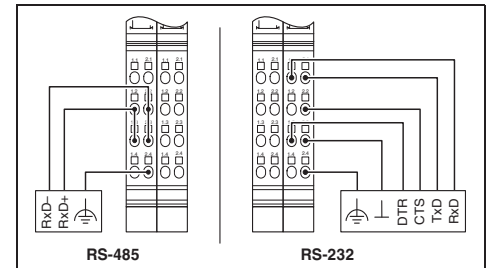
Inline communication terminals can be used to connect devices with a serial interface, e.g., barcode scanners, printers or scales.

Features:

- RS-232, RS-485, and RS-422 interface in a single terminal
- Communication with the device takes place via a selected interface
- Support of various protocols (e.g., end-to-end protocol)
- Standard baud rates of up to 250 kbaud
- Non-standard baud rates can be configured
- 3 process data width settings
- Communication via process data



1 serial input and output channel as RS-485/422 or RS-232 version



Local bus interface	
Connection method	
Serial port	
Interface	
Connection method	
Power supply for module electronics	
I/O voltage	
I/O voltage range	
Communications power U_L	
Current consumption from U_L	
Serial input/output channel	
Input buffer	
Output buffer	
Transmission speed	
Data bits	
Stop bits	
Parity	
Transmission type	
General data	
Connection method	
Connection data solid/stranded/AWG	
Weight	
Width	
Ambient temperature (operation)	

Technical Data	
Inline data jumper	
RS-232, RS-485, RS-422	
spring-cage connection	
24 V DC (via voltage jumper)	
19.2 V DC ... 30 V DC (including all tolerances, including ripple)	
7.5 V (via voltage jumper)	
Typ. 78 mA	
4 kByte	
1 kByte	
110 bits/s ... 25,000 bits/s (configurable)	
5 ... 8	
1 or 2	
even, odd or no parity	
transparent mode, end-to-end mode, XON/XOFF	
spring-cage connection	
0.08 ... 1.5 mm ² /0.08 ... 1.5 mm ² /28 - 16	
135 g	
24.4 mm	
-25°C ... 55°C	

Description
Inline communication channel , complete with accessories (connector plug and labeling field) - 1 serial input and output channel as RS-485/RS-422 or RS-232 version

Ordering data		
Type	Order No.	Pcs. / Pkt.
IB IL RS UNI-PAC	2700893	1

Plug set

Accessories		
Accessories	Order No.	Pcs. / Pkt.
IB IL AO/CNT-PLSET	2732664	1

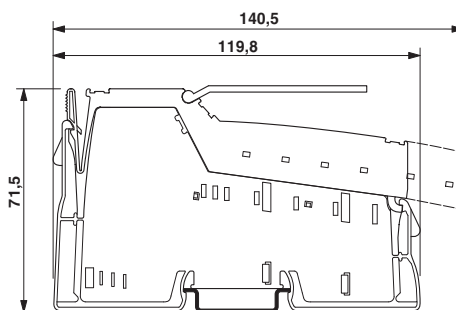
Inline power measurement terminal

This module is designed for use within an InLine station.

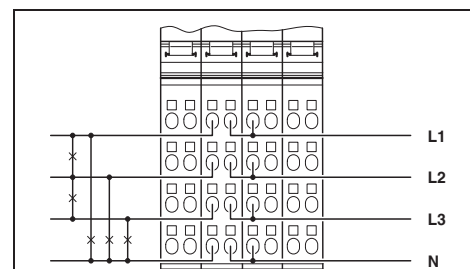
The power measurement terminal enables you to analyze AC networks and is used in applications where conventional analog meters in distribution systems no longer meet growing requirements. This is particularly true in cases where it is important to analyze distortions and harmonics as well as measuring current, voltage, and power.

Features:

- 3 phases plus neutral conductor, connectable
- Direct current detection, 1 A or 5 A
- Line-to-line voltage up to 690 V AC (L-L)
- Specification according to EN 61010-1:2001:
 - Measurement category 3 (300 V AC (L-N))
 - Measurement category 2 (400 V AC (L-N))
- Network variables:
 - Phase currents and neutral conductor current
 - Phase and phase conductor voltages
 - Real, reactive, and apparent powers
 - Power factors of phases
 - Power flow directions
 - Frequency
- Operating modes:
 - Basic measured values
 - Scanning measured values (64 scans/full wave)
- Triggers for measurement intervals can be freely defined
- Harmonic analysis up to 31st harmonic
- Determination of maximum value
- Operating hours counter
- Power meter
- Bimetal filtering



Analysis of AC networks



Local bus interface
Name
Connection method
Power supply for module electronics
Communications power U_L
Current consumption from U_L
Current measuring input
Nominal current I_N
Overload
Precision
Scanning rate
Voltage measuring input
Nominal voltage U_N
Nominal voltage U_N
Overload
Precision
Scanning rate
General data
Connection method
Connection data solid/stranded/AWG
Weight
Width
Ambient temperature (operation)

Technical Data	
Inline local bus	
Inline data jumper	
7.5 V (via voltage jumper)	
Typ. 130 mA	
5 A AC (1 A AC, depending on parameterization)	
140% continuous; 150 A for 10 ms	
0.25% (of the nominal value)	
22.4 k samples/50 Hz	
400 V AC (nominal phase voltage)	
0 V AC ... 690 V AC (phase conductor voltage)	
120% of the nominal value	
0.25% (of the nominal value)	
22.4 k samples/50 Hz	
Spring-cage connection	
0.2 ... 1.5 mm ² /0.2 ... 1.5 mm ² /24 - 16	
200 g	
48.8 mm	
-25°C ... 60°C	

Description
Inline power measurement terminal , complete with accessories (connector plug and labeling field)

Ordering data		
Type	Order No.	Pcs. / Pkt.
IB IL PM 3P/N/EF-PAC	2700965	1

Labeling field , width: 12.2 mm
Labeling field , width: 48.8 mm

Accessories		
IB IL FIELD 2	2727501	10
IB IL FIELD 8	2727515	10

Operation and monitoring

Web panels

Phoenix Contact offers numerous operation and monitoring devices for visualizing straightforward applications.

The 10" and 15" versions are new additions to the range. These operator panels are used in machines and systems which require basic human-machine interface functionality.

The web panels offer the following features:

- Large, high-resolution displays with a large display area
- Brilliant, highly legible displays even in difficult lighting conditions
- Dust and jet water-proof front panels according to IP65
- Easy mounting, thanks to low installation depth and compact design



26.4 cm (10.5") TFT color display



38.1 cm (15") color TFT display

Technical Data	
Display data	
Display	26.4 cm/10.4" TFT active
Monitor resolution	800 x 600 pixels (SVGA)
Display lighting type	CCFL
Brightness	330 cd/m ²
Display backlight MTBF	50,000 h
Color spectrum	65,536 colors
Touch screen	resistive industrial touch screen
Computer data	
Operating systems	Windows CE 5.0
Processor	RISC ARM9 CPU; 200 MHz
Main memory	64 MByte SDRAM
Data memory	32 MByte flash memory
Interfaces	2 x USB host 2.0
External dimensions	
Width	295 mm
Height	220 mm
Depth	5 mm
Installation dimensions	
Width	287 mm
Height	212 mm
Installation depth	55 mm
General data	
Degree of protection	IP65 (front), IP20 (back)
Ambient temperature (operation)	0°C ... 50°C
Mounting type	installation in front plate
Vibration (operation)	DIN EN 60068-2-6
Shock	DIN EN 60068-2-27

Technical Data	
Display data	
Display	38.1 cm/15" TFT active
Monitor resolution	1024 x 768 pixels (XGA)
Display lighting type	CCFL
Brightness	480 cd/m ²
Display backlight MTBF	50,000 h
Color spectrum	65,536 colors
Touch screen	resistive industrial touch screen
Computer data	
Operating systems	Windows CE 5.0
Processor	RISC ARM9 CPU; 200 MHz
Main memory	64 MByte SDRAM
Data memory	32 MByte flash memory
Interfaces	2 x USB host 2.0
External dimensions	
Width	400 mm
Height	329 mm
Depth	5 mm
Installation dimensions	
Width	374 mm
Height	303 mm
Installation depth	60 mm
General data	
Degree of protection	IP65 (front), IP20 (back)
Ambient temperature (operation)	0°C ... 50°C
Mounting type	installation in front plate
Vibration (operation)	DIN EN 60068-2-6
Shock	DIN EN 60068-2-27

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP 10T	2700934	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP 15T	2700935	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP 10T	2700934	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
WP 15T	2700935	1

Touch panels

For greater user-friendliness and a larger display area, Phoenix Contact offers touch panels.

They are perfectly suited for applications that require graphics-intensive interfaces or SCADA functions.

The touch panels offer the following features:

- Unlimited runtime license for Visu+ RT and AX OPC SERVER integrated as standard in all devices
- Ethernet-based drivers available for connection to third-party systems
- PROFINET I/O device functionality available
- Additional monitor connection possible by using the VGA interface (multi-user function)
- External data backup and fast device replacement by using a CF card



30.7 cm (12.1") TFT color display



38.1 cm (15")/43.2 (17") color TFT display

	Technical Data		Technical Data			
	TP 5150T	TP 5170T	TP 5150T	TP 5170T		
Display data						
Display	30.7 cm/12.1" TFT active		38.1 cm/15" TFT active	43.2 cm/17" TFT active		
Monitor resolution	800 x 600 pixels (SVGA)		1024 x 768 pixels (XGA)	1280 x 1024 pixels (SXGA)		
Display lighting type	CCFL		CCFL			
Brightness	400 cd/m ² , typical (adjustable)		350 cd/m ² , typical (adjustable)			
Display backlight MTBF	50,000 h		50,000 h			
Color spectrum	65,536 colors		65,536 colors			
Touch screen	resistive industrial touch screen		resistive industrial touch screen			
Computer data						
Operating systems	Windows CE 6.0		Windows CE 6.0			
Processor	Atom™ 1.6 GHz		Atom™ 1.6 GHz			
Main memory	1 GB DDR SODIMM		1 GB DDR SODIMM			
Data memory	CompactFlash®		CompactFlash®			
Interfaces	COM 1 (RS-232), 1x VGA, 4x USB, 2x CompactFlash		COM 1 (RS-232), 1x VGA, 4x USB, 2x CompactFlash			
External dimensions						
Width	365 mm		410 mm	452 mm		
Height	282 mm		309 mm	356.5 mm		
Depth	10 mm		10 mm			
Installation dimensions						
Width	334 mm		386.6 mm	424 mm		
Height	253 mm		285 mm	329.5 mm		
Installation depth	94 mm		96 mm	99 mm		
General data						
Degree of protection	IP65 (front), IP20 (back)		IP65 (front), IP20 (back)			
Ambient temperature (operation)	5°C ... 55°C		5°C ... 55°C	5°C ... 50°C		
Mounting type	installation in front plate		installation in front plate			
Vibration (operation)	DIN EN 60068-2-6		DIN EN 60068-2-6			
Shock	15g, 11 ms in accordance with IEC 60068-2-27		15g, 11 ms in accordance with IEC 60068-2-27			
	Ordering data		Ordering data			
Description	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Touch panel						
- 30.7 cm (12") display	TP 5120T	2700621	1	TP 5150T	2700622	1
- 37.8 cm (15") display				TP 5170T	2700623	1
- 43 cm (17") display						

Operation and monitoring

Box PCs

The Valueline Industrial PC product range is a family of rugged industrial PCs based on specially selected powerful Intel® Core™ processors.

Moreover, there are no internal fans on the latest generation of IPCs. Instead, they are cooled using just one external convection fan.

The powerful box PC can be configured for communication tasks or data acquisition in a wide variety of applications.

The main features are as follows:

- Energy efficient and powerful Intel® i7 1.33 GHz and i7 2.53 GHz Core processors
- No internal fans
- Can be configured to suit any application
- Solid state drives (SSD) with MLC and SLC technology
- Bookshelf and wall mounting options
- Maintenance-friendly design



Box PC with Intel® i7 technology

Computer data	
Processor (configuration option)	
Main memory (configuration option)	
Data memory (configuration option)	
Interfaces	
Monitor output	
Network	
Power supply unit	
General data	
Degree of protection	
Ambient temperature (operation)	
Permissible humidity (operation)	
Mounting type	
Vibration (operation)	
Shock	

Technical Data	
Processor (configuration option)	Intel® Core™ i7-660UE (4 MB L2 cache, 1.33 GHz) Intel® Core™ i7-610E (4 MB L2 cache, 2.53 GHz)
Main memory (configuration option)	2 GB DDR3-1066 SODIMM 4 GB DDR3-1066 SODIMM 8 GB DDR3-1066 SODIMM
Data memory (configuration option)	2.5 in. SATA hard drive 2.5 in. SATA solid-state drive CompactFlash®
Interfaces	COM 1 (RS-232), 1x DVI-I, 4x USB, 1x CompactFlash
Monitor output	DVI-I
Network	2x Ethernet (10/100/1000 Mbps), RJ45
Power supply unit	24 V DC
General data	
Degree of protection	IP20
Ambient temperature (operation)	0°C ... 45°C
Permissible humidity (operation)	5% ... 95% (no condensation)
Mounting type	wall mount or bookshelf mount
Vibration (operation)	DIN EN 60068-2-6
Shock	15g, 11 ms in accordance with IEC 60068-2-27

Description
Industrial computer , high performance with Intel® i7 processor

Ordering data		
Type	Order No.	Pcs./ Pkt.
VL IPC P7000	2701127	1

Mounting kit , including hardware for installation
- for bookshelf installation
- for wall installation
Removable hard drive tray
2.5" SATA HDD kit , including tray
- 250 GB
- 320 GB
2.5" SATA solid state drive kit , including tray
- 80 GB
- 160 GB
CompactFlash card
- 1 GB
- 2 GB
- 4 GB
- 8 GB

Accessories		
Type	Order No.	Pcs./ Pkt.
VL BOOKSHELF MOUNTING KIT	2913160	1
VL WALL MOUNTING KIT	2913161	1
VL I7 HDD TRAY	2701015	1
VL I7 250 GB HDD KIT	2701011	1
VL I7 320 GB HDD KIT	2701012	1
VL I7 80 GB SSD KIT	2701013	1
VL I7 160 GB SSD KIT	2701014	1
VL 1 GB CF	2913155	1
VL 2 GB CF	2913156	1
VL 4 GB CF	2913157	1
VL 8 GB CF	2913158	1

Panel PCs

The Valueline Industrial PC product range is a family of rugged industrial PCs based on specially selected powerful Intel® Core™ processors.

Moreover, there are no internal fans on the latest generation of IPCs. Instead, they are cooled using just one external convection fan.

The powerful panel PC is available in different display sizes for process visualization.

The main features are as follows:

- Energy efficient and powerful Intel® i7 1.33 GHz and i7 2.53 GHz Core processors
- No internal fans
- Can be configured according to customer requirements
- Solid state drives (SSD) with MLC and SLC technology
- Maintenance-friendly design



Panel-PC with Intel® i7 technology

Technical Data			
Display data	30.7 cm/12 in. TFT (800 x 600) with front USB port 37.8 cm/15 in. TFT (1024 x 768) with optional front USB port 43.0 cm/17 in. TFT (1280 x 1024) with optional front USB port 48.3 cm/19 in. TFT (1280 x 1024) with front USB port 60.9 cm/24 in. TFT (1920 x 1080) with front USB port		
Display lighting type	CCFL		
Display backlight MTBF	> 50,000 h		
Touch screen	resistive industrial touch screen		
Computer data	Intel® Core™ i7-660UE (4 MB L2 cache, 1.33 GHz) Intel® Core™ i7-610E (4 MB L2 cache, 2.53 GHz)		
Processor (configuration option)			
Main memory (configuration option)	2 GB DDR3-1066 SODIMM 4 GB DDR3-1066 SODIMM 8 GB DDR3-1066 SODIMM		
Data memory (configuration option)	2.5 in. SATA hard drive 2.5 in. SATA solid-state drive CompactFlash®		
Interfaces	COM 1 (RS-232), 1x DVI-I, 4x USB, 1x CompactFlash		
Monitor output	DVI-I		
Network	2x Ethernet (10/100/1000 Mbps), RJ45		
Power supply unit	24 V DC		
General data	IP65 (front), IP20 (back) 0°C ... 45°C 5% ... 95% (no condensation) Panel mount for control cabinet DIN EN 60068-2-6 15g, 11 ms in accordance with IEC 60068-2-27		
Degree of protection			
Ambient temperature (operation)			
Permissible humidity (operation)			
Mounting type			
Vibration (operation)			
Shock			
Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Industrial computer, high performance with Intel® i7 processor	VL IPC P7000	2701127	1
Accessories			
Mounting kit, including hardware for installation	VL PANEL MOUNTING KIT	2913159	1
- panel installation	VL PANEL+ MOUNTING KIT	2701177	1
- panel installation for 15 and 17 inch. displays in heavier gauge panels			
Removable hard drive tray	VL I7 HDD TRAY	2701015	1
2.5" SATA HDD kit, including tray	VL I7 250 GB HDD KIT	2701011	1
- 250 GB	VL I7 320 GB HDD KIT	2701012	1
- 320 GB			
2.5" SATA solid state drive kit, including tray	VL I7 80 GB SSD KIT	2701013	1
- 80 GB	VL I7 160 GB SSD KIT	2701014	1
- 160 GB			
CompactFlash card	VL 1 GB CF	2913155	1
- 1 GB	VL 2 GB CF	2913156	1
- 2 GB	VL 4 GB CF	2913157	1
- 4 GB	VL 8 GB CF	2913158	1
- 8 GB			
Protective cover for 15 inch touch screen	VL 15" DISPLAY PROTECTIVE FOIL	2913165	1

Operation and monitoring

Touch monitors

The Valueline FPM series offers reliable, high-quality touch monitors that are ideally suited to use as remote operating solutions in industrial applications.

Valueline FPMs are available in various display sizes and can be connected to any industrial PC with a VGA or DVI port.

The optional front USB interface provides additional connection options for external I/O devices.

The main features are as follows:

- Suitable for industrial applications
- Resistive touch technology
- VGA and DVI interface
- Optional USB on front



30.7 cm (12") display

Technical Data			
Display data			
Display	30.7 cm/12 in. TFT		
Monitor resolution	800 x 600 (SVGA)		
Display lighting type	CCFL		
Brightness	400 cd/m ² , typical (adjustable)		
Display backlight MTBF	> 50,000 h		
Touch screen	resistive industrial touch screen with serial interface		
General data			
Degree of protection	IP65 (front), IP20 (back)		
Ambient temperature (operation)	0°C ... 55°C		
Permissible humidity (operation)	5% ... 95%		
Mounting type	panel cutout or VESA mount		
Vibration (operation)	DIN EN 60068-2-6		
Shock	15g, 11 ms in accordance with IEC 60068-2-27		
Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Flat panel monitor with resistive touch screen			
- without front USB port	VL FPM 12	2913015	1
- with front USB port	VL FPM 12U	2913016	1
Flat panel monitor with resistive touch screen			
- without front USB port			
- with front USB port			
Flat panel monitor with resistive touch screen			
- without front USB port			
- with front USB port			
Flat panel monitor with resistive touch screen			
- with front USB port			
Accessories			
Mounting kit , including hardware for installation			
- panel installation	VL PANEL MOUNTING KIT	2913159	1
- panel installation for 15 and 17 inch. displays in heavier gauge panels	VL PANEL+ MOUNTING KIT	2701177	1
Protective cover for 15 inch touch screen			

Operation and monitoring

Panel-PCs IP65

The VMT 3000 series devices from Phoenix Contact are ideal for industrial applications where IP65 protection is needed. These dust and splash-proof devices are therefore particularly suitable for use close to machinery.

To allow use in direct sunlight, the devices can be optionally fitted with a "sunlight readable display".

The main features are as follows:

- Fully enclosed housing with IP65 protection
- Energy-efficient and powerful Intel® ATOM™ processors
- Fanless design
- Solid state drives (SSD) with SLC technology
- Extended temperature range of -20°C to +55°C
- Optimum network connection by means of Gigabit Ethernet or WLAN
- Maintenance-friendly design
- Also available with sunlight readable display as an option



26.4 cm (10.4") display

Technical Data	
Display data	
Display	26.4 cm/10.4" TFT active
Monitor resolution	1024 x 768 (XGA)
Display lighting type	LED
Brightness	400 cd/m ² , typical (adjustable)
Display backlight MTBF	> 50,000 h
Touch screen	resistive industrial touch screen
Computer data	
Processor (configuration option)	Atom 1.1 GHz Z510 Atom 1.6 GHz Z530
Main memory (configuration option)	1 GB DDR2 RAM 2 GB DDR2 RAM
Data memory (configuration option)	Flash SSD 1 GB Flash SSD 2 GB Flash SSD 4 GB 2.5" HDD, min 40 GB, 24x7 Automotive 2.5" SSD 8 GB 2.5" SSD 16 GB 2.5" SSD 32 GB
Interfaces	COM 1 (RS-232), 1x PS/2 (mouse/keyboard), 2x USB, 2x Mini PCI Express
Optional interfaces	Wireless LAN
Graphics card	Intel® SCH US15W with integrated graphics
Network	2x Ethernet (10/100/1000 MBit), RJ45
Power supply unit	24 V DC +/- 20%
External dimensions	
Width	294 mm
Height	240 mm
Depth	62 mm
General data	
Degree of protection	IP65
Ambient temperature (operation)	-20°C ... 55°C
Permissible humidity (operation)	10% ... 85% (no condensation)
Mounting type	depends on the configuration
Vibration (operation)	DIN EN 60068-2-6
Shock	DIN EN 60068-2-27

Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
IPC with IP65 protection with touch screen, enclosed housing	VMT 3010	2701003	1
- 26.4 cm (10.4") display			
IPC with IP65 protection with touch screen, sunlight readable display, closed housing			
- 26.4 cm (10.4") display			
- 30.7 cm (12.1") display			

Accessories			
Description	Type	Order No.	Pcs. / Pkt.
External power supply unit for panel PC in IP65 housing	VMT 301X EXT PS	2913933	1
Table stand for a monitor/panel PC in IP65 housing	VMT TISCHFUSS	2900946	1
Support bracket left/right for a monitor/panel PC in IP65 housing	VMT HALTEWINKEL LI/RE	2900933	1
Bracket connection adapter for a monitor/panel PC in IP65 housing	VMT GALGENANSCHLUSSADAPTER	2900962	1
Bracket according to VESA standard for a monitor/panel PC in IP65 housing	VMT HALTERUNG VESA	2900959	1



26.4 cm (10.4") sunlight readable display



30.7 cm (12.1") sunlight readable display

Technical Data

26.4 cm/10.4" TFT active
1024 x 768 (XGA)
LED
optical bonding
> 50,000 h
resistive industrial touch screen

Atom 1.6 GHz Z530

2 GB DDR2 RAM

2.5" HDD, min 40 GB, 24x7 Automotive

COM 1 (RS-232), 3 x USB 2.0, 1 x on the front (can be deactivated via software), 1 x PS/2 keyboard/mouse

-
Intel® SCH US15W with integrated graphics
2x Ethernet (10/100/1000 MBit), RJ45
24 V DC +/- 20%

294 mm
240 mm
62 mm

IP65
-20°C ... 55°C
10% ... 85% (no condensation)
depends on the configuration
DIN EN 60068-2-6
DIN EN 60068-2-27

Technical Data

30.7 cm/12.1" TFT active
800 x 600 (SVGA)
CCFL
optical bonding
> 50,000 h
resistive industrial touch screen

Atom 1.6 GHz Z530

2 GB DDR2 RAM

2.5" HDD, min 40 GB, 24x7 Automotive

COM 1 (RS-232), 3 x USB 2.0, 1 x on the front (can be deactivated via software), 1 x PS/2 keyboard/mouse

-
Intel® SCH US15W with integrated graphics
2x Ethernet (10/100/1000 MBit), RJ45
24 V DC +/- 20%

338 mm
261 mm
62 mm

IP65
-20°C ... 55°C
10% ... 85% (no condensation)
depends on the configuration
DIN EN 60068-2-6
DIN EN 60068-2-27

Ordering data		
---------------	--	--

Type	Order No.	Pcs. / Pkt.
VMT 3010 EXP SUN	2700969	1

Ordering data		
---------------	--	--

Type	Order No.	Pcs. / Pkt.
VMT 3012 EXP SUN	2700878	1

Accessories		
-------------	--	--

VMT 301X EXT PS	2913933	1
VMT TISCHFUSS	2900946	1
VMT HALTEWINKEL LI/RE	2900933	1
VMT GALGENANSCHLUSSADAPTER	2900962	1
VMT HALTERUNG VESA	2900959	1

Accessories		
-------------	--	--

VMT 301X EXT PS	2913933	1
VMT TISCHFUSS	2900946	1
VMT HALTEWINKEL LI/RE	2900933	1
VMT GALGENANSCHLUSSADAPTER	2900962	1
VMT HALTERUNG VESA	2900959	1

Index

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	
A			CB 1/6-2/4 PT-BE	2800929	286	CB TM2 5A M1 P	2800884	289	CES-LTPG-GY-28	0801701	216	
			CB E1 24DC/1A NC P	2800915	285	CB TM2 5A SFB P	2800873	287	CES-LTPG-GY-29	0801702	216	
			CB E1 24DC/1A NO P	2800901	284	CB TM2 6A F1 P	2800886	289	CES-LTPG-GY-30	0801703	216	
			CB E1 24DC/1A S-C P	2800922	285	CB TM2 6A M1 P	2800885	289	CES-LTPG-GY-31	0801705	216	
	AGK 10-UKH 150/240	3003554	65	CB E1 24DC/1A S-R P	2800908	285	CB TM2 6A SFB P	2800874	287	CES-LTPG-GY-32	0801706	216
	AGK 10-UKH 50	3001763	64	CB E1 24DC/2A NC P	2800916	285	CB TM2 8A F1 P	2800897	289	CES-LTPG-GY-33	0801707	216
	AGK 10-UKH 95	3003541	65	CB E1 24DC/2A NO P	2800902	284	CB TM2 8A M1 P	2800886	289	CES-SFFS-H	0801728	213
	AI 0.25-8 YE	3203024	119	CB E1 24DC/2A S-C P	2800923	285	CB TM2 8A SFB P	2800875	287	CES-SRC-BK	0801718	214
	AI 0.25-8 YE	3203037	119	CB E1 24DC/2A S-R P	2800909	285	CC 2.5/ 2-GF-5,08-LR P26THR	1792627	242	CES-SRG-BK	0801670	214
	AI 0.5-8 WH	3200014	119	CB E1 24DC/3A NC P	2800917	285	CC 2.5/ 3-GF-5,08-LR P26THR	1792630	242	CES-SRG-BK-10	0801620	214
	AI 0.5-10 WH	3201275	119	CB E1 24DC/3A NO P	2800903	284	CC 2.5/ 4-GF-5,08-LR P26THR	1792643	242	CES-SRG-BK-11	0801618	214
	AI 0.75-8 GY	3200519	119	CB E1 24DC/3A S-C P	2800924	285	CC 2.5/ 5-GF-5,08-LR P26THR	1792656	242	CES-SRG-BK-12	0801617	214
	AI 0.75-10 GY	3201288	119	CB E1 24DC/3A S-R P	2800910	285	CC 2.5/ 6-GF-5,08-LR P26THR	1792669	242	CES-SRG-BK-13	0801616	214
	AI 1 -8 RD	3200030	119	CB E1 24DC/4A NC P	2800918	285	CC 2.5/ 7-GF-5,08-LR P26THR	1792672	242	CES-SRG-BK-14	0801615	214
	AI 1 -10 RD	3200182	119	CB E1 24DC/4A NO P	2800904	284	CC 2.5/ 8-GF-5,08-LR P26THR	1792685	242	CES-SRG-BK-1ASH-L	0801667	215
	AI 1.5-8 BK	3200043	119	CB E1 24DC/4A S-C P	2800925	285	CC 2.5/ 9-GF-5,08-LR P26THR	1792698	242	CES-SRG-BK-2	0801635	214
	AI 1.5-10 BK	3200195	119	CB E1 24DC/4A S-R P	2800911	285	CC 2.5/10-GF-5,08-LR P26THR	1792708	242	CES-SRG-BK-2ASH-LL	0801669	215
	AI 2.5-10 BU	3202533	119	CB PT BRIDGE	2801014	284	CCV 2.5/ 11-GF-5,08-LR P26THR	1792711	242	CES-SRG-BK-2ASH-LR	0801668	215
	AI 2.5-12 BU	3200962	119	CB E1 24DC/6A NC P	2800905	284	CC 2.5/12-GF-5,08-LR P26THR	1792724	242	CES-SRG-BK-2X5	0801657	215
	AI 4 -10 GY	3200535	119	CB E1 24DC/6A S-C P	2800926	285	CCV 2.5/ 2-GF-5,08-LR P26THR	1792737	243	CES-SRG-BK-2X6	0801664	215
	AI 4 -12 GY	3200959	119	CB E1 24DC/6A S-R P	2800912	285	CCV 2.5/ 3-GF-5,08-LR P26THR	1792740	243	CES-SRG-BK-3	0801633	214
	ALU-SB	1404531	172	CB TM1 0.5A F1 P	2800857	289	CCV 2.5/ 4-GF-5,08-LR P26THR	1792753	243	CES-SRG-BK-4	0801632	214
	AP-CP-H	3012315	41	CB TM1 0.5A M1 P	2800846	288	CCV 2.5/ 5-GF-5,08-LR P26THR	1792766	243	CES-SRG-BK-4X3	0801665	215
	ATP-QITCB	3206238	43	CB TM1 0.5A M1 P	2800846	288	CCV 2.5/ 6-GF-5,08-LR P26THR	1792779	243	CES-SRG-BK-4X4	0801666	215
	ATP-ST 4	3030721	6	CB TM1 10A F1 P	2800835	287	CCV 2.5/ 7-GF-5,08-LR P26THR	1792782	243	CES-SRG-BK-5	0801630	214
ATP-ST 6	3024481	18	CB TM1 10A M1 P	2800865	289	CCV 2.5/ 8-GF-5,08-LR P26THR	1792795	243	CES-SRG-BK-6	0801628	214	
ATP-STTB 4	3030747	7	CB TM1 10A SFB P	2800854	288	CCV 2.5/ 9-GF-5,08-LR P26THR	1792805	243	CES-SRG-BK-7	0801627	214	
ATP-URTK/SP	0311139	59	CB TM1 10A SFB P	2800843	287	CCV 2.5/10-GF-5,08-LR P26THR	1792818	243	CES-SRG-BK-8	0801625	214	
ATP-UT	3047167	50	CB TM1 12A F1 P	2800866	289	CCV 2.5/11-GF-5,08-LR P26THR	1792821	243	CES-SRG-BK-9	0801622	214	
ATP-UT-QUATTRO	3047196	55	CB TM1 12A M1 P	2800855	288	CCV 2.5/12-GF-5,08-LR P26THR	1792834	243	CES-STPG-GY	0801715	216	
ATP-UTTB 2,5/4	3047316	55	CB TM1 12A SFB P	2800844	287	CES-B10-HFFS-PLBK	0801663	212	CES-STPG-GY-10	0801682	216	
AX OPC SERVER	2985945	340	CB TM1 16A F1 P	2800867	289	CES-B10-SF-PLBK	0801655	213	CES-STPG-GY-11	0801683	216	
AXL BK S3	2688116	356	CB TM1 16A M1 P	2800856	288	CES-B10-SFC-M	0801645	213	CES-STPG-GY-12	0801684	216	
AXL BS	2688129	357	CB TM1 16A SFB P	2800845	287	CES-B10-SFFS-PLBK	0801660	213	CES-STPG-GY-13	0801685	216	
AXL DI 16/1	2688310	357	CB TM1 1A F1 P	2800858	289	CES-B10-WRG-BK	0801725	212	CES-STPG-GY-14	0801686	216	
AXL DO 16/1	2688349	358	CB TM1 1A M1 P	2800847	288	CES-B16-HFFS-PLBK	0801662	212	CES-STPG-GY-1ASH-L	0801712	217	
AXL DO 8/2-2A	2688381	358	CB TM1 1A SFB P	2800836	287	CES-B16-SF-PLBK	0801651	213	CES-STPG-GY-2	0801672	216	
AXL SHIELD SET	2700518	359	CB TM1 2A F1 P	2800859	289	CES-B16-SFC-M	0801642	213	CES-STPG-GY-2ASH-LL	0801714	217	
AXL SSI 1/AO 1	2688433	360	CB TM1 2A M1 P	2800848	288	CES-B16-SFFS-PLBK	0801659	213	CES-STPG-GY-2ASH-LR	0801713	217	
AXL UTH 8	2688417	359	CB TM1 2A SFB P	2800837	287	CES-B16-WRG-BK	0801726	212	CES-STPG-GY-2X5	0801708	217	
			CB TM1 3A F1 P	2800860	289	CES-B24-HFFS-PLBK	0801661	212	CES-STPG-GY-2X6	0801709	217	
			CB TM1 3A M1 P	2800849	288	CES-B24-SF-PLBK	0801647	213	CES-STPG-GY-3	0801673	216	
			CB TM1 3A SFB P	2800838	287	CES-B24-SFC-M	0801641	213	CES-STPG-GY-4	0801674	216	
			CB TM1 4A F1 P	2800861	289	CES-B24-SFFS-PLBK	0801658	213	CES-STPG-GY-4X3	0801710	217	
BATTERY MOUNTING KIT	2320788	321	CB TM1 4A M1 P	2800850	288	CES-B24-WRG-BK	0801727	212	CES-STPG-GY-4X4	0801711	217	
BLUEMARK CLED	5147999	75	CB TM1 4A SFB P	2800839	287	CES-LRC-BK	0801719	214	CES-STPG-GY-5	0801675	216	
BLUEMARK CLED CASE	5146725	75	CB TM1 5A F1 P	2800862	289	CES-LRG-BK	0801671	214	CES-STPG-GY-6	0801676	216	
BLUEMARK CLED SET	5147400	75	CB TM1 5A M1 P	2800851	288	CES-LRG-BK-15	0801619	214	CES-STPG-GY-7	0801677	216	
BLUEMARK CLED SET EN	5147401	75	CB TM1 5A SFB P	2800840	287	CES-LRG-BK-16	0801621	214	CES-STPG-GY-8	0801679	216	
BLUEMARK CLED-BASE	5146669	75	CB TM1 6A F1 P	2800863	289	CES-LRG-BK-17	0801624	214	CES-STPG-GY-9	0801680	216	
BLUEMARK CLED-FLUID-CARTR.	5146662	75	CB TM1 6A M1 P	2800852	288	CES-LRG-BK-18	0801626	214	CF FLASH 256MB	2988780	343	
BLUEMARK CLED-MAG 20	5146655	75	CB TM1 6A SFB P	2800841	287	CES-LRG-BK-19	0801629	214	CLIFFIX 35-5	3022276	108	
BLUEMARK CLED-MAG 40	5146668	75	CB TM1 8A F1 P	2800864	289	CES-LRG-BK-20	0801631	214	CN-LAMBDA/4-2.25-BB	2801057	281	
BLUEMARK CLED-STACKER 20	5146656	75	CB TM1 8A M1 P	2800853	288	CES-LRG-BK-21	0801634	214	CN-LAMBDA/4-2.25-SB	2801056	281	
			CB TM1 8A SFB P	2800842	287	CES-LRG-BK-22	0801637	214	CN-UB-280DC-3-BB	2801050	280	
			CB TM2 0.5A F1 P	2800890	289	CES-LRG-BK-23	0801638	214	CN-UB-280DC-3-SB	2801051	280	
			CB TM2 0.5A M1 P	2800879	289	CES-LRG-BK-24	0801639	214	CP-H 2.5-4L	3012313	41	
			CB TM2 0.5A SFB P	2800868	287	CES-LRG-BK-25	0801640	214	CP-H 2.5-4L-Z	3012314	41	
			CB TM2 10A F1 P	2800898	289	CES-LRG-BK-26	0801643	214	CP-QPD 5X2,5	1404530	172	
			CB TM2 10A M1 P	2800887	289	CES-LRG-BK-27	0801644	214	CPH 9-15	3000768	44	
			CB TM2 10A SFB P	2800876	287	CES-LRG-BK-28	0801646	214	CRIMPFOX 16-N	1212686	120	
C-ME 4/2	3035759	15	CB TM2 12A F1 P	2800899	289	CES-LRG-BK-29	0801648	214	CRIMPFOX-1,6/2,5-ED-4,0	1687419	230	
C-ME 4/3	3035760	15	CB TM2 12A M1 P	2800888	289	CES-LRG-BK-30	0801650	214	CRIMPFOX-RC 16-N	1212688	121	
C-ME 6/2	3034442	17	CB TM2 12A SFB P	2800877	287	CES-LRG-BK-31	0801653	214	CRIMPFOX-RCI 6-N	1212687	121	
C-ME 6/3	3034390	17	CB TM2 16A F1 P	2800900	289	CES-LRG-BK-32	0801654	214	CRIMPFOX-SC 6-N	1212689	121	
C7/16-LAMBDA/4-2.25-BB	2801060	281	CB TM2 16A M1 P	2800889	289	CES-LRG-BK-33	0801656	214	CRIMPFOX-WF 6-N/DIE	1212690	120	
C7/16-LAMBDA/4-2.25-SB	2801059	281	CB TM2 16A SFB P	2800878	287	CES-LTPG-GY	0801716	216	CUTFOX-ES	1212621	125	
CABLE-EC56/F/OE/0,34/S/1,0M	2903395	307	CB TM2 1A F1 P	2800891	289	CES-LTPG-GY-15	0801687	216				
CABLE-EC56/F/OE/0,34/S/10,0M	2903400	307										
CABLE-EC56/F/OE/0,34/S/15,0M	2903401	307	CB TM2 1A M1 P	2800880	289	CES-LTPG-GY-16	0801688	216				
CABLE-EC56/F/OE/0,34/S/2,0M	2903396	307	CB TM2 1A SFB P	2800869	287	CES-LTPG-GY-17	0801689	216				
CABLE-EC56/F/OE/0,34/S/20,0M	2903402	307	CB TM2 2A F1 P	2800892	289	CES-LTPG-GY-18	0801690	216				
CABLE-EC56/F/OE/0,34/S/4,0M	2903397	307	CB TM2 2A M1 P	2800881	289	CES-LTPG-GY-19	0801691	216				
CABLE-EC56/F/OE/0,34/S/6,0M	2903398	307	CB TM2 2A SFB P	2800870	287	CES-LTPG-GY-20	0801692	216	D-CP-H 2.5-4L	3012320	41	
CABLE-EC56/F/OE/0,34/S/8,0M	2903399	307	CB TM2 3A F1 P	2800893	289	CES-LTPG-GY-21	0801693	216	D-DTME 6	3034426	17	
CARRIER 35-8	3034387	17	CB TM2 3A M1 P	2800882	289	CES-LTPG-GY-22	0801695	216	D-PT 1,5/S	3208142	36	
CARRIER-EMP (1000X15) COVER	0829520	94	CB TM2 3A SFB P	2800871	287	CES-LTPG-GY-23	0801696	216	D-PT 10	3212057	22	
CARRIER-EMP (1000X15) GY	0829366	94	CB TM2 4A F1 P	2800894	289	CES-LTPG-GY-24	0801697	216	D-PT 10-TWIN	3208748	23	
CARRIER-EMP (1000X15) TR	0829530	94	CB TM2 4A M1 P	2800883	289	CES-LTPG-GY-25	0801698	216	D-PT 2.5-4L/1P	3012301	41	
CARRIER/L-EMP (1000X15) GY	0829559	94	CB TM2 4A SFB P	2800872	287	CES-LTPG-GY-26	0801699	216	D-PT 2.5-4L/2P	3012311	41	

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
D-PT 6-QUATTRO	3212963	19	EML (25,4X12,7)R	0816825	109	EML-HT (20X7)R	0830645	100	FBS 3-6	3030242	15
D-PT 6-QUATTRO/2P	3061855	43	EML (24X3)R	0830291	109	EML-HT (20X7)R CUS	0830664	101	FBS 3-6 BU	3036945	286
D-PT 6-TWIN	3211508	19	EML (40X6)R	0830481	114	EML-HT (20X7)RL-T	0830654	101	FBS 3-6 GY	3032240	286
D-PTB 2,5-PE/L/L	3210553	12	EML (40X6)R YE	0830482	114	EML-HT (24X4)R	0830646	100	FBS 3-8	3030297	18
D-PTB 2,5/3	3210552	11	EML (40X6)R CUS	0830487	114	EML-HT (24X4)R CUS	0830665	101	FBS 4-5	3030187	12
D-PTME 4	3212167	15	EML (40X6)R YE CUS	0830488	114	EML-HT (24X4)RL-T	0830655	101	FBS 4-6	3030255	15
D-PTME 6-CT/1P	3212303	47	EML (50X10)R	0830483	114	EML-HT (25,4X12,7)R	0830648	100	FBS 4-6 BU	3036958	286
D-PTME 6/1P	3212307	48	EML (50X10)R CUS	0830489	114	EML-HT (25,4X12,7)R CUS	0830667	101	FBS 4-6 GY	3032279	286
D-PTS 1,5/S	3214576	6	EML (50X10)R YE	0830484	114	EML-HT (25,4X12,7)RL-T	0830657	101	FBS 4-8	3030307	18
D-PTTB 1,5/S/4P	3213894	37	EML (50X10)R YE CUS	0830490	114	EML-HT (25X8)R	0830647	100	FBS 5-5	3030190	12
D-PTTBS 1,5/S	3214699	7	EML (75X10)R	0830485	114	EML-HT (25X8)R CUS	0830666	101	FBS 5-6	3030349	15
D-PTTBS 1,5/S/2P	3214534	33	EML (75X10)R CUS	0830491	114	EML-HT (25X8)RL-T	0830656	101	FBS 5-6 GY	3032266	286
D-UK 4/10	3003020	60	EML (75X10)R YE	0830486	114	EML-HT (32X10)R	0830649	100	FBS 5-8	3030310	17
D-UK 5-HESI N	3000543	61	EML (75X10)R YE CUS	0830492	114	EML-HT (32X10)R CUS	0830668	101	FBS 6-8	3032470	17
D-USST 4-MT	3070304	58	EML-HA (100X73)R	0830731	102	EML-HT (32X10)RL-T	0830658	101	FBS 1,5/S-PV	3216263	7
D-USST 6-T	3070367	59	EML-HA (100X73)R CUS	0830739	103	EML-HT (35X6,5)R	0830650	100	FBS 10-3,5	3213056	6
D-UT 2,5/10	3047028	54	EML-HA (100X73)R SR	0830735	103	EML-HT (35X6,5)R CUS	0830669	101	FBS 10-5	3030213	11
D-UT 2,5/1P	3047154	50	EML-HA (100X73)R SR CUS	0830743	103	EML-HT (35X6,5)RL-T	0830659	101	FBS 10-6	3213014	15
D-UT 4-QUATTRO HV	3048852	55	EML-HA (100X90)R	0830732	102	EML-HT (40X15)R	0800339	100	FBS 10-6 BU	3032198	286
D-UT 4-TWIN HV	3000710	55	EML-HA (100X90)R CUS	0830740	103	EML-HT (40X15)R CUS	0830168	101	FBS 10-6 GY	3032253	286
D-UT 6-QUATTRO/2P	3060607	51	EML-HA (100X90)R SR	0830736	103	EML-HT (40X15)RL-T	0830660	101	FBS 10-8	3030323	17
D-UTME 4	3047491	56	EML-HA (100X90)R SR CUS	0830744	103	EML-HT (45X5)R	0800337	100	FBS 20-3,5	3213014	6
D-UTTB 4 HV	3000709	55	EML-HA (15X9)R	0830600	102	EML-HT (45X5)R CUS	0830166	101	FBS 20-3,5	3213069	6
DF-UP 6	3060856	52	EML-HA (15X9)R CUS	0830622	103	EML-HT (45X5)RL-T	0830661	101	FBS 20-5	3030226	12
DFLK 10/FKCT	2903034	308	EML-HA (15X9)R SR	0830611	103	EML-HT (50X10)R	0800338	100	FBS 20-6	3030365	15
DFLK 14/FKCT	2903035	308	EML-HA (15X9)R SR CUS	0830633	103	EML-HT (50X10)R CUS	0830167	101	FBS 20-6 BU	3032208	286
DFLK 16/FKCT	2903036	308	EML-HA (19X6)R	0830601	102	EML-HT (50X10)RL-T	0830662	101	FBS 3-3,5	3213027	6
DFLK 20/FKCT	2903038	308	EML-HA (19X6)R CUS	0830623	103	EML-HT (8X8)R	0800340	100	FBS 4-3,5	3213030	6
DFLK 26/FKCT	2903039	308	EML-HA (19X6)R SR	0830612	103	EML-HT (8X8)R CUS	0830169	101	FBS 5-3,5	3213043	6
DFLK 34/FKCT	2903041	308	EML-HA (19X6)R SR CUS	0830634	103	EML-HT (8X8)RL-T	0830651	101	FBS 5-6 BU	3036961	286
DFLK 40/FKCT	2903042	308	EML-HA (20X20)R	0830602	102	EML-HT (D12)R	0801376	100	FBS 50-6	3032224	286
DFLK 50/FKCT	2903043	308	EML-HA (20X20)R CUS	0830624	103	EMT (31X12,5)R GY	0801612	99	FBS 50-6 BU	3032211	286
DFLK-D 9 SUB/FKCT	2903063	309	EML-HA (20X20)R SR	0830613	103	EMT (31X12,5)R GY CUS	0830390	99	FBS-PV PT 2,5-4L	3012318	41
DFLK-D 9 SUB/M/FKCT	2903052	309	EML-HA (20X20)R SR CUS	0830635	103	EMT (35X28)R	0801602	98	FBS-PV UT	3047358	55
DFLK-D15 SUB/FKCT	2903065	309	EML-HA (26,5X12)R	0830603	102	EMT (35X28)R CUS	0830391	98	FKC 2,5/ 2-ST-5,08-LR	1792517	241
DFLK-D15 SUB/M/FKCT	2903054	309	EML-HA (26,5X12)R CUS	0830625	103	EMT (35X28)R YE	0801603	98	FKC 2,5/ 3-ST-5,08-LR	1792520	241
DFLK-D25 SUB/FKCT	2903067	309	EML-HA (26,5X12)R SR	0830614	103	EMT (35X28)R YE CUS	0830392	98	FKC 2,5/ 4-ST-5,08-LR	1792533	241
DFLK-D25 SUB/M/FKCT	2903055	309	EML-HA (26,5X12)R SR CUS	0830636	103	EMT (35X46)R	0801604	98	FKC 2,5/ 5-ST-5,08-LR	1792546	241
DFLK-D37 SUB/FKCT	2903069	309	EML-HA (40X15)R	0830605	102	EMT (35X46)R CUS	0830393	98	FKC 2,5/ 6-ST-5,08-LR	1792559	241
DFLK-D37 SUB/M/FKCT	2903056	309	EML-HA (40X15)R CUS	0830627	103	EMT (35X46)R YE	0801605	98	FKC 2,5/ 7-ST-5,08-LR	1792562	241
DFLK-D50 SUB/FKCT	2903070	309	EML-HA (40X15)R SR	0830616	103	EMT (35X46)R YE CUS	0830394	98	FKC 2,5/ 8-ST-5,08-LR	1792575	241
DFLK-D50 SUB/M/FKCT	2903058	309	EML-HA (40X15)R SR CUS	0830638	103	EMT (EX15)R	0830671	109	FKC 2,5/ 9-ST-5,08-LR	1792588	241
DFS-CP 2,5-4L	3012321	41	EML-HA (40X8)R	0830604	102	EMT (EX15)R CUS	0830395	109	FKC 2,5/ 10-ST-5,08-LR	1792591	241
DFS-CP-H 2,5-4L	3012317	41	EML-HA (40X8)R CUS	0830626	103	EU5C-SWD-CAN PXC	2903098	304	FKC 2,5/ 11-ST-5,08-LR	1792601	241
DP-CP-H 2,5-4L	3012319	41	EML-HA (40X8)R SR	0830615	103	EU5C-SWD-DP PXC	2903100	304	FKC 2,5/ 12-ST-5,08-LR	1792614	241
DP-STMED 6	3035690	17	EML-HA (40X8)R SR CUS	0830637	103	EU5C-SWD-EIP-MODTCP PXC	2903244	304	FKC 2,5/ 13-ST-5,08-LR	1810900	241
DP-UTTB 2,5/4	3047303	55	EML-HA (51X25)R	0830729	102	EU5C-SWD-PF2-1 PXC	2903113	305	FKC 2,5/ 14-ST-5,08-LR	1810913	241
			EML-HA (51X25)R CUS	0830737	103	EU5E-SWD-2A2A PXC	2903104	304	FKC 2,5/ 15-ST-5,08-LR	1810926	241
			EML-HA (51X25)R SR	0830733	103	EU5E-SWD-4D4D PXC	2903101	304	FKC 2,5/ 16-ST-5,08-LR	1810939	241
			EML-HA (51X25)R SR CUS	0830741	103	EU5E-SWD-4DX PXC	2903102	304	FKCS 2,5/ 2-ST-5,08-RF	1808569	247
			EML-HA (60X30)R	0830606	102	EU5E-SWD-X8D PXC	2903103	304	FKCS 2,5/ 3-ST-5,08-RF	1808572	247
			EML-HA (60X30)R CUS	0830628	103	EV-T2-C-M3-1AC20A-4,0M2,5HBK	1405195	177	FKCS 2,5/ 4-ST-5,08-RF	1808585	247
E/AL-NS 35	1201662	66	EML-HA (60X30)R SR	0830617	103	EV-T2-C-M3-1AC20A-4,0M2,5HRD	1405194	177	FKCS 2,5/ 5-ST-5,08-RF	1808598	247
EB 2-6	0201155	60	EML-HA (60X30)R SR CUS	0830639	103	EV-T2-C-M3-1AC32A-4,0M6,0SBK	1405198	177	FKCS 2,5/ 6-ST-5,08-RF	1808608	247
EB 2-25/UKH	0201362	65	EML-HA (70X150)R	0830608	102	EV-T2-C-M3-3AC20A-4,0M2,5HBK	1405197	177	FKCS 2,5/ 7-ST-5,08-RF	1808611	247
EB 2-31/UKH	0201388	65	EML-HA (70X150)R CUS	0830630	103	EV-T2-C-M3-3AC32A-4,0M6,0SBK	1405199	177	FKCS 2,5/ 8-ST-5,08-RF	1808624	247
EB 2-36/UKH	0201401	65	EML-HA (70X150)R SR	0830619	103	EV-T2-PC-M3-1AC20A-4,0M2,5H	1404563	176	FKCS 2,5/ 9-ST-5,08-RF	1808637	247
EB 3-6	0201142	60	EML-HA (70X150)R SR CUS	0830641	103	EV-T2-PC-M3-1AC20A-4,0M2,5HBK	1405192	176	FKCS 2,5/ 10-ST-5,08-RF	1808640	247
EB 3-25/UKH	0201375	65	EML-HA (70X32)R	0830607	102	EV-T2-PC-M3-1AC20A-4,0M2,5H	1404876	176	FKCS 2,5/ 11-ST-5,08-RF	1808653	247
EB 3-31/UKH	0201391	65	EML-HA (70X32)R CUS	0830629	103	EV-T2-PC-M3-1AC20A-4,0M2,5SBK	1405193	176	FKCS 2,5/ 12-ST-5,08-RF	1808666	247
EB 3-36/UKH	0201414	65	EML-HA (70X32)R SR	0830618	103	EV-T2-PC-M3-1AC32A-4,0M6,0S	1404568	177	FKCS 2,5/ 13-ST-5,08-RF	1808679	247
EB 10-6	0201139	60	EML-HA (70X32)R SR CUS	0830640	103	EV-T2-PC-M3-3AC20A-4,0M2,5H	1404567	176	FKCS 2,5/ 14-ST-5,08-RF	1808682	247
EEM-MKT-DRA	2902078	330	EML-HA (70X50)R	0830730	102	EV-T2-PC-M3-3AC20A-4,0M2,5S	1404877	176	FKCS 2,5/ 15-ST-5,08-RF	1808695	247
EEM-TEMP-MA600	2901949	330	EML-HA (70X50)R CUS	0830738	103	EV-T2-PC-M3-3AC32A-4,0M6,0S	1404569	177	FKCS 2,5/ 16-ST-5,08-RF	1808705	247
ELR 5011 IP PN	2700745	345	EML-HA (70X50)R SR	0830734	103				FKIC 2,5/ 2-STF-5,08 EX	1810227	253
ELR 5011-2 IP PN	2701007	345	EML-HA (70X50)R SR CUS	0830742	103				FKIC 2,5/ 3-STF-5,08 EX	1810230	253
ELR H5-IES-SC-SWD/500AC-0,6	2903116	303	EML-HA (76X51)R	0830609	102				FKIC 2,5/ 4-STF-5,08 EX	1810243	253
ELR H5-IES-SC-SWD/500AC-2	2903117	303	EML-HA (76X51)R CUS	0830631	103				FKIC 2,5/ 5-STF-5,08 EX	1810256	253
ELR H5-IES-SC-SWD/500AC-9	2903118	303	EML-HA (76X51)R SR	0830620	103	FBI 2-20	0201346	64	FKIC 2,5/ 6-STF-5,08 EX	1810269	253
ELR H51-0,6-DIN-RAIL-SET	2902952	301	EML-HA (76X51)R SR CUS	0830642	103	FBI 3-20	0201317	64	FKIC 2,5/ 7-STF-5,08 EX	1810272	253
ELR H51-2,4-DIN-RAIL-SET	2902953	301	EML-HA (85X32)R	0830610	102	FBI 10-6	0203250	58	FKIC 2,5/ 8-STF-5,08 EX	1810285	253
ELR H51-9-DIN-RAIL-SET	2902954	301	EML-HA (85X32)R CUS	0830632	103	FBI 2-20 N	3213195	64	FKIC 2,5/ 9-STF-5,08 EX	1810298	253
ELR H51-IESSC-24DC500AC-06	2902746	301	EML-HA (85X32)R SR	0830621	103	FBI 3-20 N	3213205	64	FKIC 2,5/ 10-STF-5,08 EX	1810308	253
ELR H51-IESSC-24DC500AC-2	2902744	301	EML-HA (85X32)R SR CUS	0830643	103	FBS 2-10	3005947	22	FKIC 2,5/ 11-STF-5,08 EX	1810311	253
ELR H51-IESSC-24DC500AC-9	2902745	301	EML-HT (15X15)R	0800341	100	FBS 2-5	3030161	11	FKIC 2,5/ 12-STF-5,08 EX	1810324	253
EM RD-ADAPTER	2902747	301	EML-HT (15X15)R CUS	0830170							

Index

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
FKICS 2,5/ 7-STD-5,08-RN	1808776	247	GMVSTBR 2,5/ 3-STF-7,62 EX	1809908	257	HC-ALU 6-161 PROFILE 100	2200902	269	HC-B 16-TFL-H-O1STM32S	1460125	223
FKICS 2,5/ 8-STD-5,08-RN	1808789	247	GMVSTBR 2,5/ 4-STF-7,62 EX	1809911	257	HC-ALU 6-161 PROFILE 1000	2200905	269	HC-B 16-TFL-H-O1STM40S	1460126	223
FKICS 2,5/ 9-STD-5,08-RN	1808792	247	GMVSTBR 2,5/ 5-STF-7,62 EX	1809924	257	HC-ALU 6-161 PROFILE 150	2200903	269	HC-B 16-TFL-H-O1STM40S	1460127	223
FKICS 2,5/10-STD-5,08-RN	1808802	247	GMVSTBR 2,5/ 6-STF-7,62 EX	1809937	257	HC-ALU 6-161 PROFILE 200	2200904	269	HC-B 16-TFL-N-O1PG21G	1460101	223
FKICS 2,5/11-STD-5,08-RN	1808815	247	GMVSTBR 2,5/ 7-STF-7,62 EX	1809940	257	HC-ALU 6-161 SEAL EMC	2200910	269	HC-B 16-TFL-N-O1PG21S	1460103	223
FKICS 2,5/12-STD-5,08-RN	1808828	247	GMVSTBR 2,5/ 8-STF-7,62 EX	1809953	257	HC-ALU 6-53,5 COVER GY	2200891	268	HC-B 16-TFL-N-O1STM25G	1460100	223
FKICS 2,5/13-STD-5,08-RN	1808831	247	GMVSTBR 2,5/ 9-STF-7,62 EX	1809966	257	HC-ALU 6-53,5 DKL-COVER GY	2201121	268	HC-B 16-TFL-N-O1STM25S	1460102	223
FKICS 2,5/14-STD-5,08-RN	1808844	247	GMVSTBR 2,5/10-STF-7,62 EX	1809979	257	HC-ALU 6-53,5 PROFILE 100	2200887	268	HC-B 16-TFL-N-O1STM32G	1460095	223
FKICS 2,5/15-STD-5,08-RN	1808857	247	GMVSTBR 2,5/11-STF-7,62 EX	1809982	257	HC-ALU 6-53,5 PROFILE 1000	2200890	268	HC-B 16-TFL-N-O1STM32S	1460109	223
FKICS 2,5/16-STD-5,08-RN	1808860	247	GMVSTBR 2,5/12-STF-7,62 EX	1809995	257	HC-ALU 6-53,5 PROFILE 150	2200888	268	HC-B 16-TFQ-H-O1PG21G	1460146	226
FL FOC PN-C-HCS-GI-200/230	2313410	317	GMVSTBW 2,5/ 2-STF-7,62 EX	1810007	257	HC-ALU 6-53,5 PROFILE 200	2200889	268	HC-B 16-TFQ-H-O1PG21S	1460147	226
FL MC EF 1300 MM SC	2902853	317	GMVSTBW 2,5/ 3-STF-7,62 EX	1810010	257	HC-ALU 6-53,5 SEAL EMC	2200907	268	HC-B 16-TFQ-H-O1PG29G	1460148	226
FL MC EF 1300 MM ST	2902854	317	GMVSTBW 2,5/ 4-STF-7,62 EX	1810023	257	HC-ALU 6-78 COVER GY	2200896	268	HC-B 16-TFQ-H-O1PG29S	1460149	226
FL MC EF 1300 SM ST	2902856	317	GMVSTBW 2,5/ 5-STF-7,62 EX	1810036	257	HC-ALU 6-78 DKL-COVER GY	2201122	268	HC-B 16-TFQ-H-O1STM32G	1460155	226
FL MC EF WDM-A SC	2902858	316	GMVSTBW 2,5/ 6-STF-7,62 EX	1810049	257	HC-ALU 6-78 PROFILE 100	2200892	268	HC-B 16-TFQ-H-O1STM40G	1460157	226
FL MC EF WDM-B SC	2902859	316	GMVSTBW 2,5/ 7-STF-7,62 EX	1810052	257	HC-ALU 6-78 PROFILE 1000	2200895	268	HC-B 16-TFQ-H-O1STM40S	1460158	226
FL MC EF WDM-SET SC	2902660	316	GMVSTBW 2,5/ 8-STF-7,62 EX	1810065	257	HC-ALU 6-78 PROFILE 150	2200893	268	HC-B 16-TFQ-H/O1STM32S	1409354	226
FL MEM PLUG	2891259	346	GMVSTBW 2,5/ 9-STF-7,62 EX	1810078	257	HC-B 16-TFQ-H-O1STM32G	2200894	268	HC-B 16-TFQ-H-O1STM32G	1460129	226
FL M GUARD LIC VPN-10	2700194	352	GMVSTBW 2,5/10-STF-7,62 EX	1810081	257	HC-ALU 6-78 SEAL EMC	2200908	268	HC-B 16-TFQ-N-O1PG21S	1460131	226
FL M GUARD LIC VPN-250	2700193	352	GMVSTBW 2,5/11-STF-7,62 EX	1810094	257	HC-B 6-TMS-SD-IP65	1690778	232	HC-B 16-TFQ-N-O1STM25G	1460128	226
FL M GUARD LIC VPN-250 GROUP	2700192	352	GMVSTBW 2,5/12-STF-7,62 EX	1810104	257	HC-B 10-KML-H-O1PG21	1460260	224	HC-B 16-TFQ-N-O1STM25S	1460130	226
FL M GUARD RS2000 TX/TX VPN	2700642	353				HC-B 10-KML-H-O1PG29	1460289	224	HC-B 16-TFQ-H-O1STM32G	1460134	226
FL M GUARD RS4000 TX/TX	2700634	352				HC-B 10-KML-H-O1STM25	1460291	224	HC-B 16-TFQ-N-O1STM32S	1460160	226
FL M GUARD RS4000 TX/TX VPN	2200515	353				HC-B 10-KML-H-O1STM32	1460292	224	HC-B 16-TMS-SD-IP65	1690794	233
FL MM PATCH 1,0 LC-LC	2989158	343				HC-B 10-KML-N-O1PG16	1460287	224	HC-B 24-KML-H-O1PG29	1460250	225
FL MM PATCH 2,0 LC-LC	2989255	343				HC-B 10-KML-N-O1STM20	1460316	224	HC-B 24-KML-H-O1STM32	1460325	225
FL MM PATCH 5,0 LC-LC	2901799	343				HC-B 10-KMQ-H-O1PG21	1460298	228	HC-B 24-KML-H-O1STM40	1460326	225
FL PATCH CCODE BU	2891291	344				HC-B 10-KMQ-H-O1PG29	1460299	228	HC-B 24-KML-N-O1PG29	1460226	225
FL PATCH CCODE RD	2891893	344	HC-ADV-B06-BHFFH-EEE	1408614	234	HC-B 10-KMQ-H-O1STM25	1460301	228	HC-B 24-KML-N-O1STM32	1460229	225
FL PATCH GUARD	2891424	344	HC-ADV-B06-CHFH-1TTM20-EEE	1408685	234	HC-B 10-KMQ-H-O1STM32	1460302	228	HC-B 24-KMQ-H-O1PG21	1460329	229
FL PATCH GUARD KEY	2891521	344	HC-ADV-B06-CHFH-1TTM25-EEE	1408698	234	HC-B 10-KMQ-N-O1PG16	1460042	228	HC-B 24-KMQ-H-O1PG29	1460330	229
FL PATCH SAFE CLIP	2891246	344	HC-ADV-B06-HHWH-1SGM20-PL	1404224	232	HC-B 10-KMQ-N-O1STM20	1460151	228	HC-B 24-KMQ-H-O1STM32	1460335	229
FL PN/PN SDIO-2TX/2TX	2700651	344	HC-ADV-B06-HHWH-1SGM25-PL	1404226	232	HC-B 10-TFL-H-O1PG21G	1460048	222	HC-B 24-KMQ-H-O1STM40	1460336	229
FL SD FLASH/MRM	2700270	352	HC-ADV-B06-HHWH-1TGM20-PL	1404222	232	HC-B 10-TFL-H-O1PG21S	1460049	222	HC-B 24-KMQ-N-O1PG29	1460251	229
FL SFP LH	2989912	343	HC-ADV-B06-HHWH-1TGM25-PL	1404225	232	HC-B 10-TFL-H-O1PG29G	1460050	222	HC-B 24-KMQ-N-O1STM32	1460276	229
FL SFP LX	2891767	343	HC-ADV-B06-SHFFH-2STM20-EEE	1408630	234	HC-B 10-TFL-H-O1PG29S	1460051	222	HC-B 24-TFL-H-O1PG21G	1460342	223
FL SFP SX	2891754	343	HC-ADV-B06-SHFFH-2STM25-EEE	1408656	234	HC-B 10-TFL-H-O1STM25G	1460054	222	HC-B 24-TFL-H-O1PG21S	1460206	223
FL SM PATCH 2,0 SC-SC	2901830	316	HC-ADV-B10-BHFFH-EEE	1408711	235	HC-B 10-TFL-H-O1STM25S	1460055	222	HC-B 24-TFL-H-O1PG29G	1460207	223
FL SWITCH 3004T-FX	2891033	349	HC-ADV-B10-CHFH-1TTM20-EEE	1408782	235	HC-B 10-TFL-H-O1STM32G	1460056	222	HC-B 24-TFL-H-O1PG29S	1460208	223
FL SWITCH 3006T-2FX	2891036	349	HC-ADV-B10-CHFH-1TTM25-EEE	1408795	235	HC-B 10-TFL-H-O1STM32S	1460057	222	HC-B 24-TFL-H-O1STM32G	1460212	223
FL SWITCH 3004T-FX ST	2891034	349									
FL SWITCH 3005	2891030	348	HC-ADV-B10-HHWH-1SGM25-PL	1404228	233	HC-B 10-TFL-N-O1PG16G	1460036	222	HC-B 24-TFL-H-O1STM32S	1460213	223
FL SWITCH 3005T	2891032	349	HC-ADV-B10-HHWH-1SGM32-PL	1404230	233	HC-B 10-TFL-N-O1PG16S	1460041	222	HC-B 24-TFL-H-O1STM40G	1460214	223
FL SWITCH 3006T-2FX	2891036	349	HC-ADV-B10-HHWH-1TGM25-PL	1404227	233	HC-B 10-TFL-N-O1STM20G	1460034	222	HC-B 24-TFL-H-O1STM40S	1460215	223
FL SWITCH 3006T-2FX ST	2891037	349	HC-ADV-B10-HHWH-1TGM32-PL	1404229	233	HC-B 10-TFL-N-O1STM20S	1460035	222	HC-B 24-TFL-N-O1PG21G	1460190	223
FL SWITCH 3008	2891031	348	HC-ADV-B10-SHFFH-2STM20-EEE	1408737	235	HC-B 10-TFL-N-O1STM25G	1460039	222	HC-B 24-TFL-N-O1PG21S	1460193	223
FL SWITCH 3008T	2891035	349	HC-ADV-B10-SHFFH-2STM25-EEE	1408753	235	HC-B 10-TFL-N-O1STM25S	1460040	222	HC-B 24-TFL-N-O1PG29G	1460293	223
FL SWITCH IRT 2TX 2POF	2700691	346	HC-ADV-B16-BHFFH-EEE	1408818	235	HC-B 10-TFQ-H-O1PG21G	1460074	226	HC-B 24-TFQ-H-O1PG29S	1460194	223
FL SWITCH IRT TX 3POF	2700692	347	HC-ADV-B16-CHFH-1TTM25-EEE	1408889	235	HC-B 10-TFQ-H-O1PG21S	1460075	226	HC-B 24-TFL-N-O1STM25G	1460189	223
FL SWITCH LM 4TX/1FX SM ST-E	2989734	351	HC-ADV-B16-CHFH-1TTM32-EEE	1408892	235	HC-B 10-TFQ-H-O1PG29G	1460076	226	HC-B 24-TFL-N-O1STM25S	1460191	223
FL SWITCH LM 4TX/1FX SM-E	2989637	351	HC-ADV-B16-HHWH-1SGM32-PL	1404232	233	HC-B 10-TFQ-H-O1PG29S	1460077	226	HC-B 24-TFL-N-O1STM32G	1460297	223
FL SWITCH LM 4TX/1FX ST-E	2989530	351	HC-ADV-B16-HHWH-1SGM40-PL	1404234	233	HC-B 10-TFQ-H-O1STM25G	1460080	226	HC-B 24-TFL-N-O1STM32S	1460192	223
FL SWITCH LM 4TX/1FX-E	2989433	351	HC-ADV-B16-HHWH-1TGM32-PL	1404231	233	HC-B 10-TFQ-H-O1STM25S	1460081	226	HC-B 24-TFQ-H-O1PG21G	1460350	227
FL SWITCH LM 4TX/2FX SM ST-E	2989938	351	HC-ADV-B16-HHWH-1TGM40-PL	1404233	233	HC-B 10-TFQ-H-O1STM32G	1460082	226	HC-B 24-TFQ-H-O1PG21S	1460238	227
FL SWITCH LM 4TX/2FX ST-E	2989831	351	HC-ADV-B16-SHFFH-2STM25-EEE	1408834	235	HC-B 10-TFQ-H-O1STM32S	1460083	226	HC-B 24-TFQ-H-O1PG29G	1460239	227
FL SWITCH LM 5TX-E	2989336	350	HC-ADV-B16-SHFFH-2STM32-EEE	1408850	235	HC-B 10-TFQ-N-O1PG16G	1460063	226	HC-B 24-TFQ-H-O1PG29S	1460240	227
FL WLAN 5100	2700718	354	HC-ADV-B24-BHFFH-EEE	1408915	235	HC-B 10-TFQ-N-O1PG16S	1460068	226	HC-B 24-TFQ-H-O1STM32G	1460243	227
FL WLAN EPA 5N	2700488	355	HC-ADV-B24-CHFH-1TTM25-EEE	1408986	235	HC-B 10-TFQ-N-O1STM20G	1460061	226	HC-B 24-TFQ-H-O1STM32S	1409367	227
FLKM-PA-2D15/HW/DI/C300	2901879	306	HC-ADV-B24-CHFH-1TTM32-EEE	1408999	235	HC-B 10-TFQ-N-O1STM20S	1460062	226	HC-B 24-TFQ-H-O1STM40G	1460245	227
FUSE 10,3X85 10A PV	3062770	63	HC-ADV-B24-CHFH-1TTM40-EEE	1409008	235	HC-B 10-TFQ-N-O1STM25G	1460066	226	HC-B 24-TFQ-H-O1STM40S	1460246	227
FUSE 10,3X85 12A PV	3062771	63	HC-ADV-B24-HHWH-1SGM32-PL	1404237	233	HC-B 10-TFQ-N-O1STM25S	1460067	226	HC-B 24-TFQ-N-O1PG21S	1460224	227
FUSE 10,3X85 16A PV	3062772	63	HC-ADV-B24-HHWH-1SGM40-PL	1404239	233	HC-B 10-TMS-SD-IP65	1690781	233	HC-B 24-TFQ-N-O1PG29G	1460332	227
FUSE 10,3X85 20A PV	3062773	63	HC-ADV-B24-HHWH-1TGM32-PL	1404235	233	HC-B 16-KML-H-O1PG21	1460306	225	HC-B 24-TFQ-N-O1STM25G	1460218	227
FUSE 10,3X85 25A PV	3062774	63	HC-ADV-B24-HHWH-1TGM40-PL	1404238	233	HC-B 16-KML-H-O1PG29	1460307	225	HC-B 24-TFQ-N-O1STM25S	1460219	227
FUSE 10,3X85 2A PV	3062766	63	HC-ADV-B24-SHFFH-2STM25-EEE	1408931	235	HC-B 16-KML-H-O1STM32	1460172	225	HC-B 24-TFQ-N-O1STM32G	1460222	227
FUSE 10,3X85 4A PV	3062767	63	HC-ADV-B24-SHFFH-2STM32-EEE	1408957	235	HC-B 16-KML-H-O1STM40	1460309	225	HC-B 24-TFQ-N-O1STM32S	1460223	227
FUSE 10,3X85 6A PV	3062768	63	HC-ADV-B24-SHFFH-2STM40-EEE	1408973	235	HC-B 16-KML-N-O1PG21	1460198	225	HC-B 24-TMS-SD-IP65	1690804	233
FUSE 10,3X85 8A PV	3062769	63	HC-ALU 6 DECO 100 GY	2200914	268	HC-B 16-KML-N-O1STM25	1460267	225	HC-B 6-KML-H-O1PG21	1460280	224
FUSE-10X38-16A-GR	2903126	301	HC-ALU 6 DECO 150 GY	2200915	268	HC-B 16-KML-N-O1STM32	1460264	225	HC-B 6-KML-H-O1PG29	1460281	224
FUSE-10X38-20A-GR	2903384	301	HC-ALU 6 DECO 200 GY	2200916	268	HC-B 16-KMQ-H-O1PG21	1460313	228	HC-B 6-KML-H-O1STM25	1460283	224
FUSE-10X38-30A-MR	2903119	301	HC-ALU 6 MOUNT 100 GY	2200911	268	HC-B 16-KMQ-H-O1PG29	1460314	228	HC-B 6-KML-H-O1STM32	1460284	224
			HC-ALU								

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
HC-B 6-TFL-N-O1PG13.5G	1460340	222	ICV 2,5/10-GF-5,08 EX	1810528	255	MSTB 2,5/9-ST-5,08-LR	1808954	241			
HC-B 6-TFL-N-O1PG13.5S	1460348	222	ICV 2,5/11-GF-5,08 EX	1810531	255	MSTB 2,5/10-ST-5,08-LR	1808967	241			
HC-B 6-TFL-N-O1PG16G	1460341	222	ICV 2,5/12-GF-5,08 EX	1810544	255	MSTB 2,5/11-ST-5,08-LR	1808970	241			
HC-B 6-TFL-N-O1PG16S	1460349	222	IFS-CONFSTICK	2986122	293	MSTB 2,5/12-ST-5,08-LR	1808983	241	P		
HC-B 6-TFL-N-O1STM20G	1460339	222	IFS-RS232-DATACABLE	2320490	319	MSTB 2,5/13-ST-5,08-LR	1808996	241	P-CO	3036796	11
HC-B 6-TFL-N-O1STM20S	1460346	222	IFS-USB-PROG-ADAPTER	2811271	356	MSTB 2,5/14-ST-5,08-LR	1809005	241	P-DI	3036783	11
HC-B 6-TFL-N-O1STM25G	1460258	222	ILC 131 ETH	2700973	340	MSTB 2,5/15-ST-5,08-LR	1809018	241	P-FIX	3038956	11
HC-B 6-TFL-N-O1STM25S	1460347	222	ILC 131 ETH/XC	2701034	342	MSTB 2,5/16-ST-5,08-LR	1809021	241	P-FU 5X20 LED 24-5	3209248	11
HC-B-AF	1686533	232	ILC 151 ETH	2700974	341	MSTBA 2,5/2-G-5,08-LR	1809076	244	P-FU 5X20 LED 250-5	3209264	11
HC-B-AF-SET	1604638	232	ILC 151 ETH/XC	2701141	342	MSTBA 2,5/3-G-5,08-LR	1809089	244	P-FU 5X20 LED 60-5	3209251	11
HC-CIF-2B6-BFFD-FH-AL	1404214	221	ILC 171 ETH 2TX	2700975	341	MSTBA 2,5/4-G-5,08-LR	1809092	244	P-FU 5X20-5	3209235	11
HC-CIF-2B6-HFFD-WH-AL	1404215	221	ILC 191 ETH 2TX	2700976	341	MSTBA 2,5/5-G-5,08-LR	1809102	244	PACT-FAST-MNT-W13-L40	2276612	333
HC-CIF-B10-BFFD-FH-AL	1404219	221	IS-K 4	1302338	58	MSTBA 2,5/6-G-5,08-LR	1809115	244	PACT-FAST-MNT-W13-L65	2276625	333
HC-CIF-B10-BFFD-FH-AL	1404220	221	ISH 2,5/0,2	3002843	11	MSTBA 2,5/7-G-5,08-LR	1809128	244	PACT-FAST-MNT-W16-L40	2276638	333
HC-CIF-B10-HFFD-WH-AL	1404221	221	ISH 2,5/0,5	3002856	11	MSTBA 2,5/8-G-5,08-LR	1809131	244	PACT-FAST-MNT-W16-L65	2276641	333
HC-CIF-B16-BFFD-FH-AL	1404216	221	ISH 2,5/1,0	3002869	11	MSTBA 2,5/9-G-5,08-LR	1809144	244	PAI-4-FIX BK	3032774	17
HC-CIF-B16-BFFD-FH-AL	1404217	221	ISH 4/0,5	3002885	13	MSTBA 2,5/10-G-5,08-LR	1809157	244	PAI-4-FIX BN	3032787	47
HC-CIF-B16-HFFD-WH-AL	1404218	221	ISH 4/1,0	3002898	13	MSTBA 2,5/11-G-5,08-LR	1809160	244	PAI-4-FIX BU	3032729	17
HC-CIF-B24-BFFD-FH-AL	1404211	221	ISSBI 10-6	0301505	58	MSTBA 2,5/12-G-5,08-LR	1809173	244	PAI-4-FIX GN	3032758	17
HC-CIF-B24-BFFD-FH-AL	1404212	221				MSTBA 2,5/13-G-5,08-LR	1809186	244	PAI-4-FIX GY	3032790	47
HC-CIF-B24-HFFD-WH-AL	1404213	221				MSTBA 2,5/14-G-5,08-LR	1809199	244	PAI-4-FIX OG	3034455	17
HC-Q 12-COD	1409435	230				MSTBA 2,5/15-G-5,08-LR	1809209	244	PAI-4-FIX RD	3032732	17
HC-Q 12-1-CT-F	1409419	230	K			MSTBA 2,5/16-G-5,08-LR	1809212	244	PAI-4-FIX VT	3032761	17
HC-Q 12+CT-M	1409422	230				MSTBVA 2,5/2-G-5,08-LR	1809267	245	PAI-4-FIX YE	3032745	17
HC-RBO 10	3247970	67	KDT-ST 3	3063921	218	MSTBVA 2,5/3-G-5,08-LR	1809270	245	PAI-4-FIX-5/6 BK	3035980	15
HC-RBO 10 BU	3247972	67	KDT-ST 4	3063934	218	MSTBVA 2,5/4-G-5,08-LR	1809283	245	PAI-4-FIX-5/6 BN	3035981	15
HC-RBO 10-FE	3247971	67	KDT-ST 5	3063947	218	MSTBVA 2,5/5-G-5,08-LR	1809296	245	PAI-4-FIX-5/6 BU	3035975	15
HC-RBO 12	3247983	67	KDT-ST 6	3063950	218	MSTBVA 2,5/6-G-5,08-LR	1809306	245	PAI-4-FIX-5/6 GN	3035978	15
HC-RBO 12 BU	3247985	67	KDT-ST 7	3063963	218	MSTBVA 2,5/7-G-5,08-LR	1809319	245	PAI-4-FIX-5/6 GY	3035982	15
HC-RBO 12-FE	3247984	67	KDT-ST 8	3063976	218	MSTBVA 2,5/8-G-5,08-LR	1809322	245	PAI-4-FIX-5/6 OG	3035974	15
HC-RBO 16	3247996	67	KDT-ST 9	3063989	218	MSTBVA 2,5/9-G-5,08-LR	1809335	245	PAI-4-FIX-5/6 RD	3035976	15
HC-RBO 16 BU	3247998	67	KDT-ST 10	3063992	218	MSTBVA 2,5/10-G-5,08-LR	1809348	245	PAI-4-FIX-5/6 VT	3035979	15
HC-RBO 16-FE	3247997	67	KDT-ST 11	3064001	218	MSTBVA 2,5/11-G-5,08-LR	1809351	245	PAI-4-FIX-5/6 YE	3035977	15
HC-RBO 8	3247967	66	KDT-ST 12	3062016	218	MSTBVA 2,5/12-G-5,08-LR	1809364	245	PAI-4-N GY	3032871	11
HC-RBO 8 BU	3247969	66	KDT-ST 13	3062029	218	MSTBVA 2,5/13-G-5,08-LR	1809377	245	PC	3040588	32
HC-RBO 8-FE	3247968	66	KDT-ST 14	3062032	218	MSTBVA 2,5/14-G-5,08-LR	1809380	245	PC-CT 6/2	3212308	47
			KDT-ST 15	3062045	218	MSTBVA 2,5/15-G-5,08-LR	1809393	245	PC-CT 6/3	3212309	47
			KDT-ST 16	3062058	218	MSTBVA 2,5/16-G-5,08-LR	1809403	245	PH 1,5/S/10	3212824	39
			KDT-ST 17	3062061	218	MVSTBR 2,5/2-STF-5,08 EX	1809678	251	PH 1,5/S/3	3212756	38
			KEL-EMV 16-4	3063507	218	MVSTBR 2,5/3-STF-5,08 EX	1809681	251	PH 1,5/S/4	3212769	38
I											
IB IL AO 2/UI-PAC	2700775	361	KEL-EMV 24-5	3063510	218	MVSTBR 2,5/4-STF-5,08 EX	1809694	251	PH 1,5/S/5	3212772	38
IB IL AO/CNT-PLSET	2732664	362	KEL-EMV-F	3063523	218	MVSTBR 2,5/5-STF-5,08 EX	1809704	251	PH 1,5/S/6	3212785	38
IB IL FIELD 2	2727501	363	KLM 3-L	0814788	67	MVSTBR 2,5/6-STF-5,08 EX	1809717	251	PH 1,5/S/7	3212798	38
IB IL FIELD 8	2727515	363	KSS 8	0311540	59	MVSTBR 2,5/7-STF-5,08 EX	1809720	251	PH 1,5/S/8	3212808	39
IB IL PM 3P/N/EF-PAC	2700965	363				MVSTBR 2,5/8-STF-5,08 EX	1809733	251	PH 1,5/S/9	3212811	39
IB IL RS UNI-PAC	2700893	362				MVSTBR 2,5/9-STF-5,08 EX	1809746	251	PH 6/2	3000680	49
IB IL SCN-8	2726337	361	M			MVSTBR 2,5/10-STF-5,08 EX	1809759	251	PH 6/3	3000681	49
IBS IP 400 MBH -F	2732868	345				MVSTBR 2,5/11-STF-5,08 EX	1809762	251	PH 6/4	3000682	49
IBS IP 400 MBH/MS-F	2734031	345	MACX MCR-PTB	2865625	315	MVSTBR 2,5/12-STF-5,08 EX	1809775	251	PH 6/5	3000683	49
IBS PG SET	2863699	345	MACX MCR-PTB-SP	2924184	315	MVSTBW 2,5/2-STF-5,08 EX	1809788	251	PH 6/6	3000684	49
IC 2,5/2-GF-5,08 EX	1810337	255	MACX MCR-S-MUX	2865599	313	MVSTBW 2,5/3-STF-5,08 EX	1809791	251	PH 6/7	3000685	49
IC 2,5/2-STF-5,08 EX	1810117	253	MARKING BOX	5147100	77	MVSTBW 2,5/4-STF-5,08 EX	1809801	251	PLA 5/1-7,5	1792216	259
IC 2,5/3-GF-5,08 EX	1810340	255	MARKING BOX DE CH	0801749	77	MVSTBW 2,5/5-STF-5,08 EX	1809814	251	PLA 5/2-7,5-ZF	1792229	259
IC 2,5/3-STF-5,08 EX	1810120	253	MARKING BOX DK DK	0801741	77	MVSTBW 2,5/6-STF-5,08 EX	1809827	251	PLA 5/3-7,5-ZF	1792232	259
IC 2,5/4-GF-5,08 EX	1810353	255	MARKING BOX EN	5147101	77	MVSTBW 2,5/7-STF-5,08 EX	1809830	251	PLA 5/4-7,5-ZF	1792245	259
IC 2,5/4-STF-5,08 EX	1810133	253	MARKING BOX EN BE	0801742	77	MVSTBW 2,5/8-STF-5,08 EX	1809843	251	PLA 5/5-7,5-ZF	1792258	259
IC 2,5/5-GF-5,08 EX	1810366	255	MARKING BOX ES ES	0801747	77	MVSTBW 2,5/9-STF-5,08 EX	1809856	251	PLA 5/6-7,5-ZF	1792261	259
IC 2,5/5-STF-5,08 EX	1810146	253	MARKING BOX FR FR	0801590	77	MVSTBW 2,5/10-STF-5,08 EX	1809869	251	PLA 5/7-7,5-ZF	1792274	259
IC 2,5/6-GF-5,08 EX	1810379	255	MARKING BOX HU HU	0801750	77	MVSTBW 2,5/11-STF-5,08 EX	1809872	251	PLA 5/8-7,5-ZF	1792287	259
IC 2,5/6-STF-5,08 EX	1810159	253	MARKING BOX IT IT	0801745	77	MVSTBW 2,5/12-STF-5,08 EX	1809885	251	PLA 5/9-7,5-ZF	1792290	259
IC 2,5/7-GF-5,08 EX	1810382	255	MARKING BOX PL US	0801744	77				PLA 5/10-7,5-ZF	1792300	259
IC 2,5/7-STF-5,08 EX	1810162	253	MARKING BOX PT PT	0801748	77				PLA 5/11-7,5-ZF	1792313	259
IC 2,5/8-GF-5,08 EX	1810395	255	MARKING BOX SE SE	0801740	77				PLA 5/12-7,5-ZF	1792326	259
IC 2,5/8-STF-5,08 EX	1810175	253	ME 22.5 TBUS 1,5/5-ST-3,81 GN	2707437	316	N			PLH 5/1-7,5	1792096	258
IC 2,5/9-GF-5,08 EX	1810405	255	MINI MCR-SL-CVS-24-5-10-NC	2902822	311	NLC-055-012D-08I-04QRD-05A	2700486	337	PLH 5/2-7,5-ZF	1792106	259
IC 2,5/9-STF-5,08 EX	1810188	253	MINI MCR-SL-CVS-24-5-10-SP-NC	2902823	311	NLC-055-024D-08I-04QRD-05A	2700464	336	PLH 5/3-7,5-ZF	1792119	259
IC 2,5/10-GF-5,08 EX	1810418	255	MINI MCR-SL-PTB	2864134	313	NLC-055-024D-08I-04QTP-00A	2700453	337	PLH 5/4-7,5-ZF	1792122	259
IC 2,5/10-STF-5,08 EX	1810191	253	MINI MCR-SL-TB	2811420	313	NLC-055-100A-08I-04QRA-05A	2700487	337	PLH 5/5-7,5-ZF	1792135	259
IC 2,5/11-GF-5,08 EX	1810421	255	MINI MCR-SL-UH-LP-NC	2902829	310	NLC-IO-2AI-2AO-01	2701040	338	PLH 5/6-7,5-ZF	1792148	259
IC 2,5/11-STF-5,08 EX	1810201	253	MINI MCR-SL-UH-LP-SP-NC	2902830	310	NLC-MOD-CAP	2701289	336	PLH 5/7-7,5-ZF	1792151	259
IC 2,5/12-GF-5,08 EX	1810434	255	MINI-SYS-PS-100-240AC/24DC/1,5	2866983	316	NLC-MOD-CAP-PXC	2701292	336	PLH 5/8-7,5-ZF	1792164	259
IC 2,5/12-STF-5,08 EX	1810214	253	MPS-IH RD	0201676	6	NLC-NAV-01	2701221	336	PLH 5/9-7,5-ZF	1792177	259
ICV 2,5/2-GF-5,08 EX	1810447	255	MPS-MT	0201744	6	NLC-OP1-COVER	2701276	336	PLH 5/10-7,5-ZF	1792180	259
ICV 2,5/3-GF-5,08 EX	1810450	255	MSTB 2,5/2-ST-5,08-LR	1808866	241				PLH 5/11-7,5-ZF	1792193	259
ICV 2,5/4-GF-5,08 EX	1810463	255	MSTB 2,5/3-ST-5,08-LR	1808899	241				PLH 5/12-7,5-ZF	1792203	259
ICV 2,5/5-GF-5,08 EX	1810476	255	MSTB 2,5/4-ST-5,08-LR	1808909	241				PML-W100 (100X100)R	0830431	104
ICV 2,5/6-GF-5,08 EX	1810489	255	MSTB 2,5/5-ST-5,08-LR	1808912	241				PML-W100 (100X100)R CUS	0830495	104
ICV 2,5/7-GF-5,08 EX	1810492	255	MSTB 2,								

Index

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
PML-W100 (50X50)R CUS	0830494	104	PP-H 1,5/S/8	3212578	38	PT 6-TWIN BU	3211485	19	PTS 1,5/S-QUATTRO BU	3214631	7
PML-W101 (100X100)	0830435	105	PP-H 1,5/S/9	3212581	38	PT 6-TWIN-PE	3211498	21	PTS 1,5/S-QUATTRO-PE	3214644	9
PML-W101 (12,5X12,5)	0830432	105	PP-H 6/1	3061541	44	PT 6/1P	3061758	42	PTS 1,5/S-TWIN	3214589	7
PML-W101 (200X200)	0830436	105	PP-H 6/1 BU	3061554	44	PT 6/1P BU	3061761	42	PTS 1,5/S-TWIN BU	3214592	7
PML-W101 (25X25)	0830433	105	PP-H 6/1 GNYS	3061567	44	PT 6/1P-PE	3061774	43	PTS 1,5/S-TWIN-PE	3214602	9
PML-W101 (50X50)	0830434	105	PP-H 6/1-L	3061664	45	PT-IQ-1X2+F-12DC-UT	2800975	277	PTS 1,5/S-TWIN/1P	3214709	33
PML-W200 (12,5X12,5)	0830453	104	PP-H 6/1-L BU	3061677	45	PT-IQ-1X2+F-24DC-UT	2800977	277	PTS 1,5/S-TWIN/1P BU	3214712	33
PML-W200 (100X100)R CUS	0830498	104	PP-H 6/1-L GNYS	3061680	45	PT-IQ-1X2+F-48DC-UT	2800979	277	PTS 1,5/S-TWIN/1P-PE	3214725	35
PML-W200 (25X25)R	0830451	104	PP-H 6/1-M	3061693	45	PT-IQ-1X2+F-5DC-UT	2800792	277	PTS 1,5/S/1P	3214453	32
PML-W200 (25X25)R CUS	0830496	104	PP-H 6/1-M BU	3061703	45	PT-IQ-1X2-12DC-P	2800771	276	PTS 1,5/S/1P BU	3214466	32
PML-W200 (50X50)R	0830452	104	PP-H 6/1-M GNYS	3061716	45	PT-IQ-1X2-12DC-UT	2800793	276	PTS 1,5/S/1P-PE	3214479	34
PML-W200 (50X50)R CUS	0830497	104	PP-H 6/1-R	3061729	45	PT-IQ-1X2-24DC-P	2800772	276	PTTB 1,5/S/4P	3213865	37
PML-W201 (100X100)	0830456	106	PP-H 6/1-R BU	3061732	45	PT-IQ-1X2-24DC-UT	2800976	276	PTTB 1,5/S/4P BU	3213878	37
PML-W201 (200X200)	0830457	106	PP-H 6/1-R GNYS	3061745	45	PT-IQ-1X2-48DC-P	2800773	276	PTTB 1,5/S/4P-PE	3213881	37
PML-W201 (25X25)	0830454	106	PP-H 6/2	3061570	44	PT-IQ-1X2-48DC-UT	2800978	276	PTTB 1,5/S/4P-PV	3213852	37
PML-W201 (50X50)	0830455	106	PP-H 6/3	3061583	44	PT-IQ-1X2-5DC-P	2800770	276	PTTB 4-L 1000V	3062744	13
PML-W202 (100X100)	0830439	106	PP-H 6/4	3061596	44	PT-IQ-1X2-5DC-UT	2800791	276	PTTBS 1,5/S	3214657	7
PML-W202 (200X200)	0830440	106	PP-H 6/5	3061606	44	PT-IQ-2X1+F-12DC-UT	2800781	277	PTTBS 1,5/S BU	3214660	7
PML-W202 (25X25)	0830437	106	PP-H 6/6	3061619	44	PT-IQ-2X1+F-24DC-UT	2800788	277	PTTBS 1,5/S-PE	3214673	9
PML-W202 (50X50)	0830438	106	PP-H 6/7	3061622	44	PT-IQ-2X1+F-48DC-UT	2800790	277	PTTBS 1,5/S-PV	3214686	7
PML-W203 (100X100)	0830443	106	PP-H 6/8	3061635	44	PT-IQ-2X1+F-5DC-UT	2800779	277	PTTBS 1,5/S/2P	3214495	33
PML-W203 (200X200)	0830444	106	PP-H 6/9	3061648	44	PT-IQ-2X1-12DC-P	2800775	277	PTTBS 1,5/S/2P BU	3214505	33
PML-W203 (25X25)	0830441	106	PP-H 6/10	3061651	44	PT-IQ-2X1-12DC-UT	2800780	277	PTTBS 1,5/S/2P-PE	3214518	35
PML-W203 (50X50)	0830442	106	PPCT 6/2	3212304	47	PT-IQ-2X1-24DC-P	2800776	277	PTTBS 1,5/S/2P-PV	3214521	33
PML-W204 (100X100)	0830446	106	PPCT 6/3	3212305	47	PT-IQ-2X1-24DC-UT	2800787	277	PTU 16/14X2,5 BU	3214014	27
PML-W204 (200X200)	0830447	106	PR	3040559	44	PT-IQ-2X1-48DC-P	2800777	277	PTU 16/14X2,5 GN	3214015	27
PML-W204 (50X50)	0830445	106	PR 1,5/S	3212882	38	PT-IQ-2X1-48DC-UT	2800789	277	PTU 16/14X2,5 GY	3214016	26
PML-W205 (100X100)	0830449	106	PR 1,5/S/2	3212895	38	PT-IQ-2X1-5DC-P	2800774	277	PV-1P-100,0/S01-2,5	1459509	185
PML-W205 (200X200)	0830450	106	PR/2	3040630	44	PT-IQ-2X1-5DC-UT	2800778	277	PV-1P-100,0/S02-4,0	1459511	185
PML-W205 (50X50)	0830448	106	PRG CAB MINI DIN	2730611	340	PT-IQ-2X2+F-24DC-UT	2800981	279	PV-1P-100,0/S03-6,0	1459524	185
PML-W300 (105X52)R	0830460	104	PROT-M12 FB	1555538	199	PT-IQ-2X2-24DC-P	2800804	278	PV-1P-100,0/S04-10,0	1459537	185
PML-W300 (105X52)R CUS	0830501	104	PRZ	3040614	44	PT-IQ-2X2-24DC-UT	2800980	278	PV-1P-500,0/S01-2,5	1459540	185
PML-W300 (52X26)R	0830458	104	PRZ 1,5/S	3212905	38	PT-IQ-4X1+F-24DC-UT	2800983	279	PV-1P-500,0/S02-4,0	1787700	185
PML-W300 (52X26)R CUS	0830499	104	PS-5	3030983	11	PT-IQ-4X1-24DC-P	2800813	279	PV-1P-500,0/S03-6,0	1787713	185
PML-W300 (74X37)R	0830459	104	PS-6	3030996	54	PT-IQ-4X1-24DC-UT	2800982	279	PV-1P-500,0/S04-10,0	1459553	185
PML-W300 (74X37)R CUS	0830500	104	PS-8	3031005	13	PT-IQ-PTB-P	2800989	276	PV-C PLUG	1775631	182
PML-W301 (105X52)	0830463	107	PS-8/2,3MM RD	3048564	13	PT-IQ-PTB-UT	2800768	276	PV-C PROTECTION CAP	1785430	180
PML-W301 (200X100)	0830464	107	PS-IH RD	0311579	69	PTB 2,5-PE/L/L	3210547	12	PV-C1F-S 2,5-6 (+)	1789821	182
PML-W301 (52X26)	0830461	107	PS-MT	0311647	69	PTB 2,5-PE/L/MT	3210549	12	PV-C1M-S 2,5-6 (-)	1789834	182
PML-W301 (74X37)	0830462	107	PSB 3/10/4	0601292	58	PTB 2,5-PE/L/NTG	3210545	11	PV-C1S 2,5-6 (+)	1774674	182
PML-W302 (105X52)	0830467	107	PSBJ 3/13/4	0201304	58	PTB 2,5-PE/L/TG	3210539	11	PV-CF-S 6-16 (+)	1790784	183
PML-W302 (200X100)	0830468	107	PSM-SET-B-FOC/4-HCS/PN	2313782	317	PTME 4	3212139	15	PV-CFA-S01-2,5/0,65	1459919	181
PML-W302 (52X26)	0830465	107	PSM-SET-SC-DUPLEX/2-HCS/PN	2313779	317	PTME 6 HV	3035696	17	PV-CFA-S01-2,5/1,4	1459016	181
PML-W302 (74X37)	0830466	107	PSR-OP-UNIT	2902578	293	PTME 6 HV BU	3035695	17	PV-CFA-S01-2,5/1,1	1459029	181
PML-W303 (105X52)	0830471	107	PSR-SCP-24DC/ETP/1X1	2986711	295	PTME 6-CT/1P	3212300	47	PV-CFA-S01-2,5/1,2	1459032	181
PML-W303 (200X100)	0830472	107	PSR-SCP-24DC/MSTO/4X1	2902786	293	PTME 6-DIO/L-R HV	3035697	17	PV-CFA-S01-2,5/1,3	1459045	181
PML-W303 (52X26)	0830469	107	PSR-SCP-24DC/MSTO/D/4X1	2902363	293	PTME 6-DIO/R-L HV	3035698	17	PV-CFA-S01-2,5/1,4	1459058	181
PML-W303 (74X37)	0830470	107	PSR-SPP-24DC/ETP/1X1	2986562	295	PTME 6/1P	3212306	48	PV-CFA-S01-2,5/1,5	1459061	181
PML-W304 (105X52)	0830475	107	PSR-SPP-24DC/MSTO/4X1	2902787	293	PTMED 4	3212141	15	PV-CFA-S02-4/1,0	1459197	181
PML-W304 (200X100)	0830476	107	PSR-SPP-24DC/MSTO/D/4X1	2902364	293	PTMED 4-PE	3212154	15	PV-CFA-S02-4/1,1	1459935	181
PML-W304 (52X26)	0830473	107	PST 1,3/ 2-5,0-SF	1805627	261	PTMED 6-CT/1P	3212301	47	PV-CFA-S02-4/1,2	1459207	181
PML-W304 (74X37)	0830474	107	PST 1,3/ 3-5,0-SF	1805630	261	PTMED 6-CT/1P-PE	3212302	47	PV-CFA-S02-4/1,3	1459210	181
PML-W305 (105X52)	0830479	107	PST 1,3/ 4-5,0-SF	1805643	261	PTPM 0,2/ 5-P-2,5 PA CAT5	1811161	239	PV-CFA-S02-4/1,4	1459223	181
PML-W305 (200X100)	0830480	107	PST 1,3/ 5-5,0-SF	1805656	261	PTPM 0,4/ 5-P-2,5 PA CAT5	1811145	239	PV-CFA-S02-4/1,5	1459236	181
PML-W305 (52X26)	0830477	107	PST 1,3/ 6-5,0-SF	1805669	261	PTS 1,5/ 2-7,5-H	1703083	261	PV-CFA-S03-6/1,0	1459359	181
PML-W305 (74X37)	0830478	107	PST 1,3/ 7-5,0-SF	1805672	261	PTS 1,5/ 2-PH-5,0	1805517	261	PV-CFA-S03-6/1,1	1459951	181
PP-H 1,5/S/1	3212484	38	PST 1,3/ 8-5,0-SF	1805685	261	PTS 1,5/ 3-7,5-H	1703084	261	PV-CFA-S03-6/1,2	1459362	181
PP-H 1,5/S/1 BU	3212497	38	PT 1,5/S/2P	3213784	36	PTS 1,5/ 3-PH-5,0	1805520	261	PV-CFA-S03-6/1,3	1459375	181
PP-H 1,5/S/1 GNYS	3212507	38	PT 1,5/S/2P BU	3213797	36	PTS 1,5/ 4-7,5-H	1703086	261	PV-CFA-S03-6/1,4	1459388	181
PP-H 1,5/S/1-L	3212659	39	PT 1,5/S/2P-PE	3213810	37	PTS 1,5/ 4-PH-5,0	1805533	261	PV-CFA-S03-6/1,5	1459391	181
PP-H 1,5/S/1-L BU	3212662	39	PT 10	3212120	22	PTS 1,5/ 5-7,5-H	1703087	261	PV-CM-S 2,5-6 (-)	1774687	182
PP-H 1,5/S/1-L GNYS	3212675	39	PT 10 BU	3212123	22	PTS 1,5/ 5-PH-5,0	1805546	261	PV-CM-S 6-16 (-)	1790797	183
PP-H 1,5/S/1-M	3212688	39	PT 10-PE	3212131	24	PTS 1,5/ 6-7,5-H	1703088	261	PV-CMA-S01-2,5/0,65	1459922	181
PP-H 1,5/S/1-M BU	3212691	39	PT 10-TWIN	3208746	23	PTS 1,5/ 6-PH-5,0	1805559	261	PV-CMA-S01-2,5/1,0	1459074	181
PP-H 1,5/S/1-M GNYS	3212701	39	PT 10-TWIN BU	3208747	23	PTS 1,5/ 7-7,5-H	1703090	261	PV-CMA-S01-2,5/1,1	1459087	181
PP-H 1,5/S/1-R	3212714	39	PT 10-TWIN-PE	3208745	24	PTS 1,5/ 7-PH-5,0	1805562	261	PV-CMA-S01-2,5/1,2	1459090	181
PP-H 1,5/S/1-R BU	3212727	39	PT 2,5-4L/1P	3012300	41	PTS 1,5/ 8-7,5-H	1703091	261	PV-CMA-S01-2,5/1,3	1459100	181
PP-H 1,5/S/1-R GNYS	3212730	39	PT 2,5-4L/1P-FS	3012302	41	PTS 1,5/ 8-PH-5,0	1805575	261	PV-CMA-S01-2,5/1,4	1459113	181
PP-H 1,5/S/10	3212594	38	PT 2,5-4L/2P	3012310	41	PTS 1,5/ 9-7,5-H	1703093	261	PV-CMA-S01-2,5/1,5	1459126	181
PP-H 1,5/S/11	3212604	38	PT 2,5-4L/2P-FS	3012312	41	PTS 1,5/ 9-PH-5,0	1805588	261	PV-CMA-S02-4/1,0	1459249	181
PP-H 1,5/S/12	3212617	38	PT 6	3211813	18	PTS 1,5/ 10-7,5-H	1703094	261	PV-CMA-S02-4/1,1	1459948	181
PP-H 1,5/S/13	3212620	38	PT 6 BU	3211819	18	PTS 1,5/ 10-PH-5,0	1805591	261	PV-CMA-S02-4/1,2	1459252	181
PP-H 1,5/S/14	3212633	38	PT 6-PE	3211822	20	PTS 1,5/ 11-7,5-H	1703095	261	PV-CMA-S02-4/1,3	1459265	181
PP-H 1,5/S/15	3212646	38	PT 6-QUATTRO	3212934	19	PTS 1,5/ 11-PH-5,0	1805601	261	PV-CMA-S02-4/1,4	1459278	181
PP-H 1,5/S/2	3212510	38	PT 6-QUATTRO BU	3212947	19	PTS 1,5/ 12-7,5-H	1703096	261	PV-CMA-S02-4/1,5	1459281	181
PP-H 1,5/S/3	3212523	38	PT 6-								

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
PV-CMA-S03-6/1,5	1459443	181	QUINT-PS/48DC/24DC/5	2320144	322	RBO 8-3L/N/FE-HC	3076167	68	SAC-3P-M8Y/2X3,0-PUR/M 8FR	1458732	186
PV-FT-C NUT BK	1775880	180	QUINT-UPS/ 24DC/ 24DC/ 5/1.3AH	2320254	318	RBO 8-FE	3213139	66	SAC-3P-M8Y/2X3,0-PUR/M 8FR-2L	1458774	186
PV-FT-CF-C-2.5-130-BU	1805135	180	QUINT-UPS/ 24DC/ 24DC/10/3.4AH	2320267	318	RBO 8-FE-HC	3247975	66	SAC-3P-M8Y/2X3,0-PUR/M 8FS	1458693	186
PV-FT-CF-C-4-130-BU	1805151	180				RBO 8-HC	3247973	68	SAC-3P-MR/A-1L-Z SCO	1458538	192
PV-FT-CF-C-6-130-BU	1805177	180				RBO 8-HC BU	3247974	66	SAC-3P-MR/B-1L-Z SCO	1458554	193
PV-FT-CM-C-2.5-130-RD	1805148	180				RBO 8-VS 2	3213179	66	SAC-3P-MR/BI-1L-Z SCO	1458570	193
PV-FT-CM-C-4-130-RD	1805164	180				RBO 8-VS 3	3213182	66	SAC-3P-MS/A-1L-Z SCO	1458525	192
PV-FT-CM-C-6-130-RD	1805180	180	R			REL-OR/L- 24AC/1	2901911	298	SAC-3P-MS/B-1L-Z SCO	1458541	193
PV-TC (+) 10-1.5M	1780451	184	RAD-2400-IFS	2901541	325	REL-OR/L- 24AC/1/MB	2901905	298	SAC-3P-MS/BI-1L-Z SCO	1458567	193
PV-TC (-) 10-1.5M	1780464	184	RAD-AI4-IFS	2901537	327	REL-OR/L-120AC/1	2901912	298	SAC-4P- 2.0-PUR/M12FS	1533576	355
PV-YC 4/ 1-0,12-SO2 (+/-)	1795022	184	RAD-AO4-IFS	2901538	327	REL-OR/L-120AC/1/MB	2901906	298	SAC-4P- 1.5-600/M12FR FB	1404014	202
PV-YC 4/ 1-0,12-SO2 (-/+)	1795019	184	RAD-CABLE-USB	2903447	325	REL-OR/L-230AC/1	2901913	298	SAC-4P- 1.5-600/M12FR HD	1403960	200
PV-YC 6/ 1-0,12-SO3 (+/-)	1787739	184	RAD-CONF-RF3	2902814	325	REL-OR/L-230AC/1/MB	2901907	298	SAC-4P-1,5-600/M12FR-3L FB	1404019	202
PV-YC 6/ 1-0,12-SO3 (+/+)	1787726	184	RAD-CONF-RF5	2902815	325	REL-OR/LDP- 24DC/1	2901908	298	SAC-4P-1,5-600/M12FR-3L HD	1403964	200
PZ 1,5/S/2	3212918	38	RAD-CONF-RF7	2902816	325	REL-OR/LDP- 24DC/1/MB	2901901	298	SAC-4P-1,5-600/M12FS FB	1404010	202
PZ2	3040627	44	RAD-DAIO6-IFS	2901533	326	REL-OR/LDP-110DC/1	2901909	298	SAC-4P-1,5-600/M12FS HD	1403956	200
			RAD-DI4-IFS	2901535	326	REL-OR/LDP-110DC/1/MB	2901902	298	SAC-4P-1,5-600/M12FS SH HD	1403985	200
			RAD-DOR4-IFS	2901536	327	REL-OR/LDP-220DC/1	2901910	298	SAC-4P-10,0-600/M12FR FB	1404018	202
			RAD-ISM-900-DATA-BD-PLUS	2902277	328	REL-OR/LDP-220DC/1/MB	2901904	298	SAC-4P-10,0-600/M12FR HD	1403963	200
			RAD-MEMORY	2902828	325	RFC 460R PN 3TX	2700784	343	SAC-4P-10,0-600/M12FR-3L FB	1404022	202
Q											
Q-MU PG29 BK	1670772	172	RB ST 10-(2,5/4)	3030873	22	RFC DUAL-FAN	2730239	343	SAC-4P-10,0-600/M12FR-3L HD	1403967	200
QPD C 4PE2,5 1X6-11 BK	1403834	168	RB ST 6-(2,5/4)	3030860	18				SAC-4P-1,5-600/M12FR FB	1404013	202
QPD C 4PE2,5 1X6-11 GY	1403832	168	RB ST 6-1,5/S	3213250	18				SAC-4P-10,0-600/M12FS HD	1403959	200
QPD C 4PE2,5 1X9-16 BK	1403831	168	RBO 10	3244614	67				SAC-4P-10,0-600/M12FS SH HD	1403989	200
QPD C 4PE2,5 1X9-16 GY	1403839	168	RBO 10 BU	3244616	67				SAC-4P-3,0-600/M12FR FB	1404015	202
QPD C 4PE2,5 2X6-11 BK	1403838	168	RBO 10-3L	3076219	67				SAC-4P-3,0-600/M12FR HD	1403961	200
QPD C 4PE2,5 2X6-11 GY	1403837	168	RBO 10-3L-HC	3076057	69				SAC-4P-3,0-600/M12FR-3L FB	1404020	202
QPD C 4PE2,5 2X9-16 BK	1403836	168	RBO 10-3L/FE	3076137	67				SAC-4P-3,0-600/M12FR-3L HD	1403965	200
QPD C 4PE2,5 2X9-16 GY	1403835	168	RBO 10-3L/FE-HC	3076138	69	S-ME 4	3035758	15	SAC-4P-3,0-600/M12FS FB	1404011	202
QPD CW 4PE2,5 1X6-11 BK	1403848	171	RBO 10-3L/N	3076251	67	S-ME 6	3034439	17	SAC-4P-3,0-600/M12FS HD	1403957	200
QPD CW 4PE2,5 1X6-11 GY	1403847	171	RBO 10-3L/N-HC	3076099	69	SAC BIT M12-W14	1212513	199	SAC-4P-3,0-600/M12FS SH HD	1403986	200
QPD CW 4PE2,5 1X9-16 BK	1403846	171	RBO 10-3L/N/FE	3076293	67	SAC- 1,5/0,1-116/2XA-1L-Z	1457982	194	SAC-4P-5,0-600/M12FR FB	1404017	202
QPD CW 4PE2,5 1X9-16 GY	1403845	171	RBO 10-3L/N/FE-HC	3076170	69	SAC- 1,5/0,1-116/2XB-1L-Z	1458169	195	SAC-4P-5,0-600/M12FR HD	1403962	200
QPD CW 4PE2,5 2X6-11 BK	1403844	171	RBO 10-FE	3244615	67	SAC- 1,5/0,1-116/2XB1-1L-Z	1458347	195	SAC-4P-5,0-600/M12FR-3L FB	1404021	202
QPD CW 4PE2,5 2X6-11 GY	1403843	171	RBO 10-FE-HC	3247978	69	SAC- 1,5/0,15-116/2XA-1L-Z	1458020	194	SAC-4P-5,0-600/M12FR-3L HD	1403966	200
QPD CW 4PE2,5 2X9-16 BK	1403841	171	RBO 10-HC	3247976	69	SAC- 1,5/0,15-116/2XB-1L-Z	1458208	195	SAC-4P-5,0-600/M12FS FB	1404112	202
QPD CW 4PE2,5 2X9-16 GY	1403840	171	RBO 10-HC BU	3247977	69	SAC- 1,5/0,15-116/2XB1-1L-Z	1458389	195	SAC-4P-5,0-600/M12FS HD	1403958	200
QPD N 4PE2,5 6-11 BK	1459663	168	RBO 10-VS 2	3244643	67	SAC- 1,5/0,2-116/2XA-1L-Z	1458062	194	SAC-4P-5,0-600/M12FS SH HD	1403987	200
QPD N 4PE2,5 6-11 GY	1459650	168	RBO 10-VS 3	3244656	67	SAC- 1,5/0,2-116/2XB1-1L-Z	1458240	195	SAC-4P-FRS/ 1,5-PUR PE SH SCO	1424100	190
QPD N 4PE2,5 9-16 BK	1459647	168	RBO 12	3244627	67	SAC- 1,5/0,2-116/2XB1-1L-Z	1458428	195	SAC-4P-FRS/ 3,0-PUR PE SH SCO	1424101	190
QPD N 4PE2,5 9-16 GY	1459634	168	RBO 12 BU	3244629	67	SAC- 3,0/0,1-116/2XA-1L-Z	1457995	194	SAC-4P-FRS/ 5,0-PUR PE SH SCO	1424102	190
QPD PSK 5X2,5	1404529	172	RBO 12-3L	3076222	67	SAC- 3,0/0,1-116/2XB-1L-Z	1458172	195	SAC-4P-FRS/10,0-PUR PE SH SCO	1424103	190
QPD QSK 5X2,5	1404528	172	RBO 12-3L-HC	3076060	69	SAC- 3,0/0,1-116/2XB1-1L-Z	1458350	195	SAC-4P-FRT/ 1,5-PUR SH SCO	1424116	191
QPD W 3PE2,5 M25 FC BK	1582567	170	RBO 12-3L/FE	3076140	67	SAC- 3,0/0,15-116/2XA-1L-Z	1458033	194	SAC-4P-FRT/ 3,0-PUR SH SCO	1424117	191
QPD W 4PE2,5 6-11 M20 0,5 BK	1403725	169	RBO 12-3L/FE-HC	3076141	69	SAC- 3,0/0,15-116/2XB-1L-Z	1458211	195	SAC-4P-FRT/ 5,0-PUR SH SCO	1424118	191
QPD W 4PE2,5 6-11 M20 0,5 GY	1403726	169	RBO 12-3L/N	3076264	67	SAC- 3,0/0,15-116/2XB1-1L-Z	1458392	195	SAC-4P-FRT/10,0-PUR SH SCO	1424128	190
QPD W 4PE2,5 6-11 M20 1,0 BK	1403727	169	RBO 12-3L/N-HC	3076109	69	SAC- 3,0/0,2-116/2XA-1L-Z	1458075	194	SAC-4P-FSS/ 1,5-PUR PE SH SCO	1424096	191
QPD W 4PE2,5 6-11 M20 1,0 GY	1403728	169	RBO 12-3L/N/FE	3076303	67	SAC- 3,0/0,2-116/2XB-1L-Z	1458253	195	SAC-4P-FSS/ 3,0-PUR PE SH SCO	1424097	190
QPD W 4PE2,5 6-11 M20 FC BK	1403729	170	RBO 12-3L/N/FE-HC	3076183	69	SAC- 3,0/0,2-116/2XB1-1L-Z	1458431	195	SAC-4P-FSS/ 5,0-PUR PE SH SCO	1424098	190
QPD W 4PE2,5 6-11 M20 FC GY	1403730	170	RBO 12-FE	3244628	67	SAC- 5,0/0,1-116/2XA-1L-Z	1458004	194	SAC-4P-FSS/10,0-PUR PE SH SCO	1424099	190
QPD W 4PE2,5 6-11 M25 0,5 BK	1582557	169	RBO 12-FE-HC	3247988	69	SAC- 5,0/0,1-116/2XB-1L-Z	1458185	195	SAC-4P-FST/ 1,5-PUR SH SCO	1424112	191
QPD W 4PE2,5 6-11 M25 0,5 GY	1582569	169	RBO 12-HC	3247986	69	SAC- 5,0/0,1-116/2XB1-1L-Z	1458363	195	SAC-4P-FST/ 3,0-PUR SH SCO	1424113	191
QPD W 4PE2,5 6-11 M25 1,0 BK	1582558	169	RBO 12-HC BU	3247987	69	SAC- 5,0/0,15-116/2XA-1L-Z	1458046	194	SAC-4P-FST/ 5,0-PUR SH SCO	1424114	191
QPD W 4PE2,5 6-11 M25 1,0 GY	1582570	169	RBO 12-VS 2	3244669	67	SAC- 5,0/0,15-116/2XB-1L-Z	1458224	195	SAC-4P-FST/10,0-PUR SH SCO	1424115	191
QPD W 4PE2,5 6-11 M25 FC BK	1582559	170	RBO 12-VS 3	3244672	67	SAC- 5,0/0,15-116/2XB1-1L-Z	1458402	195	SAC-4P-M12MR/1,5-600 FB	1404006	202
QPD W 4PE2,5 6-11 M25 FC GY	1582571	170	RBO 16	3244630	67	SAC- 5,0/0,2-116/2XA-1L-Z	1458088	194	SAC-4P-M12MR/1,5-600 HD	1403952	200
QPD W 4PE2,5 9-16 M20 0,5 BK	1403731	169	RBO 16 BU	3244632	67	SAC- 5,0/0,2-116/2XB-1L-Z	1458266	195	SAC-4P-M12MR/10,0-600 FB	1404009	202
QPD W 4PE2,5 9-16 M20 0,5 GY	1403732	169	RBO 16-3L	3076235	67	SAC- 5,0/0,2-116/2XB1-1L-Z	1458444	195	SAC-4P-M12MR/10,0-600 HD	1403955	200
QPD W 4PE2,5 9-16 M20 1,0 BK	1403733	169	RBO 16-3L-HC	3076073	69	SAC- 10,0/0,1-116/2XA-1L-Z	1458017	194	SAC-4P-M12MR/3,0-600 FB	1404007	202
QPD W 4PE2,5 9-16 M20 1,0 GY	1403734	169	RBO 16-3L/FE	3076153	67	SAC- 10,0/0,1-116/2XB-1L-Z	1458198	195	SAC-4P-M12MR/3,0-600 HD	1403953	200
QPD W 4PE2,5 9-16 M20 FC BK	1403735	170	RBO 16-3L/FE-HC	3076154	69	SAC- 10,0/0,15-116/2XB1-1L-Z	1458376	195	SAC-4P-M12MR/5,0-600 FB	1404008	202
QPD W 4PE2,5 9-16 M20 FC GY	1403736	170	RBO 16-3L/N	3076277	67	SAC- 10,0/0,15-116/2XB-1L-Z	1458059	194	SAC-4P-M12MR/5,0-600 HD	1403954	200
QPD W 4PE2,5 9-16 M25 0,5 BK	1582561	169	RBO 16-3L/N-HC	3076112	69	SAC- 10,0/0,15-116/2XB-1L-Z	1458237	195	SAC-4P-M12MS/0,3-600/FS SH HD	1403990	200
QPD W 4PE2,5 9-16 M25 0,5 GY	1582573	169	RBO 16-3L/N/FE	3076316	67	SAC- 10,0/0,15-116/2XB1-1L-Z	1458415	195	SAC-4P-M12MS/0,3-600/M12FR FB	1404027	202
QPD W 4PE2,5 9-16 M25 1,0 BK	1582562	169	RBO 16-3L/N/FE-HC	3076196	69	SAC- 10,0/0,2-116/2XA-1L-Z	1458091	194	SAC-4P-M12MS/0,3-600/M12FR HD	1403972	200
QPD W 4PE2,5 9-16 M25 1,0 GY	1582574	169	RBO 16-FE	3244631	67	SAC- 10,0/0,2-116/2XB-1L-Z	1458279	195	SAC-4P-M12MS/0,3-600/M12FR FB	1404023	202
QPD W 4PE2,5 9-16 M25 FC BK	1582563	170	RBO 16-FE-HC	3247991	69	SAC- 10,0/0,2-116/2XB1-1L-Z	1458457	195	SAC-4P-M12MS/0,3-600/M12FS HD	1403968	200
QPD W 4PE2,5 9-16 M25 FC GY	1582575	170	RBO 16-HC	3247989	69	SAC-3P-M8Y/2X 1,5-PUR	1458622	186	SAC-4P-M12MS/0,6-600/FS SH HD	1403991	200
QPD W 4PE2,5 M20 0,5 BK	1403737	169	RBO 16-HC BU	3247990	69	SAC-3P-M8Y/2X 3,0-PUR	1458635	186	SAC-4P-M12MS/0,6-600/M12FR FB	1404028	202
QPD W 4PE2,5 M20 0,5 GY	1403738	169	RBO 16-VS 2	3244685	67	SAC-3P-M8Y/2X 5,0-PUR	1458648	186	SAC-4P-M12MS/0,6-600/M12FR FB	1403973	200
QPD W 4PE2,5 M20 1,0 BK	1403739	169	RBO 16-VS 3	3244698							

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
SAC-4P-M12MS/10,0-600 FB	1404005	202	SAC-5P-M 8MSB/ 3,0-115/M 8FSB	1404482	187	SAC-8P-M 8MS/10,0-PUR SH	1404138	189	SB-MER 4-8	3000589	18
SAC-4P-M12MS/10,0-600 HD	1403951	200	SAC-5P-M 8MSB/ 5,0-115	1404463	187	SAC-MR/0,1-116/2XA-1L-Z SCO	1458130	196	SB-TB 6-T-2-8	3075842	59
SAC-4P-M12MS/3,0-600 SH HD	1403984	200	SAC-5P-M 8MSB/10,0-115	1404464	187	SAC-MR/0,1-116/2XB-1L-Z SCO	1458318	197	SB-TB 6-T-3-8	3075843	59
SAC-4P-M12MS/3,0-600 FB	1404003	202	SAC-5P-M12MR/1,5-600 FB	1404079	203	SAC-MR/0,1-116/2XB-1L-Z SCO	1458499	197	SB-TB 6-T-4-8	3075844	59
SAC-4P-M12MS/3,0-600 HD	1403948	200	SAC-5P-M12MR/1,5-600 HD	1404044	201	SAC-MR/0,15-116/2XA-1L-Z SCO	1458143	196	SCBI 10-8,15	3245134	59
SAC-4P-M12MS/3,0-600 SH HD	1403982	200	SAC-5P-M12MR/10,0-600 FB	1404082	203	SAC-MR/0,15-116/2XB-1L-Z SCO	1458321	197	SCBI 10-8,15 ISO	3000417	59
SAC-4P-M12MS/3,0-600/FS SH HD	1403993	200	SAC-5P-M12MR/10,0-600 HD	1404048	201	SAC-MR/0,15-116/2XB-1L-Z SCO	1458509	197	SD FLASH 256MB	2988120	341
SAC-4P-M12MS/3,0-600/M12FR FB	1404031	202	SAC-5P-M12MR/3,0-600 FB	1404080	203	SAC-MR/0,2-116/2XA-1L-Z SCO	1458156	196	SF-10KP320	1615961	166
SAC-4P-M12MS/3,0-600/M12FR HD	1403975	200	SAC-5P-M12MR/3,0-600 HD	1404046	201	SAC-MR/0,2-116/2XB-1L-Z SCO	1458334	197	SF-10KP350	1615963	166
SAC-4P-M12MS/3,0-600/M12FS FB	1404026	202	SAC-5P-M12MR/5,0-600 FB	1404081	203	SAC-MR/0,2-116/2XB-1L-Z SCO	1458512	197	SF-10KP470	1627072	166
SAC-4P-M12MS/3,0-600/M12FS HD	1403971	200	SAC-5P-M12MR/5,0-600 HD	1404047	201	SAC-MS/0,1-116/2XA-1L-Z SCO	1458101	196	SF-10KS320	1607031	166
SAC-4P-M12MS/5,0-600 FB	1404004	202	SAC-5P-M12MS/0,3-600/M12FR FB	1404102	203	SAC-MS/0,1-116/2XB-1L-Z SCO	1458282	197	SF-10KS350	1607032	166
SAC-4P-M12MS/5,0-600 HD	1403949	200	SAC-5P-M12MS/0,3-600/M12FR HD	1404067	201	SAC-MS/0,1-116/2XB-1L-Z SCO	1458460	197	SF-10KS470	1627073	166
SAC-4P-M12MS/5,0-600 SH HD	1403983	200	SAC-5P-M12MS/0,3-600/M12FS FB	1404097	203	SAC-MS/0,15-116/2XA-1L-Z SCO	1458114	196	SF-BIT-HEX 2,5-50	1212646	123
SAC-4P-MRS/ 1,5-PUR PE SH SCO	1424108	190	SAC-5P-M12MS/0,3-600/M12FS HD	1404063	201	SAC-MS/0,15-116/2XB-1L-Z SCO	1458295	197	SF-BIT-HEX 2-50	1212645	123
SAC-4P-MRS/ 3,0-PUR PE SH SCO	1424109	190	SAC-5P-M12MS/0,6-600/M12FR FB	1404103	203	SAC-MS/0,15-116/2XB-1L-Z SCO	1458473	197	SF-BIT-HEX 3-50	1212647	123
SAC-4P-MRS/ 5,0-PUR PE SH SCO	1424110	190	SAC-5P-M12MS/0,6-600/M12FR HD	1404068	201	SAC-MS/0,2-116/2XA-1L-Z SCO	1458127	196	SF-BIT-HEX 4-50	1212648	123
SAC-4P-MRS/10,0-PUR PE SH SCO	1424111	190	SAC-5P-M12MS/0,6-600/M12FS FB	1404098	203	SAC-MS/0,2-116/2XB-1L-Z SCO	1458305	197	SF-BIT-HEX 5-50	1212649	123
SAC-4P-MRT/ 1,5-PUR SH SCO	1424124	191	SAC-5P-M12MS/0,6-600/M12FS HD	1404064	201	SAC-MS/0,2-116/2XB-1L-Z SCO	1458486	197	SF-BIT-HEX 6-50	1212650	123
SAC-4P-MRT/ 3,0-PUR SH SCO	1424125	191	SAC-5P-M12MS/1,5-600 FB	1404075	203	SACB-8/16-L-5,0PVC FB	1555541	199	SF-BIT-HEX 8-50	1212651	123
SAC-4P-MRT/ 5,0-PUR SH SCO	1424126	191	SAC-5P-M12MS/1,5-600 HD	1404039	201	SACB-8/16-L-10,0PVC FB	1555554	199	SF-BIT-HEXB 5-89	1208911	232
SAC-4P-MRT/5,0-PUR PE SH SCO	1424127	191	SAC-5P-M12MS/1,5-600/M12FR FB	1404104	203	SACC-CI-M12FS-12CON-L90	1424195	162	SI-M BH	1212070	123
SAC-4P-MS/0,3-600/M12FR-3L FB	1404033	202	SAC-5P-M12MS/1,5-600/M12FR HD	1404069	201	SACC-CI-M12FS-12CON-L90 SH	1424199	162	SI-M SET	1212543	268
SAC-4P-MS/0,3-600/M12FR-3L HD	1403976	200	SAC-5P-M12MS/1,5-600/M12FS FB	1404099	203	SACC-CI-M12FS-17CON-L90	1424197	162	SI-FH 1-80 S-VDE	1212693	122
SAC-4P-MS/0,6-600/M12FR-3L FB	1404034	202	SAC-5P-M12MS/1,5-600/M12FS HD	1404065	201	SACC-CI-M12FS-17CON-L90 SH	1424201	162	SI-FH 2-100 S-VDE	1212694	122
SAC-4P-MS/0,6-600/M12FR-3L HD	1403977	200	SAC-5P-M12MS/1,0-600 FB	1404078	203	SACC-CI-M12FS-8CON-L90	1424180	207	SI-FPHSL 1-80 S-VDE	1212697	122
SAC-4P-MS/1,5-600/M12FR-3L FB	1404035	202	SAC-5P-M12MS/1,0-600 HD	1404043	201	SACC-CI-M12FSY-8CON-L90	1424193	207	SI-FPHSL 2-100 S-VDE	1212698	122
SAC-4P-MS/1,5-600/M12FR-3L HD	1403978	200	SAC-5P-M12MS/3,0-600 FB	1404076	203	SACC-CI-M12MS-12CON-L90	1424194	162	SI-FPZ 1-80 S-VDE	1212695	122
SAC-4P-MS/3,0-600/M12FR-3L FB	1404036	202	SAC-5P-M12MS/3,0-600 HD	1404041	201	SACC-CI-M12MS-12CON-L90 SH	1424198	162	SI-FPZ 2-100 S-VDE	1212696	122
SAC-4P-MS/3,0-600/M12FR-3L HD	1403979	200	SAC-5P-M12MS/3,0-600/M12FR FB	1404105	203	SACC-CI-M12MS-17CON-L90	1424196	162	SI-FPZSL 1-80 S-VDE	1212699	122
SAC-4P-MS/A-1L-Z D SCO	1458583	193	SAC-5P-M12MS/3,0-600/M12FR HD	1404070	201	SACC-CI-M12MS-17CON-L90 SH	1424200	162	SI-FPZSL 2-100 S-VDE	1212700	122
SAC-4P-MSS/ 1,5-PUR PE SH SCO	1424104	190	SAC-5P-M12MS/3,0-600/M12FS FB	1404101	203	SACC-DSI-FSX-8CON-M16-180 SCO	1424177	207	SI-SL 0,6X3,5-100 S-VDE	1212587	52
SAC-4P-MSS/ 3,0-PUR PE SH SCO	1424105	190	SAC-5P-M12MS/3,0-600/M12FS HD	1404066	201	SACC-DSI-FSX-8CON-PG9-180 SCO	1404741	207	SI-SL 0,8X4,0-100 S-VDE	1212588	50
SAC-4P-MSS/ 5,0-PUR PE SH SCO	1424245	190	SAC-5P-M12MS/5,0-600 FB	1404077	203	SACC-DSI-M12FSS-4CON-M16/0,5PE	1424133	160	SI-SL/PH/PZ-SL SET S-VDE	1212701	122
SAC-4P-MSS/10,0-PUR PE SH SCO	1424107	190	SAC-5P-M12MS/5,0-600 HD	1404042	201	SACC-DSI-M12FST-4CON-M16/0,5	1424134	160	SI-THEX 10-200	1212644	123
SAC-4P-MST/ 1,5-PUR SH SCO	1424120	191	SAC-5P-MR/AD-2L SCO	1458606	192	SACC-DSI-M12MSS-4CON-M16/0,5PE	1424132	160	SI-THEX 2,5-100	1212638	123
SAC-4P-MST/ 3,0-PUR SH SCO	1424121	191	SAC-5P-MS/0,3-600/M12FR-3L FB	1404106	203	SACC-DSI-M12MST-4CON-M16/0,5	1424136	160	SI-THEX 2-100	1212637	123
SAC-4P-MST/ 5,0-PUR SH SCO	1424122	191	SAC-5P-MS/0,3-600/M12FR-3L HD	1404071	201	SACC-DSI-M8FS-5CON-M10-L180 DN	1424241	159	SI-THEX 3-100	1212639	123
SAC-4P-MST/10,0-PUR SH SCO	1424123	191	SAC-5P-MS/0,6-600/M12FR-3L FB	1404107	203	SACC-DSI-M8FS-5CON-M10-L90 DN	1424239	159	SI-THEX 4-150	1212640	123
SAC-5P- 1,5-115/M 8FRB	1404475	187	SAC-5P-MS/0,6-600/M12FR-3L HD	1404072	201	SACC-DSI-M8FS-6CON-M10-L90 SH	1424243	159	SI-THEX 5-150	1212641	123
SAC-5P- 1,5-115/M 8FSB	1404470	187	SAC-5P-MS/1,5-600/M12FR-3L FB	1404108	203	SACC-DSI-M8FS-8CON-M10-L180	1424237	159	SI-THEX 6-200	1212642	123
SAC-5P- 3,0-115/M 8FRB	1404476	187	SAC-5P-MS/1,5-600/M12FR-3L HD	1404073	201	SACC-DSI-M8FS-8CON-M10-L180 SH	1424235	159	SI-THEX 8-200	1212643	123
SAC-5P- 3,0-115/M 8FSB	1404471	187	SAC-5P-MS/3,0-600/M12FR-3L FB	1404109	203	SACC-DSI-M8FS-8CON-M10/0,5	1424229	158	SI-TXH SET	1212538	268
SAC-5P- 5,0-115/M 8FRB	1404477	187	SAC-5P-MS/3,0-600/M12FR-3L HD	1404550	201	SACC-DSI-M8MS-5CON-M8-L180 DN	1424242	159	SI-FP-2D1D	1404510	208
SAC-5P- 5,0-115/M 8FSB	1404473	187	SAC-5P-MS/AD-2L SCO	1458596	192	SACC-DSI-M8MS-5CON-M8-L90 DN	1424240	159	SI-FP-2R1A-U1A	1404506	208
SAC-5P-1,5-600/M12FR FB	1404088	203	SAC-8P- 1,5-PUR/M 8FS	1404191	188	SACC-DSI-M8MS-6CON-M8-L90 SH	1424244	159	SI-FP-D1A	1404501	208
SAC-5P-1,5-600/M12FR HD	1404053	201	SAC-8P- 1,5-PUR/M 8FR	1404187	188	SACC-DSI-M8MS-6CON-M8-L180	1424238	159	SI-FP-D1D-D1E	1404509	208
SAC-5P-1,5-600/M12FR-3L FB	1404093	203	SAC-8P- 1,5-PUR/M 8FS SH	1404147	189	SACC-DSI-M8MS-6CON-M8-L180 SH	1424236	159	SI-FP-R1A-D1A	1404496	208
SAC-5P-1,5-600/M12FR-3L HD	1404057	201	SAC-8P- 3,0-PUR/M 8FR	1404192	188	SACC-DSI-M8MS-8CON-M8/0,5	1424230	158	SI-FP-R1A-D1A-D1C	1404507	208
SAC-5P-1,5-600/M12FS FB	1404083	203	SAC-8P- 3,0-PUR/M 8FS	1404188	188	SACC-E-M12FSS-4CON-M16/0,5 PE	1424137	160	SI-FP-R1A-D1B-D3B	1404502	208
SAC-5P-1,5-600/M12FS HD	1404049	201	SAC-8P- 3,0-PUR/M 8FS SH	1404148	189	SACC-E-M12FST-4CON-M16/0,5	1424138	160	SI-FP-R1A-D1B-U1A/0,7	1404504	208
SAC-5P-10,0-115/M 8FRB	1404478	187	SAC-8P- 5,0-PUR/M 8FR	1404193	188	SACC-E-M12MSS-4CON-M16/0,5 PE	1424139	160	SI-FP-R1A-D1E	1404500	208
SAC-5P-10,0-115/M 8FSB	1404474	187	SAC-8P- 5,0-PUR/M 8FS	1404189	188	SACC-E-M12MST-4CON-M16/0,5	1424140	160	SI-FP-R1A-R2A-2U1A	1404503	208
SAC-5P-10,0-600/M12FR FB	1404092	203	SAC-8P- 5,0-PUR/M 8FS SH	1404149	189	SACC-E-M8FS-5CON-M10/0,5 DN	1424233	158	SI-FP-R1A-U1A	1404499	208
SAC-5P-10,0-600/M12FR HD	1404056	201	SAC-8P-10,0-PUR/M 8FR	1404194	188	SACC-E-M8FS-8CON-M10/0,5	1424231	158	SI-FP-R1A-U1A-D1A	1404497	208
SAC-5P-10,0-600/M12FR-3L FB	1404096	203	SAC-8P-10,0-PUR/M 8FS	1404190	188	SACC-E-M8MS-5CON-M10/0,5 DN	1424234	158	SI-FP-R1A-U1A-D1B	1404495	208
SAC-5P-10,0-600/M12FR-3L HD	1404062	201	SAC-8P-10,0-PUR/M 8FS SH	1404150	189	SACC-E-M8MS-8CON-M10/0,5	1424232	158	SI-FP-R1A-U1A/0,7	1404512	208
SAC-5P-10,0-600/M12FS FB	1404086	203	SAC-8P-M 8MR/ 1,5-PUR	1404182	188	SACC-M12FR-12SOL-PG 9-M	1404423	163	SI-FP-U1A	1404505	208
SAC-5P-10,0-600/M12FS HD	1404052	201	SAC-8P-M 8MR/ 3,0-PUR	1404186	188	SACC-M12FR-12SOL-PG 9-M SH	1404413	163	SI-PP-2R1A	1404520	209
SAC-5P-3,0-600/M12FR FB	1404089	203	SAC-8P-M 8MR/ 5,0-PUR	1404185	188	SACC-M12FS-12SOL-PG 9-M	1404420	163	SI-PP-2U1A-D2A	1404519	209
SAC-5P-3,0-600/M12FR HD	1404054	201	SAC-8P-M 8MR/10,0-PUR	1404183	188	SACC-M12FS-3SOL-PG 9-M SH	1404411	163	SI-PP-R1A	1404517	209
SAC-5P-3,0-600/M12FR-3L FB	1404094	203	SAC-8P-M 8MS/ 0,3-PUR/M 8FR	1404201	188	SACC-M12FSS-12SOL-PG11-M	1404642	164	SI-PP-R1A-R3A	1404521	209
SAC-5P-3,0-600/M12FR-3L HD	1404059	201	SAC-8P-M 8MS/ 0,3-PUR/M 8FS	1404196	188	SACC-M12FST-3PECON-PG11-M	1404644	164	SI-PP-R1A-S0A	1404516	209
SAC-5P-3,0-600/M12FS FB	1404084	203	SAC-8P-M 8MS/ 0,3-PUR/M 8FS SH	1404133	189	SACC-M12MR-12SOL-PG 9-M	1404421	163	SI-PP-R1A-S0B	1404518	209
SAC-5P-3,0-600/M12FS HD	1404050	201	SAC-8P-M 8MS/ 0,6-PUR/M 8FR	1404202	188	SACC-M12MR-12SOL-PG 9-M SH	1404412	163	SI-PP-U1A	1404522	209
SAC-5P-5,0-600/M12FR FB	1404091	203	SAC-8P-M 8MS/ 0,6-PUR/M 8FS	1404198	188	SACC-M12MS-12SOL-PG 9-M	1404419	163	SI-SES-R1A	1404513	209
SAC-5P-5,0-600/M12FR HD	1404055	201	SAC-8P-M 8MS/ 0,6-PUR/M 8FS SH	1404134	189	SACC-M12MS-12SOL-PG 9-M SH	1404410	163			

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
ST-08P1N8ACK04S	1617932	167	THERMOMARK CARD SET DK DK	5147213	78	UCT-EM (12X6)	0801503	83	UCT-WMT (15X4) OG	0801449	111
ST-08P1N8ACK05S	1617933	167	THERMOMARK CARD SET EN	5147201	78	UCT-EM (12X6) CUS	0801578	83	UCT-WMT (15X4) OG CUS	0801534	111
ST-08P1N8AWQ10S	1617950	167	THERMOMARK CARD SET EN BE	5147214	78	UCT-EM (12X7)	0801501	84	UCT-WMT (15X4) RD	0801448	111
ST-08S1N8A8K02S	1613370	166	THERMOMARK CARD SET ES ES	5147218	78	UCT-EM (12X7) CUS	0801587	84	UCT-WMT (15X4) RD CUS	0801533	111
ST-08S1N8A8K03S	1613371	166	THERMOMARK CARD SET FR FR	0801591	78	UCT-EM (15X10)	0801504	84	UCT-WMT (15X4) VT	0801451	111
ST-08S1N8A8K04S	1613372	166	THERMOMARK CARD SET HU HU	5147221	78	UCT-EM (15X10) CUS	0801588	84	UCT-WMT (15X4) VT CUS	0801536	111
ST-08S1N8A8K05S	1613452	166	THERMOMARK CARD SET IT IT	5147217	78	UCT-EM (17,5X7,5)	0801482	85	UCT-WMT (15X4) YE	0801447	111
ST-10KP010	1618255	166	THERMOMARK CARD SET PL US	5147215	78	UCT-EM (17,5X7,5) CUS	0801566	85	UCT-WMT (15X4) YE CUS	0801531	111
ST-10KP020	1618256	166	THERMOMARK CARD SET PT PT	5147219	78	UCT-EM (17,5X8)	0801496	86	UCT-WMT (18X4)	0801462	111
ST-10KP030	1618261	166	THERMOMARK CARD SET RU RU	5147211	78	UCT-EM (17,5X8) CUS	0801582	86	UCT-WMT (18X4) BU	0801468	111
ST-10KS010	1618239	166	THERMOMARK CARD SET SE SE	5147212	78	UCT-EM (17,5X9)	0801491	86	UCT-WMT (18X4) BU CUS	0801546	111
ST-10KS020	1618251	166	THERMOMARK CARD-UCT-MAG1	5146480	81	UCT-EM (17,5X9) CUS	0801575	86	UCT-WMT (18X4) CUS	0801538	111
ST-10KS030	1618254	166	THERMOMARK CARD-UCT-MAG10	0801737	108	UCT-EM (17,5X9) YE	0801492	86	UCT-WMT (18X4) GN	0801466	111
ST-17P1N8A9K02S	1613497	166	THERMOMARK CARD-UCT-MAG11	0801738	85	UCT-EM (17,5X9) YE CUS	0801576	86	UCT-WMT (18X4) GN CUS	0801544	111
ST-17P1N8A9K03S	1613896	166	THERMOMARK CARD-UCT-MAG12	0803099	83	UCT-EM (17X10)	0801483	85	UCT-WMT (18X4) OG	0801465	111
ST-17P1N8A9K04S	1614532	166	THERMOMARK CARD-UCT-MAG13	0803040	82	UCT-EM (17X10) CUS	0801567	85	UCT-WMT (18X4) OG CUS	0801543	111
ST-17P1N8A9K05S	1617795	166	THERMOMARK CARD-UCT-MAG14	0803401	87	UCT-EM (17X10) YE	0801484	85	UCT-WMT (18X4) RD	0801464	111
ST-17S1N8A9K02S	1617863	167	THERMOMARK CARD-UCT-MAG15	0803402	87	UCT-EM (17X10) YE CUS	0801569	85	UCT-WMT (18X4) RD CUS	0801541	111
ST-17P1N8ACK03S	1617872	167	THERMOMARK CARD-UCT-MAG16	0803403	85	UCT-EM (17X9)	0801475	85	UCT-WMT (18X4) VT	0801467	111
ST-17P1N8ACK04S	1617873	167	THERMOMARK CARD-UCT-MAG17	0803404	87	UCT-EM (17X9) CUS	0801559	85	UCT-WMT (18X4) VT CUS	0801545	111
ST-17P1N8ACK05S	1617874	167	THERMOMARK CARD-UCT-MAG18	0803405	85	UCT-EM (17X9) YE	0801476	85	UCT-WMT (18X4) YE	0801463	111
ST-17S1N8A9K02S	1617949	167	THERMOMARK CARD-UCT-MAG19	0803406	84	UCT-EM (17X9) YE CUS	0801560	85	UCT-WMT (18X4) YE CUS	0801540	111
ST-17S1N8A9K03S	1613288	166	THERMOMARK CARD-UCT-MAG20	08030751	83	UCT-EM (18X8)	0801488	87	UCT-WMT (23X4)	0801453	112
ST-17S1N8A9K04S	1613324	166	THERMOMARK CARD-UCT-MAG21	08030752	87	UCT-EM (18X8) CUS	0801573	87	UCT-WMT (23X4) BU	0801460	112
ST-17S1N8A9K05S	1613325	166	THERMOMARK CARD-UCT-MAG7	0801734	110	UCT-EM (20X7)	0801494	83	UCT-WMT (23X4) BU CUS	0801553	112
ST-17S1N8A9K06S	1613326	166	THERMOMARK CARD-UCT-MAG8	0801735	83	UCT-EM (20X7) CUS	0801580	83	UCT-WMT (23X4) CUS	0801547	112
ST-8CP1N8A9K02S	1617835	166	THERMOMARK CARD-UCT-MAG9	0801736	83	UCT-EM (20X7) TQ	0801495	83	UCT-WMT (23X4) GN	0801457	112
ST-8CP1N8A9K03S	1617836	166	THERMOMARK CARD-US-MAG1	5146451	94	UCT-EM (20X7) TQ CUS	0801581	83	UCT-WMT (23X4) GN CUS	0801551	112
ST-8CP1N8A9K04S	1617841	166	THERMOMARK ROLL SET	5147300	79	UCT-EM (20X8)	0801477	87	UCT-WMT (23X4) OG	0801456	112
ST-8CP1N8A9K05S	1617844	166	THERMOMARK ROLL SET DE CH	5147230	79	UCT-EM (20X8) CUS	0801561	87	UCT-WMT (23X4) OG CUS	0801550	112
ST-8CP1N8ACK02S	1617935	167	THERMOMARK ROLL SET DK DK	5147224	79	UCT-EM (20X9)	0801471	87	UCT-WMT (23X4) RD	0801455	112
ST-8CP1N8ACK03S	1617936	167	THERMOMARK ROLL SET EN	5147301	79	UCT-EM (20X9) CUS	0801556	87	UCT-WMT (23X4) RD CUS	0801549	112
ST-8CP1N8ACK04S	1617937	167	THERMOMARK ROLL SET EN BE	5147225	79	UCT-EM (20X9) TQ	0801473	87	UCT-WMT (23X4) VT	0801459	112
ST-8CP1N8ACK05S	1617948	167	THERMOMARK ROLL SET ES ES	5147228	79	UCT-EM (20X9) TQ CUS	0801558	87	UCT-WMT (23X4) VT CUS	0801552	112
ST-8CP1N8AWQ10S	1617951	167	THERMOMARK ROLL SET FR FR	0801592	79	UCT-EM (20X9) YE	0801472	87	UCT-WMT (23X4) YE	0801454	112
ST-8CS1N8A8K02S	1613453	166	THERMOMARK ROLL SET HU HU	5147231	79	UCT-EM (20X9) YE CUS	0801557	87	UCT-WMT (23X4) YE CUS	0801548	112
ST-8CS1N8A8K03S	1613454	166	THERMOMARK ROLL SET IT IT	5147227	79	UCT-EM (21X8)	0801489	87	UCT-WMT (30X4)	0801422	112
ST-8CS1N8A8K04S	1613495	166	THERMOMARK ROLL SET PL US	5147226	79	UCT-EM (21X8) CUS	0801574	87	UCT-WMT (30X4) BU	0801428	112
ST-8CS1N8A8K05S	1613496	166	THERMOMARK ROLL SET PT PT	5147229	79	UCT-EM (30X5)	0801505	108	UCT-WMT (30X4) BU CUS	0801514	112
ST-Z0001	1607770	167	THERMOMARK ROLL SET RU RU	5147222	79	UCT-EM (30X5) CUS	0801589	108	UCT-WMT (30X4) CUS	0801507	112
ST-Z0016	1617993	166	THERMOMARK ROLL SET SE SE	5147223	79	UCT-EM (30X5) YE	0803040	108	UCT-WMT (30X4) GN	0801426	112
ST-Z0017	1618049	166	THERMOMARK ROLL X1	5146723	76	UCT-EM (30X5) YE CUS	0803048	108	UCT-WMT (30X4) GN CUS	0801511	112
ST-Z0018	1618050	166	THERMOMARK ROLL X1 CUTTER	5146765	76	UCT-EM (5X10)	0801497	81	UCT-WMT (30X4) OG	0801425	112
STG-MTN 0,5-1,0	3190438	41	THERMOMARK ROLL X1 CUTTER/P	5146766	76	UCT-EM (5X10) CUS	0801583	81	UCT-WMT (30X4) OG CUS	0801510	112
STG-MTN 1,5-2,5	3190506	41	THERMOMARK ROLL X1-CASE	5146724	76	UCT-EM (6X10)	0801493	82	UCT-WMT (30X4) RD	0801424	112
STP 3,5-2	0830131	7	THERMOMARK-RIBBON 110	5145384	76	UCT-EM (6X10) CUS	0801579	82	UCT-WMT (30X4) RD CUS	0801509	112
STP 5-2	0800967	13	THERMOMARK-RIBBON 110 BU	0829544	76	UCT-WMT (10X4)	0801430	110	UCT-WMT (30X4) VT	0801427	112
STP 5-3	0810562	26	THERMOMARK-RIBBON 110 GN	0829542	76	UCT-WMT (10X4) BU	0801437	110	UCT-WMT (30X4) VT CUS	0801512	112
SWD4-100LF-8-24 PXC	2903111	305	THERMOMARK-RIBBON 110 RD	0829543	76	UCT-WMT (10X4) BU CUS	0801521	110	UCT-WMT (30X4) YE	0801423	112
SWD4-3LF8-24-2S PXC	2903112	305	THERMOMARK-RIBBON 110-EML-HT	0800342	76	UCT-WMT (10X4) CUS	0801515	110	UCT-WMT (30X4) YE CUS	0801508	112
SWD4-8MF2 PXC	2903108	304	THERMOMARK-RIBBON 110-WMSU	0801358	76	UCT-WMT (10X4) GN	0801435	110	UK 10,3-HESI 1500V	3062760	62
SWD4-8SF2-5 PXC	2903107	304	THERMOMARK-RIBBON 110-WMSU WH	0801359	76	UCT-WMT (10X4) GN CUS	0801519	110	UK 5 N-MT	3000563	60
SWD4-8SFF2-5 PXC	2903109	304	THERMOMARK-RIBBON 110-WMTB HF	5148007	76	UCT-WMT (10X4) OG	0801434	110	UK 5 N-TG	3000604	60
SWD4-CRP-1 PXC	2903110	305	THERMOMARK-RIBBON 64-WMSU	0801360	76	UCT-WMT (10X4) OG CUS	0801518	110	UK 5-HEDI N	3000564	61
SWD4-CRP-2 PXC	2903114	305	THERMOMARK-RIBBON 64-WMSU WH	0801361	76	UCT-WMT (10X4) RD	0801433	110	UK 5-HEDI N GY	3000752	61
SWD4-RC8-10 PXC	2903106	304	TP 5120T	2700621	365	UCT-WMT (10X4) RD CUS	0801517	110	UK 5-HESI N	3000539	61
SZF 0-0,4X2,5	1204504	6	TP 5150T	2700622	365	UCT-WMT (10X4) VT	0801436	110	UK 5-HESILA 250 N	3000542	61
SZF 1-0,6X3,5	1204517	11	TP 5170T	2700623	365	UCT-WMT (10X4) VT CUS	0801520	110	UK 5-HESILED 24 N	3000540	61
SZF 2-0,8X4,0	1204520	17	TPN-UK	3003062	62	UCT-WMT (10X4) YE	0801431	110	UK 5-HESILED 60 N	3000541	61
SZF 3-1,0X5,5	1206612	22	TPNS-UK	0706647	58	UCT-WMT (10X4) YE CUS	0801516	110	UK 5-MTD	3000562	61
SZG 0,6X3,5 VDE	1205121	58	TPS 3/20/5	3246586	59	UCT-WMT (12X4)	0801438	111	UKH 50 EP	3009228	64
SZS 1,0X4,0 VDE	1205066	59	TS-USST 4/10	3070383	58	UCT-WMT (12X4) BU	0801444	111	UKH 50-3L-F	3076638	64
SZS 1,2X8,0 VDE	1205082	64	TSD 04 SAC	1208429	199	UCT-WMT (12X4) BU CUS	0801529	111	UKH 50-3L/FE-F	3076640	64
			TT-ST-2-PE/S1-24DC	2801055	273	UCT-WMT (12X4) CUS	0801522	111	UKH 50-3L/N-F	3076639	64
						UCT-WMT (12X4) GN	0801442	111	UKH 50-3L/N/FE-F	3076641	64
						UCT-WMT (12X4) GN CUS	0801527	111	UKH 70-3L-F	3247019	64
						UCT-WMT (12X4) OG	0801441	111	UKH 70-3L/FE-F	3076484	64
						UCT-WMT (12X4) OG CUS	0801525	111	UKH 70-3L/FE-F	3076565	64
TC-2D37SUB-DO16-ESD-AR-UNI	2902913	297	UCT-EM (10X5)	0801470	82	UCT-WMT (12X4) RD	0801440	111	UKH 70-3L/N-F	3076523	64
TC-2D37SUB-DO16-F&G-AR-UNI	2902914	297	UCT-EM (10X5) CUS	0801568	82	UCT-WMT (12X4) RD CUS	0801524	111	UKH 70-3L/N/FE-F	3076604	64
TC-C-PSR3-SC-A10000A20000	2903389	297	UCT-EM (10X7)	0801498	83	UCT-WMT (12X4) VT	0801443	111	UKH 95 EP	3009231	65
TC-C-PSR3-SC-A10000A23132	2903390	297	UCT-EM (10X7) CUS	0801585	83	UCT-WMT (12X4) VT CUS	0801528	111	UKH 95-3L-F	3076497	65
TC-C-PSR3-SC-A100V+A20000	2903391	297	UCT-EM (10X7) TQ	0801499	83	UCT-WMT (12X4) YE	0801439	111	UKH 95-3L/FE-F	3076578	65
TC-C-PTSM-50-00000000J1	2903388	297	UCT-EM (10X7) TQ CUS	0801586	83	UCT-WMT (12X4) YE CUS	0801523	111	UKH 95-3L/N-F	3076536	65
TC-D37SUB-ADIO16-EX-P-UNI	2924854	315	UCT-EM (10X8)	0801485	83	UCT-WMT (15X4)	0801446	111	UKH 95-3L/N/FE-F	3076617	65
TC-D37SUB-ADIO16-M-P-UNI	2902933	313	UCT-EM (10X8) CUS	0801570	83	UCT-WMT (15X4) BU	0801452	111	UKH 95-F	3247022	65
TC-D37SUB-AIO16-EX-PS-UNI	2902932	315	UCT-EM (10X8) TQ	0801486	83	UCT-WMT (15X4) BU CUS	0801537	111	UKH 150-3L-F	3076507	65
TC-D37SUB-AIO16-M-PS-UNI	2902934	313	UCT-EM (10X8) TQ CUS	08015							

Index

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	
UKH 150-F	3247035	65	UP 6/ 1-R GNYE	3060814	53	US-EMP (27X15) SR CUS	0830038	95	V			
UKH 150/240 EP	3009244	65	UP 6/ 2	3060623	52	US-EMP (27X15) YE	0828848	94				
UKH 240-3L-F	3076510	65	UP 6/ 3	3060636	52	US-EMP (27X15) YE CUS	0830037	95				
UKH 240-3L/FE-F	3076594	65	UP 6/ 4	3060649	52	US-EMP (35X15)	0830295	94				
UKH 240-3L/N-F	3076552	65	UP 6/ 5	3060652	52	US-EMP (35X15) CUS	0830353	95		VC-EW 1.6	1884869	230
UKH 240-3L/N/FE-F	3076633	65	UP 6/ 6	3060665	52	US-EMP (35X15) RD	0830309	94		VDE-ISS 6	1201934	64
UKH 240-F	3247048	65	UP 6/ 7	3060678	52	US-EMP (35X15) RD CUS	0830356	95		VDE-ISS 8	1201947	65
UKH 70-F	3247051	64	UP 6/ 8	3060681	52	US-EMP (35X15) SR	0830308	94		VL 1 GB CF	2913155	366
UM-ALU 4 AU45 L130	2200957	264	UP 6/ 9	3060694	52	US-EMP (35X15) SR CUS	0830355	95		VL 15" DISPLAY PROTECTIVE FOIL	2913165	367
UM-ALU 4 AU45 L165	2200958	264	UP 6/10	3060704	52	US-EMP (35X15) YE	0830307	94		VL 2 GB CF	2913156	366
UM-ALU 4 AU45 L200	2200959	264	UPS-BAT/VRLA-WTR/24DC/13AH	2320416	321	US-EMP (35X15) YE CUS	0830354	95		VL 4 GB CF	2913157	366
UM-ALU 4 AU45 L235	2200960	264	UPS-BAT/VRLA-WTR/24DC/26AH	2320429	321	US-EMP (49X15)	0828780	94		VL 8 GB CF	2913158	366
UM-ALU 4 AU45 L25	2200953	264	UPS-CAP/24DC/10A/10KJ	2320377	320	US-EMP (49X15) CUS	0830049	95	VL BOOKSHELF MOUNTING KIT	2913160	366	
UM-ALU 4 AU45 L42.5	2200954	264	UPS-CAP/24DC/20A/20KJ	2320380	320	US-EMP (49X15) SR	0828855	94	VL FPM 12	2913015	368	
UM-ALU 4 AU45 L60	2200955	264	US-EMLP (104X140)	0830304	96	US-EMP (49X15) SR CUS	0830051	95	VL FPM 12U	2913016	368	
UM-ALU 4 AU45 L95	2200956	264	US-EMLP (104X140) CUS	0830387	96	US-EMP (49X15) YE	0828854	94	VL FPM 15	2913017	369	
UM-ALU 4 AU45 L990	2200961	264	US-EMLP (104X140) SR	0830306	96	US-EMP (49X15) YE CUS	0830050	95	VL FPM 15U	2913018	369	
UM-ALU 4 AU75 L130	2200966	264	US-EMLP (104X140) SR CUS	0830389	96	US-EMLP (52,5X15) SR	0830296	94	VL FPM 17	2913019	369	
UM-ALU 4 AU75 L165	2200967	264	US-EMLP (104X140) YE	0830305	96	US-EMP (52,5X15) CUS	0830357	95	VL FPM 17U	2913020	369	
UM-ALU 4 AU75 L200	2200968	264	US-EMLP (104X140) YE CUS	0830388	96	US-EMP (52,5X15) RD	0830312	94	VL FPM 19U	2913021	369	
UM-ALU 4 AU75 L235	2200969	264	US-EMLP (35X15)	0830300	96	US-EMP (52,5X15) RD CUS	0830360	95	VL I7 160 GB SSD KIT	2701014	366	
UM-ALU 4 AU75 L25	2200962	264	US-EMLP (35X15) CUS	0830375	96	US-EMP (52,5X15) SR	0830311	94	VL I7 250 GB HDD KIT	2701011	366	
UM-ALU 4 AU75 L42.5	2200963	264	US-EMLP (35X15) RD	0830321	96	US-EMP (52,5X15) SR CUS	0830359	95	VL I7 320 GB HDD KIT	2701012	366	
UM-ALU 4 AU75 L60	2200964	264	US-EMLP (35X15) RD CUS	0830378	96	US-EMP (52,5X15) YE	0830310	94	VL I7 80 GB SSD KIT	2701013	366	
UM-ALU 4 AU75 L95	2200965	264	US-EMLP (35X15) SR	0830320	96	US-EMP (52,5X15) YE CUS	0830358	95	VL I7 HDD TRAY	2701015	366	
UM-ALU 4 AU75 L990	2200970	264	US-EMLP (35X15) SR CUS	0830377	96	US-EMP (60X15)	0828781	94	VL IPC P7000	2701127	366	
UM-ALU 4 FOOT	2200974	264	US-EMLP (35X15) YE	0830319	96	US-EMP (60X15) CUS	0830052	95	VL PANEL MOUNTING KIT	2913159	367	
UM-ALU 4 LID45 PA BK	2200971	264	US-EMLP (35X15) YE CUS	0830376	96	US-EMP (60X15) SR	0828857	94	VL PANEL+ MOUNTING KIT	2701177	367	
UM-ALU 4 LID75 PA BK	2200972	264	US-EMLP (40X10)	0830341	96	US-EMP (60X15) SR CUS	0830054	95	VL WALL MOUNTING KIT	2913161	366	
UM-ALU 4 PE CONTACT	2200973	264	US-EMLP (40X10) CUS	0830365	96	US-EMP (60X15) YE	0828856	94	VMT 3010	2701003	370	
UM-ALU 4-100.5 COVER AL	2200951	264	US-EMLP (40X10) SR	0830328	96	US-EMP (60X15) YE CUS	0830053	95	VMT 3010 EXP SUN	2700969	371	
UM-ALU 4-100.5 COVER PA BK	2200952	264	US-EMLP (40X10) SR CUS	0830367	96	US-EMP (70X15)	0830297	94	VMT 3012 EXP SUN	2700878	371	
UM-ALU 4-100.5 FRONT 130	2200946	264	US-EMLP (40X10) YE	0830342	96	US-EMP (70X15) CUS	0830361	95	VMT 301X EXT PS	2913933	370	
UM-ALU 4-100.5 FRONT 165	2200947	264	US-EMLP (40X10) YE CUS	0830366	96	US-EMP (70X15) RD	0830315	94	VMT GALGENANSCHLUSSADAPTER	2900962	370	
UM-ALU 4-100.5 FRONT 200	2200948	264	US-EMLP (52,5X15)	0830301	96	US-EMP (70X15) RD CUS	0830364	95	VMT HALTERUNG VESA	2900959	370	
UM-ALU 4-100.5 FRONT 235	2200949	264	US-EMLP (52,5X15) CUS	0830379	96	US-EMP (70X15) SR	0830314	94	VMT HALTEWINKEL LI/RE	2900933	370	
UM-ALU 4-100.5 FRONT 42.5	2200943	264	US-EMLP (52,5X15) RD	0830324	96	US-EMP (70X15) SR CUS	0830363	95	VMT TISCHFUSS	2900946	370	
UM-ALU 4-100.5 FRONT 60	2200944	264	US-EMLP (52,5X15) RD CUS	0830382	96	US-EMP (70X15) YE	0830313	94	VS-BH-M12FSX-10G-RJ45/90	1405448	207	
UM-ALU 4-100.5 FRONT 95	2200945	264	US-EMLP (52,5X15) SR	0830323	96	US-EMP (70X15) YE CUS	0830362	95	VS-CABLE-STRIIP-VARIO	1657407	205	
UM-ALU 4-100.5 FRONT 990	2200950	264	US-EMLP (52,5X15) SR CUS	0830381	96	US-EMP (8,8X15)	0830293	94	VS-FSBPXS-OE-94F/0,5	1424135	207	
UM-ALU 4-100.5 PROFILE 130	2200938	264	US-EMLP (52,5X15) YE	0830322	96	US-EMP (8,8X15) CUS	0830349	95	VS-FSBPXS-OE-94F/1,0	1424148	207	
UM-ALU 4-100.5 PROFILE 165	2200939	264	US-EMLP (52,5X15) YE CUS	0830380	96	US-EMP (8,8X15) RD	0830428	94	VS-FSBPXS-OE-94F/2,0	1424151	207	
UM-ALU 4-100.5 PROFILE 200	2200940	264	US-EMLP (70X15)	0830302	96	US-EMP (8,8X15) RD CUS	0830352	95	VS-FSBPXS-OE-94F/5,0	1424164	207	
UM-ALU 4-100.5 PROFILE 235	2200941	264	US-EMLP (70X15) CUS	0830383	96	US-EMP (8,8X15) SR	0830427	94	VS-M12MS-IP20-93E-LI/2,0	1406056	355	
UM-ALU 4-100.5 PROFILE 42.5	2200935	264	US-EMLP (70X15) RD	0830327	96	US-EMP (8,8X15) SR CUS	0830351	95	VS-MP-PPC/CG-10G	1403678	205	
UM-ALU 4-100.5 PROFILE 60	2200936	264	US-EMLP (70X15) RD CUS	0830386	96	US-EMP (8,8X15) YE	0830426	94	VS-MP-PPC/CG-FO	1404319	206	
UM-ALU 4-100.5 PROFILE 95	2200937	264	US-EMLP (70X15) SR	0830326	96	US-EMP (8,8X15) YE CUS	0830350	95	VS-MP-PPC/CG-PO	1403681	205	
UM-ALU 4-100.5 PROFILE 990	2200942	264	US-EMLP (70X15) SR CUS	0830385	96	USST 4-MT	3070300	59	VS-MP-PPC/CG-PO/10G	1403682	205	
UM-ALU 4-72 COVER AL	2200933	264	US-EMLP (70X15) YE	0830325	96	USST 4-MT P/P	3070302	59	VS-MP-PPC/CG-PO/FO	1404321	206	
UM-ALU 4-72 COVER PA BK	2200934	264	US-EMLP (70X15) YE CUS	0830384	96	USST 4-TG	3070301	58	VS-MP-PPC/CG-XL-10G	1403686	205	
UM-ALU 4-72 FRONT 130	2200928	264	US-EMLP (8,8X15)	0830303	96	USST 4-TG P/P	3070303	58	VS-MP-PPC/CG-XL-FO	1404324	206	
UM-ALU 4-72 FRONT 165	2200929	264	US-EMLP (8,8X15) CUS	0830371	96	USST 6-T/SB	3070310	59	VS-MP-PPC/CG-XL-PO/10G	1403688	205	
UM-ALU 4-72 FRONT 200	2200930	264	US-EMLP (8,8X15) RD	0830318	96	UT 4	3044102	54	VS-MP-PPC/CG-XL-PO/FO	1404325	206	
UM-ALU 4-72 FRONT 235	2200931	264	US-EMLP (8,8X15) RD CUS	0830374	96	UT 4 BU	3044115	54	VS-MP-PPC/PPC-1G	1403685	205	
UM-ALU 4-72 FRONT 42.5	2200925	264	US-EMLP (8,8X15) SR	0830317	96	UT 4 RD	3045127	54	VS-MP-PPC/PPC-PO	1403684	205	
UM-ALU 4-72 FRONT 60	2200926	264	US-EMLP (8,8X15) SR CUS	0830373	96	UT 4-QUATTRO HV	3048823	55	VS-PPC-C1-MNNA-4Q5-EMC	1403686	205	
UM-ALU 4-72 FRONT 95	2200927	264	US-EMLP (8,8X15) YE	0830316	96	UT 4-QUATTRO HV BU	3048836	55	VS-PPC-C1-MNNA-9Q5-EMC	1403367	205	
UM-ALU 4-72 FRONT 990	2200932	264	US-EMLP (8,8X15) YE CUS	0830372	96	UT 4-QUATTRO HV RD	3048849	55	VS-PPC-C1-PC-ROBK-L	1405293	205	
UM-ALU 4-72 PROFILE 130	2200920	264	US-EMLSP (28X10)	0830343	97	UT 4-TWIN HV	3000608	55	VS-PPC-C2-PC-ROBK-L	1405303	205	
UM-ALU 4-72 PROFILE 165	2200921	264	US-EMLSP (28X10) CUS	0830368	97	UT 4/ 1P-F	3060458	50	VS-PPC-F1-PC-POBK	1405316	205	
UM-ALU 4-72 PROFILE 200	2200922	264	US-EMLSP (28X10) SR	0830329	97	UT 6-QUATTRO/2P	3060568	51				
UM-ALU 4-72 PROFILE 235	2200923	264	US-EMLSP (28X10) SR CUS	0830370	97	UT 6-QUATTRO/2P BU	3060571	51				
UM-ALU 4-72 PROFILE 42.5	2200917	264	US-EMLSP (28X10) YE	0830344	97	UT 6-QUATTRO/2P-F	3060843	51				
UM-ALU 4-72 PROFILE 60	2200918	264	US-EMLSP (28X10) YE CUS	0830369	97	UT 6-QUATTRO/2P-PE	3060584	51				
UM-ALU 4-72 PROFILE 95	2200919	264	US-EMP (100X15)	0829521	94	UT 6/1P	3060539	50	WG-D HF 10,2	3241101	155	
UM-ALU 4-72 PROFILE 990	2200924	264	US-EMP (100X15) CUS	0830061	95	UT 6/1P BU	3060542	50	WG-D HF 10,2 BK	3241102	155	
UNIFOX-CT 4,8	1212475	146	US-EMP (100X15) SR	0829523	94	UT 6/1P-PE	3060555	51	WG-D HF 12,7	3241103	155	
UNIFOX-CT 4,8P	1212609	146	US-EMP (100X15) SR CUS	0830063	95	UTME 4	3047452	56	WG-D HF 12,7 BK	3241104	155	
UNIFOX-CT M 7,9	1212610	152	US-EMP (100X15) YE	0829522	94	UTME 4-P/P	3047453	57	WG-D HF 16	3241105	155	
UP 6/ 1	3060610	52	US-EMP (100X15) YE CUS	0830062	95	UTME 4-P/P BU	3047454	57	WG-D HF 16 BK	3241106	155	
UP 6/ 1 BU	3060717	52	US-EMP (17X15)	0828774	94	UTMED 4	3047465	57	WG-D HF 20,3	3241107	155	
UP 6/ 1 GNYE	3060720	52	US-EMP (17X15) CUS	0830025	95	UTMED 4-PE	3047478	57	WG-D HF 20,3 BK	3241108	155	
UP 6/ 1-L	3060733	53	US-EMP (17X15) SR	0828843	94	UTTB 4 HV	3000610	55	WG-D HF 7,6	3241099	155	
UP 6/ 1-L BU	3060746	53	US-EMP (17X15) SR CUS	0830027	95				WG-D HF 7,6 BK	3241100	155	
UP 6/ 1-L GNYE	3060759	53	US-EMP (17X15) YE	0828842	94				WG-S HF 120	3241121	125	
UP 6/ 1-M	3060762	53	US-EMP (17X15) YE CUS	0830026	95				WG-S HF 120 BK	3241122	125	
UP 6/ 1-M BU	3060775	53	US-EMP (20X9)	0829439	232				WG-S HF 15	3241109	125	

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
WG-S HF 20	3241111	125	WP-G BRASS IP40 PG29	3241042	140	WP-GA HF IP69K M40 BK	3240915	131	WP-SC BRASS 17	3241067	139
WG-S HF 20 BK	3241112	125	WP-G BRASS IP40 PG36	3241043	140	WP-GA HF IP69K PG11 BK	3240904	131	WP-SC BRASS 21	3241068	139
WG-S HF 40	3241113	125	WP-G BRASS IP40 PG7	3241037	140	WP-GA HF IP69K PG16 BK	3240905	131	WP-SC BRASS 27	3241069	139
WG-S HF 40 BK	3241114	125	WP-G BRASS IP40 PG9	3241038	140	WP-GA HF IP69K PG21 BK	3240906	131	WP-SC BRASS 36	3241070	139
WG-S HF 50	3241115	125	WP-G BRASS IP65 M10	3241058	143	WP-GA HF IP69K PG29 BK	3240907	131	WP-SC BRASS 45	3241071	139
WG-S HF 50 BK	3241116	125	WP-G BRASS IP65 M12	3241059	143	WP-GA HF IP69K PG36 BK	3240908	131	WP-SC BRASS WP PVC 10	3241072	142
WG-S HF 70	3241117	125	WP-G BRASS IP65 M16	3241060	143	WP-GA HF IP69K PG7 BK	3240902	131	WP-SC BRASS WP PVC 14	3241073	142
WG-S HF 70 BK	3241118	125	WP-G BRASS IP65 M20	3241061	143	WP-GA HF IP69K PG9 BK	3240903	131	WP-SC BRASS WP PVC 17	3241074	142
WG-S HF 80	3241119	125	WP-G BRASS IP65 M25	3241062	143	WP-GR HF IP66 M12 BK	3240952	133	WP-SC BRASS WP PVC 21	3241075	142
WG-S HF 80 BK	3241120	125	WP-G BRASS IP65 M32	3241063	143	WP-GR HF IP66 M16 BK	3240953	133	WP-SC BRASS WP PVC 27	3241076	142
WIREFOX-D SR 6-1	1212511	182	WP-G BRASS IP65 M40	3241064	143	WP-GR HF IP66 M20 BK	3240954	133	WP-SC BRASS WP PVC 36	3241077	142
WM-CARRIER/B (48X10)LPR	0830423	114	WP-G BRASS IP65 PG11	3241053	143	WP-GR HF IP66 M25 BK	3240955	133	WP-SC BRASS WP PVC 45	3241078	142
WM-CARRIER/B (55X15)LPR	0830424	114	WP-G BRASS IP65 PG21	3241054	143	WP-GR HF IP66 M32 BK	3240956	133	WP-SC HF 10	3241016	135
WM-CARRIER/B (65X15)LPR	0830425	114	WP-G BRASS IP65 PG11	3241055	143	WP-GR HF IP66 M40 BK	3240957	133	WP-SC HF 14	3241017	135
WML 14 (25X19)RL	0830678	115	WP-G BRASS IP65 PG29	3241056	143	WP-GR HF IP66 PG11 BK	3240946	132	WP-SC HF 17	3241018	135
WML 14 (38X19)R YE	0830675	115	WP-G BRASS IP65 PG36	3241057	143	WP-GR HF IP66 PG16 BK	3240947	132	WP-SC HF 21	3241019	135
WML 14 (38X19)R YE CUS	0830682	115	WP-G BRASS IP65 PG7	3241051	143	WP-GR HF IP66 PG21 BK	3240948	132	WP-SC HF 27	3241020	135
WML 14 (38X19)RL	0830679	115	WP-G BRASS IP65 PG9	3241052	143	WP-GR HF IP66 PG29 BK	3240949	132	WP-SC HF 36	3241021	135
WML 5 (25X10)R YE	0830673	115	WP-G HF IP66 M10 BK	3240895	129	WP-GR HF IP66 PG36 BK	3240950	132	WP-SC HF 45	3241022	135
WML 5 (25X10)R YE CUS	0830680	115	WP-G HF IP66 M12 BK	3240896	129	WP-GR HF IP66 PG7 BK	3240944	132	WP-SC PA HF 10,0 BK	3240981	127
WML 5 (25X10)RL	0830676	115	WP-G HF IP66 M16 BK	3240897	129	WP-GR HF IP66 PG9 BK	3240945	132	WP-SC PA HF 13,0 BK	3240982	127
WML 6 (13X13)R YE	0830674	115	WP-G HF IP66 M20 BK	3240898	129	WP-GR HF IP66 PG29 BK	3240938	133	WP-SC PA HF 15,8 BK	3240983	127
WML 6 (13X13)R YE CUS	0830681	115	WP-G HF IP66 M25 BK	3240899	129	WP-GR HF IP69K M16 BK	3240939	133	WP-SC PA HF 21,2 BK	3240984	127
WML 6 (13X13)RL	0830677	115	WP-G HF IP66 M32 BK	3240900	129	WP-GR HF IP69K M20 BK	3240940	133	WP-SC PA HF 28,5 BK	3240985	127
WMTB HF (40X12)R	0830407	113	WP-G HF IP66 M40 BK	3240901	129	WP-GR HF IP69K M25 BK	3240941	133	WP-SC PA HF 34,5 BK	3240986	127
WMTB HF (40X12)R CUS	0830413	113	WP-G HF IP66 PG11 BK	3240890	128	WP-GR HF IP69K M32 BK	3240942	133	WP-SC PA HF 42,5 BK	3240987	127
WMTB HF (40X12)R YE	0830408	113	WP-G HF IP66 PG16 BK	3240891	128	WP-GR HF IP69K M40 BK	3240943	133	WP-SPIRAL PU C HF 10	3240856	135
WMTB HF (40X12)R YE CUS	0830414	113	WP-G HF IP66 PG21 BK	3240892	128	WP-GR HF IP69K M11 BK	3240932	133	WP-SPIRAL PU C HF 14	3240857	135
WMTB HF (55X15)R	0830409	113	WP-G HF IP66 PG29 BK	3240893	128	WP-GR HF IP69K PG16 BK	3240933	133	WP-SPIRAL PU C HF 17	3240858	135
WMTB HF (55X15)R CUS	0830415	113	WP-G HF IP66 PG36 BK	3240894	128	WP-GR HF IP69K PG21 BK	3240934	133	WP-SPIRAL PU C HF 21	3240859	135
WMTB HF (55X15)R YE	0830410	113	WP-G HF IP66 PG7 BK	3240888	128	WP-GR HF IP69K PG29 BK	3240935	133	WP-SPIRAL PU C HF 27	3240860	135
WMTB HF (55X15)R YE CUS	0830416	113	WP-G HF IP66 PG9 BK	3240889	128	WP-GR HF IP69K PG36 BK	3240936	133	WP-SPIRAL PU C HF 36	3240861	135
WMTB HF (55X25)R	0830411	113	WP-G HF IP69K M10 BK	3240881	129	WP-GR HF IP69K PG7 BK	3240930	133	WP-SPIRAL PU C HF 45	3240862	135
WMTB HF (55X25)R CUS	0830417	113	WP-G HF IP69K M12 BK	3240882	129	WP-GR HF IP69K PG9 BK	3240931	133	WP-SPIRAL PVC C 10	3240849	134
WMTB HF (55X25)R YE	0830412	113	WP-G HF IP69K M16 BK	3240883	129	WP-GT BRASS M10	3241030	141	WP-SPIRAL PVC C 14	3240850	134
WMTB HF (55X25)R YE CUS	0830418	113	WP-G HF IP69K M20 BK	3240884	129	WP-GT BRASS M12	3241031	141	WP-SPIRAL PVC C 17	3240851	134
WP 10T	2700934	364	WP-G HF IP69K M25 BK	3240885	129	WP-GT BRASS M16	3241032	141	WP-SPIRAL PVC C 21	3240852	134
WP 15T	2700935	364	WP-G HF IP69K M32 BK	3240886	129	WP-GT BRASS M20	3241033	141	WP-SPIRAL PVC C 27	3240853	134
WP-BASE A M16	3241083	145	WP-G HF IP69K M40 BK	3240887	129	WP-GT BRASS M25	3241034	141	WP-SPIRAL PVC C 36	3240854	134
WP-BASE A M20	3241084	145	WP-G HF IP69K PG11 BK	3240876	129	WP-GT BRASS M32	3241035	141	WP-SPIRAL PVC C 45	3240855	134
WP-BASE A M25	3241085	145	WP-G HF IP69K PG16 BK	3240877	129	WP-GT BRASS M40	3241036	141	WP-STEEL PVC C 10	3240867	142
WP-BASE A M32	3241086	145	WP-G HF IP69K PG21 BK	3240878	129	WP-GT BRASS PG11	3241025	141	WP-STEEL PVC C 14	3240868	142
WP-BASE A M40	3241087	145	WP-G HF IP69K PG29 BK	3240879	129	WP-GT BRASS PG16	3241026	141	WP-STEEL PVC C 17	3240869	142
WP-BASE A PG16	3241079	145	WP-G HF IP69K PG36 BK	3240880	129	WP-GT BRASS PG21	3241027	141	WP-STEEL PVC C 21	3240870	142
WP-BASE A PG21	3241080	145	WP-G HF IP69K PG7 BK	3240874	129	WP-GT BRASS PG36	3241029	141	WP-STEEL PVC C 27	3240871	142
WP-BASE A PG29	3241081	145	WP-G HF IP69K PG9 BK	3240875	129	WP-GT BRASS PG7	3241023	141	WP-STEEL PVC C 36	3240872	142
WP-BASE A PG36	3241082	145	WP-G PP HF M10	3240995	137	WP-GT BRASS PG9	3241024	141	WP-STEEL PVC C 45	3240873	142
WP-BASE C PA HF 10,0 BK	3240958	144	WP-G PP HF M12	3240996	137	WP-GT PP HF M12	3241010	137	WP-STEEL S 10	3240686	139
WP-BASE C PA HF 13,0 BK	3240959	144	WP-G PP HF M16	3240997	137	WP-GT PP HF M16	3241011	137	WP-STEEL S 14	3240687	139
WP-BASE C PA HF 15,8 BK	3240960	144	WP-G PP HF M20	3240998	137	WP-GT PP HF M20	3241012	137	WP-STEEL S 17	3240683	139
WP-BASE C PA HF 21,2 BK	3240961	144	WP-G PP HF M25	3240999	137	WP-GT PP HF M25	3241013	137	WP-STEEL S 21	3240688	139
WP-BASE C PA HF 28,2 BK	3240962	144	WP-G PP HF M32	3241000	137	WP-GT PP HF M32	3241014	137	WP-STEEL S 27	3240864	139
WP-BASE C PA HF 34,5 BK	3240963	144	WP-G PP HF M40	3241001	137	WP-GT PP HF M40	3241015	137	WP-STEEL S 36	3240689	139
WP-BASE C PA HF 42,5 BK	3240964	144	WP-G PP HF PG11	3240990	136	WP-GT PP HF PG11	3241004	137	WP-STEEL S 45	3240690	139
WP-BASE HF 13	3240966	145	WP-G PP HF PG16	3240991	136	WP-GT PP HF PG16	3241005	137	WP-STEEL ZC 10	3240697	138
WP-BASE HF 14	3240967	145	WP-G PP HF PG21	3240992	136	WP-GT PP HF PG21	3241006	137	WP-STEEL ZC 14	3240865	138
WP-BASE HF 15,8	3240968	145	WP-G PP HF PG29	3240993	136	WP-GT PP HF PG29	3241007	137	WP-STEEL ZC 17	3240698	138
WP-BASE HF 17	3240969	145	WP-G PP HF PG36	3240994	136	WP-GT PP HF PG36	3241008	137	WP-STEEL ZC 21	3240699	138
WP-BASE HF 22	3240970	145	WP-G PP HF PG7	3240988	136	WP-GT PP HF PG7	3241002	137	WP-STEEL ZC 27	3240866	138
WP-BASE HF 29	3240971	145	WP-G PP HF PG9	3240989	136	WP-GT PP HF PG9	3241003	137	WP-STEEL ZC 36	3240700	138
WP-BASE HF 37	3240972	145	WP-GA HF IP66 M10 BK	3240923	131	WP-PA HF 10,0 BK	3240680	127	WP-STEEL ZC 45	3240701	138
WP-BASE HF 45	3240973	145	WP-GA HF IP66 M12 BK	3240924	131	WP-PA HF 13,0 BK	3240681	127	WS UT 4	3047332	54
WP-BASE HF 9-10	3240965	145	WP-GA HF IP66 M16 BK	3240925	131	WP-PA HF 15,8 BK	3240682	127	WS UT 6	3047345	50
WP-EC TPE HF 10,0 BK	3240974	127	WP-GA HF IP66 M20 BK	3240926	131	WP-PA HF 21,2 BK	3240683	127	WT-BASE HF 5	3240702	154
WP-EC TPE HF 13,0 BK	3240975	127	WP-GA HF IP66 M25 BK	3240927	131	WP-PA HF 28,5 BK	3240684	127	WT-BASE HF 5 BK	3240703	154
WP-EC TPE HF 15,8 BK	3240976	127	WP-GA HF IP66 M32 BK	3240928	131	WP-PA HF 34,5 BK	3241088	127	WT-BASE HF 9	3240704	154
WP-EC TPE HF 21,2 BK	3240977	127	WP-GA HF IP66 M40 BK	3240929	131	WP-PA HF 42,5 BK	3241089	127	WT-BASE HF 9 BK	3240705	154
WP-EC TPE HF 28,5 BK	3240978	127	WP-GA HF IP66 PG11 BK	3240918	130	WP-PA HF-HB 10,0 BK	3240838	127	WT-BASE LS HF 4	3240706	154
WP-EC TPE HF 34,5 BK	3240979	127	WP-GA HF IP66 PG16 BK	3240919	130	WP-PA HF-HB 13,0 BK	3240839	127	WT-BASE LS HF 4 BK	3240707	154
WP-EC TPE HF 42,5 BK	3240980	127	WP-GA HF IP66 PG21 BK	3240920	130	WP-PA HF-HB 15,8 BK	3240840	127	WT-BASE LS HF 6	3240708	154
WP-G BRASS IP40 M10	3241044	141	WP-GA HF IP66 PG29 BK	3240921	130	WP-PA HF-HB 21,2 BK	3240841	127	WT-BASE LS HF 6 BK	3240709	154
WP-G BRASS IP40 M12	3241045	141	WP-GA HF IP66 PG36 BK	3240922	130	WP-PA HF-HB 28,5 BK	3240842	127	WT-BASE P HF 9,5 BK	3240710	155
WP-G BRASS IP40 M16	3241046	141	WP-GA HF IP66 PG7 BK	3240916	130	WP-PA HF-HB 34,5 BK	3240843	127	WT-BASE R HF 8	3240711	155
WP-G BRASS IP40 M20	3241047	141	WP-GA HF IP66 PG9 BK	3240917	130	WP-PA HF-HB 42,5 BK	3240844	127	WT-D HF 7,5X200	3240712	150
WP-G BRASS IP40 M25	3241048	141	WP-GA HF IP69K M10 BK	3240909	131	WP-PA HF-SL 21,2 BK	3240845	126	WT-D HF 7,5X200 BK	3240713	150
WP-G BRASS IP40 M32	3241049	141	WP-GA HF IP69K M12 BK	3240910	131	WP-PA HF-SL 28,5 BK	3240846	126	WT-D HF 7,5X250	3240714	150
WP-G BRASS IP40 M40	3241050	141	WP-GA HF IP69K M16 BK	3240911	131	WP-PA HF-SL 34,5 BK	3240847	126	WT-D HF 7,5X250 BK	3240715	150
WP-G BRASS IP40 PG1											

Index

Alphabetical

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
WT-E HF 4,8X200	3240720	150	WT-STEEL S 4,6X679	3240812	152			
WT-E HF 7,8X200	3240722	150	WT-STEEL S 4,6X838	3240723	152			
WT-E HF 7,8X300	3240724	150	WT-STEEL S 7,9X1067	3240813	152			
WT-E HF 7,8X380	3240726	150	WT-STEEL S 7,9X259	3240814	152			
WT-HF 12,6X1000	3240728	146	WT-STEEL S 7,9X360	3240815	152			
WT-HF 12,6X1000 BK	3240729	147	WT-STEEL S 7,9X520	3240816	152			
WT-HF 12,6X850	3240730	146	WT-STEEL S 7,9X679	3240817	152			
WT-HF 12,6X850 BK	3240731	147	WT-STEEL S 7,9X838	3240725	152			
WT-HF 2,5X98	3240732	146	WT-STEEL SH 4,6X1067	3240818	153			
WT-HF 2,5X98 BK	3240733	147	WT-STEEL SH 4,6X150	3240820	153			
WT-HF 2,5X98 BK-L	3240734	147	WT-STEEL SH 4,6X201	3240821	153			
WT-HF 2,5X98-L	3240735	146	WT-STEEL SH 4,6X259	3240822	153			
WT-HF 2,6X160	3240736	146	WT-STEEL SH 4,6X360	3240823	153			
WT-HF 2,6X160 BK	3240737	147	WT-STEEL SH 4,6X520	3240824	153			
WT-HF 2,6X160 BK-L	3240738	147	WT-STEEL SH 4,6X679	3240825	153			
WT-HF 2,6X160-L	3240739	146	WT-STEEL SH 4,6X838	3240727	153			
WT-HF 2,6X200	3240740	146	WT-STEEL SH 7,9X1067	3240826	153			
WT-HF 2,6X200 BK	3240741	147	WT-STEEL SH 7,9X259	3240827	153			
WT-HF 2,6X200 BK-L	3240742	147	WT-STEEL SH 7,9X360	3240828	153			
WT-HF 2,6X200-L	3240743	146	WT-STEEL SH 7,9X520	3240829	153			
WT-HF 3,6X140	3240744	146	WT-STEEL SH 7,9X679	3240830	153			
WT-HF 3,6X140 BK	3240745	147	WT-STEEL SH 7,9X838	3240766	153			
WT-HF 3,6X140 BK-L	3240746	147	WT-UV HF 2,5X98 BK	3240831	148			
WT-HF 3,6X140-L	3240747	146	WT-UV HF 3,6X140 BK	3240832	148			
WT-HF 3,6X200	3240748	146	WT-UV HF 3,6X200 BK	3240833	148			
WT-HF 3,6X200 BK	3240749	147	WT-UV HF 4,5X200 BK	3240834	148			
WT-HF 3,6X200 BK-L	3240750	147	WT-UV HF 4,5X290 BK	3240835	148			
WT-HF 3,6X200-L	3240751	146	WT-UV HF 7,8X365 BK	3240837	148			
WT-HF 3,6X290	3240752	146						
WT-HF 3,6X290 BK	3240753	147						
WT-HF 3,6X290 BK-L	3240754	147						
WT-HF 3,6X290-L	3240755	146						
WT-HF 4,5X160	3240756	146						
WT-HF 4,5X160 BK	3240757	147						
WT-HF 4,5X160 BK-L	3240758	147						
WT-HF 4,5X160-L	3240759	146						
WT-HF 4,5X200	3240760	146						
WT-HF 4,5X200 BK	3240761	147						
WT-HF 4,5X200 BK-L	3240762	147						
WT-HF 4,5X200-L	3240763	146						
WT-HF 4,5X290	3240764	146						
WT-HF 4,5X290 BK	3240765	147						
WT-HF 4,5X360	3240768	146						
WT-HF 4,5X360 BK	3240769	147						
WT-HF 4,5X430	3240770	146						
WT-HF 4,5X430 BK	3240771	147						
WT-HF 7,8X300	3240772	146						
WT-HF 7,8X300 BK	3240773	147						
WT-HF 7,8X365	3240774	146						
WT-HF 7,8X365 BK	3240775	147						
WT-HF 7,8X540	3240719	146						
WT-HF 7,8X540 BK	3240721	147						
WT-HF 9X780	3240778	146						
WT-HF 9X780 BK	3240779	147						
WT-HT HF 2,5X98	3240780	149						
WT-HT HF 2,5X98 BK	3240781	149						
WT-HT HF 3,6X140	3240782	149						
WT-HT HF 3,6X140 BK	3240783	149						
WT-HT HF 3,6X200	3240784	149						
WT-HT HF 3,6X200 BK	3240785	149						
WT-HT HF 4,5X200	3240786	149						
WT-HT HF 4,5X200 BK	3240787	149						
WT-HT HF 4,5X290	3240788	149						
WT-HT HF 4,5X290 BK	3240789	149						
WT-HT HF 7,8X365	3240792	149						
WT-HT HF 7,8X365 BK	3240793	149						
WT-ID HF 2,5X98 BU	3240794	151						
WT-ID HF 3,5X140 BU	3240795	151						
WT-ID HF 3,5X200 BU	3240796	151						
WT-ID HF 4,5X200 BU	3240797	151						
WT-ID HF 4,5X290 BU	3240798	151						
WT-ID HF 7,5X365 BU	3240800	151						
WT-R HF 3,6X150	3240801	151						
WT-R HF 4,8X200	3240803	151						
WT-STEEL S 4,6X1067	3240805	152						
WT-STEEL S 4,6X150	3240807	152						
WT-STEEL S 4,6X201	3240808	152						
WT-STEEL S 4,6X259	3240809	152						
WT-STEEL S 4,6X360	3240810	152						
WT-STEEL S 4,6X520	3240811	152						

Z

ZAP 40 1212630 119

Order No. Type	Page	Order No. Type	Page	Order No. Type	Page	Order No. Type	Page	
0		0801470 UCT-EM (10X5)	82	0801570 UCT-EM (10X8) CUS	83	0801673 CES-STPG-GY-3	216	
		0801471 UCT-EM (20X9)	87	0801572 UCT-EM (10X8) TQ CUS	83	0801674 CES-STPG-GY-4	216	
		0801472 UCT-EM (20X9) YE	87	0801573 UCT-EM (18X8) CUS	87	0801675 CES-STPG-GY-5	216	
		0801473 UCT-EM (20X9) TQ	87	0801574 UCT-EM (21X8) CUS	87	0801676 CES-STPG-GY-6	216	
	0201139 EB 10- 6	60	0801475 UCT-EM (17X9)	85	0801575 UCT-EM (17,5X9) CUS	86	0801677 CES-STPG-GY-7	216
	0201142 EB 3- 6	60	0801476 UCT-EM (17X9) YE	85	0801576 UCT-EM (17,5X9) YE CUS	86	0801679 CES-STPG-GY-8	216
	0201155 EB 2- 6	60	0801477 UCT-EM (20X8)	87	0801577 UCT-EM (12X3,3) CUS	83	0801680 CES-STPG-GY-9	216
	0201304 PSBJ 3/13/4	58	0801482 UCT-EM (17,5X7,5)	85	0801578 UCT-EM (12X6) CUS	83	0801682 CES-STPG-GY-10	216
	0201317 FBI 3-20	64	0801483 UCT-EM (17X10)	85	0801579 UCT-EM (6X10) CUS	82	0801683 CES-STPG-GY-11	216
	0201346 FBI 2-20	64	0801484 UCT-EM (17X10) YE	85	0801580 UCT-EM (20X7) CUS	83	0801684 CES-STPG-GY-12	216
	0201362 EB 2-25/UKH	65	0801485 UCT-EM (10X8)	83	0801581 UCT-EM (20X7) TQ CUS	83	0801685 CES-STPG-GY-13	216
	0201375 EB 3-25/UKH	65	0801486 UCT-EM (10X8) TQ	83	0801582 UCT-EM (17,5X8) CUS	86	0801686 CES-STPG-GY-14	216
	0201388 EB 2-31/UKH	65	0801488 UCT-EM (18X8)	87	0801583 UCT-EM (5X10) CUS	81	0801687 CES-LTPG-GY-15	216
	0201391 EB 3-31/UKH	65	0801489 UCT-EM (21X8)	87	0801585 UCT-EM (10X7) CUS	83	0801688 CES-LTPG-GY-16	216
0201401 EB 2-36/UKH	65	0801491 UCT-EM (17,5X9)	86	0801586 UCT-EM (10X7) TQ CUS	83	0801689 CES-LTPG-GY-17	216	
0201414 EB 3-36/UKH	65	0801492 UCT-EM (17,5X9) YE	86	0801587 UCT-EM (12X7) CUS	84	0801690 CES-LTPG-GY-18	216	
0201676 MPS-IH RD	6	0801493 UCT-EM (6X10)	82	0801588 UCT-EM (15X10) CUS	84	0801691 CES-LTPG-GY-19	216	
0201744 MPS-MT	6	0801494 UCT-EM (20X7)	83	0801589 UCT-EM (30X5) CUS	108	0801692 CES-LTPG-GY-20	216	
0203250 FBI 10- 6	58	0801495 UCT-EM (20X7) TQ	83	0801590 MARKING BOX FR FR	77	0801693 CES-LTPG-GY-21	216	
0301505 ISSBI 10- 6	58	0801496 UCT-EM (17,5X8)	86	0801591 THERMOMARK CARD SET FR FR	78	0801695 CES-LTPG-GY-22	216	
0311139 ATP-URTK/SP	59	0801497 UCT-EM (5X10)	81	0801592 THERMOMARK ROLL SET FR FR	79	0801696 CES-LTPG-GY-23	216	
0311540 KSS 8	59	0801498 UCT-EM (10X7)	83	0801602 EMT (35X28)R	98	0801697 CES-LTPG-GY-24	216	
0311579 PS-IH RD	69	0801499 UCT-EM (10X7) TQ	83	0801603 EMT (35X28)R YE	98	0801698 CES-LTPG-GY-25	216	
0311647 PS-MT	69	0801501 UCT-EM (12X7)	84	0801604 EMT (35X46)R	98	0801699 CES-LTPG-GY-26	216	
0601292 PSB 3/10/4	58	0801502 UCT-EM (12X3,3)	83	0801605 EMT (35X46)R YE	98	0801700 CES-LTPG-GY-27	216	
0706647 TPNs-UK	58	0801503 UCT-EM (12X6)	83	0801612 EMT (31X12,5)R GY	99	0801701 CES-LTPG-GY-28	216	
0800037 EML-HT (45X5)R	100	0801504 UCT-EM (15X10)	84	0801615 CES-SRG-BK-14	214	0801702 CES-LTPG-GY-29	216	
0800038 EML-HT (50X10)R	100	0801505 UCT-EM (30X5)	108	0801616 CES-SRG-BK-13	214	0801703 CES-LTPG-GY-30	216	
0800039 EML-HT (40X15)R	100	0801507 UCT-WMT (30X4) CUS	112	0801617 CES-SRG-BK-12	214	0801705 CES-LTPG-GY-31	216	
0800340 EML-HT (8X8)R	100	0801508 UCT-WMT (30X4) YE CUS	112	0801618 CES-SRG-BK-11	214	0801706 CES-LTPG-GY-32	216	
0800341 EML-HT (15X15)R	100	0801509 UCT-WMT (30X4) RD CUS	112	0801619 CES-LRG-BK-15	214	0801707 CES-LTPG-GY-33	216	
0800342 THERMOMARK-RIBBON 110-EML-HT	76	0801510 UCT-WMT (30X4) OG CUS	112	0801620 CES-SRG-BK-10	214	0801708 CES-STPG-GY-2X5	217	
0800967 STP 5-2	13	0801511 UCT-WMT (30X4) GN CUS	112	0801621 CES-LRG-BK-16	214	0801709 CES-STPG-GY-2X6	217	
0801358 THERMOMARK-RIBBON 110-WMSU	76	0801512 UCT-WMT (30X4) VT CUS	112	0801622 CES-SRG-BK-9	214	0801710 CES-STPG-GY-4X3	217	
0801359 THERMOMARK-RIBBON 110-WMSU WH	76	0801514 UCT-WMT (30X4) BU CUS	112	0801624 CES-LRG-BK-17	214	0801711 CES-STPG-GY-4X4	217	
0801360 THERMOMARK-RIBBON 64-WMSU	76	0801515 UCT-WMT (10X4) CUS	110	0801625 CES-SRG-BK-8	214	0801712 CES-STPG-GY-1ASH-L	217	
0801361 THERMOMARK-RIBBON 64-WMSU WH	76	0801516 UCT-WMT (10X4) YE CUS	110	0801626 CES-LRG-BK-18	214	0801713 CES-STPG-GY-2ASH-LR	217	
0801376 EML-HT (D12)R	100	0801517 UCT-WMT (10X4) RD CUS	110	0801627 CES-SRG-BK-7	214	0801714 CES-STPG-GY-2ASH-LL	217	
0801422 UCT-WMT (30X4)	112	0801518 UCT-WMT (10X4) OG CUS	110	0801628 CES-SRG-BK-6	214	0801715 CES-STPG-GY	216	
0801423 UCT-WMT (30X4) YE	112	0801519 UCT-WMT (10X4) GN CUS	110	0801629 CES-LRG-BK-19	214	0801716 CES-LTPG-GY	216	
0801424 UCT-WMT (30X4) RD	112	0801520 UCT-WMT (10X4) VT CUS	110	0801630 CES-SRG-BK-5	214	0801718 CES-SRC-BK	214	
0801425 UCT-WMT (30X4) OG	112	0801521 UCT-WMT (10X4) BU CUS	110	0801631 CES-LRG-BK-20	214	0801719 CES-LRC-BK	214	
0801426 UCT-WMT (30X4) GN	112	0801522 UCT-WMT (12X4) CUS	111	0801632 CES-SRG-BK-4	214	0801725 CES-B10-WRG-BK	212	
0801427 UCT-WMT (30X4) VT	112	0801523 UCT-WMT (12X4) YE CUS	111	0801633 CES-SRG-BK-3	214	0801726 CES-B16-WRG-BK	212	
0801428 UCT-WMT (30X4) BU	112	0801524 UCT-WMT (12X4) RD CUS	111	0801634 CES-LRG-BK-21	214	0801727 CES-B24-WRG-BK	212	
0801430 UCT-WMT (10X4)	110	0801525 UCT-WMT (12X4) OG CUS	111	0801635 CES-SRG-BK-2	214	0801728 CES-SFFS-H	213	
0801431 UCT-WMT (10X4) YE	110	0801527 UCT-WMT (12X4) GN CUS	111	0801637 CES-LRG-BK-22	214	0801734 THERMOMARK CARD-UCT-MAG7	110	
0801433 UCT-WMT (10X4) RD	110	0801528 UCT-WMT (12X4) VT CUS	111	0801638 CES-LRG-BK-23	214	0801735 THERMOMARK CARD-UCT-MAG8	83	
0801434 UCT-WMT (10X4) OG	110	0801529 UCT-WMT (12X4) BU CUS	111	0801639 CES-LRG-BK-24	214	0801736 THERMOMARK CARD-UCT-MAG9	83	
0801435 UCT-WMT (10X4) GN	110	0801530 UCT-WMT (15X4) CUS	111	0801640 CES-LRG-BK-25	214	0801737 THERMOMARK CARD-UCT-MAG10	108	
0801436 UCT-WMT (10X4) VT	110	0801531 UCT-WMT (15X4) YE CUS	111	0801641 CES-B24-SFC-M	213	0801738 THERMOMARK CARD-UCT-MAG11	85	
0801437 UCT-WMT (10X4) BU	110	0801533 UCT-WMT (15X4) RD CUS	111	0801642 CES-B16-SFC-M	213	0801740 MARKING BOX SE SE	77	
0801438 UCT-WMT (12X4)	111	0801534 UCT-WMT (15X4) OG CUS	111	0801643 CES-LRG-BK-26	214	0801741 MARKING BOX DK DK	77	
0801439 UCT-WMT (12X4) YE	111	0801535 UCT-WMT (15X4) GN CUS	111	0801644 CES-LRG-BK-27	214	0801742 MARKING BOX EN BE	77	
0801440 UCT-WMT (12X4) RD	111	0801536 UCT-WMT (15X4) VT CUS	111	0801645 CES-B10-SFC-M	213	0801744 MARKING BOX PL US	77	
0801441 UCT-WMT (12X4) OG	111	0801537 UCT-WMT (15X4) BU CUS	111	0801646 CES-LRG-BK-28	214	0801745 MARKING BOX IT IT	77	
0801442 UCT-WMT (12X4) GN	111	0801538 UCT-WMT (18X4) CUS	111	0801647 CES-B24-SF-PLBK	213	0801747 MARKING BOX ES ES	77	
0801443 UCT-WMT (12X4) VT	111	0801540 UCT-WMT (18X4) YE CUS	111	0801648 CES-LRG-BK-29	214	0801748 MARKING BOX PT PT	77	
0801444 UCT-WMT (12X4) BU	111	0801541 UCT-WMT (18X4) RD CUS	111	0801650 CES-LRG-BK-30	214	0801749 MARKING BOX DE CH	77	
0801446 UCT-WMT (15X4)	111	0801543 UCT-WMT (18X4) OG CUS	111	0801651 CES-B16-SF-PLBK	213	0801750 MARKING BOX HU HU	77	
0801447 UCT-WMT (15X4) YE	111	0801544 UCT-WMT (18X4) GN CUS	111	0801653 CES-LRG-BK-31	214	0810562 STP 5-3	26	
0801448 UCT-WMT (15X4) RD	111	0801545 UCT-WMT (18X4) VT CUS	111	0801654 CES-LRG-BK-32	214	0814788 KLM 3-L	67	
0801449 UCT-WMT (15X4) OG	111	0801546 UCT-WMT (18X4) BU CUS	111	0801655 CES-B10-SF-PLBK	213	0816825 EML (25,4X12,7)R	109	
0801450 UCT-WMT (15X4) GN	111	0801547 UCT-WMT (23X4) CUS	112	0801656 CES-LRG-BK-33	214	0828774 US-EMP (17X15)	94	
0801451 UCT-WMT (15X4) VT	111	0801548 UCT-WMT (23X4) YE CUS	112	0801657 CES-SRG-BK-2X5	215	0828777 US-EMP (27X15)	94	
0801452 UCT-WMT (15X4) BU	111	0801549 UCT-WMT (23X4) RD CUS	112	0801658 CES-B24-SFFS-PLBK	213	0828780 US-EMP (49X15)	94	
0801453 UCT-WMT (23X4)	112	0801550 UCT-WMT (23X4) OG CUS	112	0801659 CES-B16-SFFS-PLBK	213	0828781 US-EMP (60X15)	94	
0801454 UCT-WMT (23X4) YE	112	0801551 UCT-WMT (23X4) GN CUS	112	0801660 CES-B10-SFFS-PLBK	213	0828842 US-EMP (17X15) YE	94	
0801455 UCT-WMT (23X4) RD	112	0801552 UCT-WMT (23X4) VT CUS	112	0801661 CES-B24-HFFS-PLBK	212	0828843 US-EMP (17X15) SR	94	
0801456 UCT-WMT (23X4) OG	112	0801553 UCT-WMT (23X4) BU CUS	112	0801662 CES-B16-HFFS-PLBK	212	0828848 US-EMP (27X15) YE	94	
0801457 UCT-WMT (23X4) GN	112	0801556 UCT-EM (20X9) CUS	87	0801663 CES-B10-HFFS-PLBK	212	0828849 US-EMP (27X15) SR	94	
0801459 UCT-WMT (23X4) VT	112	0801557 UCT-EM (20X9) YE CUS	87	0801664 CES-SRG-BK-2X6	215	0828854 US-EMP (49X15) YE	94	
0801460 UCT-WMT (23X4) BU	112	0801558 UCT-EM (20X9) TQ CUS	87	0801665 CES-SRG-BK-4X3	215	0828855 US-EMP (49X15) SR	94	
0801462 UCT-WMT (18X4)	111	0801559 UCT-EM (17X9) CUS	85	0801666 CES-SRG-BK-4X4	215	0828856 US-EMP (60X15) YE	94	
0801463 UCT-WMT (18X4) YE	111	0801560 UCT-EM (17X9) YE CUS	85	0801667 CES-SRG-BK-1ASH-L	215	0828857 US-EMP (60X15) SR	94	
0801464 UCT-WMT (18X4) RD	111	0801561 UCT-EM (20X8) CUS	87	0801668 CES-SRG-BK-2ASH-LR	215	0829366 CARRIER-EMP (1000X15) GY	94	
0801465 UCT-WMT (18X4) OG	111	0801566 UCT-EM (17,5X7,5) CUS	85	0801669 CES-SRG-BK-2ASH-LL	215	0829439 US-EMP (20X9)	232	
0801466 UCT-WMT (18X4) GN	111	0801567 UCT-EM (17X10) CUS	85	0801670 CES-SRG-BK	214	0829520 CARRIER-EMP (1000X15) COVER	94	
0801467 UCT-WMT (18X4) VT	111	0801568 UCT-EM (10X5) CUS	82	0801671 CES-LRG-BK	214	0829521 US-EMP (100X15)	94	
0801468 UCT-WMT (18X4) BU	111	0801569 UCT-EM (17X10) YE CUS	85	0801672 CES-STPG-GY-2	216	0829522 US-EMP (100X15) YE	94	

Index

Numerical

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
0829523	US-EMP (100X15) SR	94	0830358	US-EMP (52,5X15) YE CUS	95	0830445	PML-W204 (50X50)	106	0830623	EML-HA (19X6)R CUS	103
0829530	CARRIER-EMP (1000X15) TR	94	0830359	US-EMP (52,5X15) SR CUS	95	0830446	PML-W204 (100X100)	106	0830624	EML-HA (20X20)R CUS	103
0829542	THERMOMARK-RIBBON 110 GN	76	0830360	US-EMP (52,5X15) RD CUS	95	0830447	PML-W204 (200X200)	106	0830625	EML-HA (26.5X12)R CUS	103
0829543	THERMOMARK-RIBBON 110 RD	76	0830361	US-EMP (70X15) CUS	95	0830448	PML-W205 (50X50)	106	0830626	EML-HA (40X8)R CUS	103
0829544	THERMOMARK-RIBBON 110 BU	76	0830362	US-EMP (70X15) YE CUS	95	0830449	PML-W205 (100X100)	106	0830627	EML-HA (40X15)R CUS	103
0829559	CARRIER-L-EMP (1000X15) GY	94	0830363	US-EMP (70X15) SR CUS	95	0830450	PML-W205 (200X200)	106	0830628	EML-HA (60X30)R CUS	103
0829560	CARRIER-L-EMP (1000X15) TR	94	0830364	US-EMP (70X15) RD CUS	95	0830451	PML-W200 (25X25)R	104	0830629	EML-HA (70X32)R CUS	103
0830025	US-EMP (17X15) CUS	95	0830365	US-EMLP (40X10) CUS	96	0830452	PML-W200 (50X50)R	104	0830630	EML-HA (70X150)R CUS	103
0830026	US-EMP (17X15) YE CUS	95	0830366	US-EMLP (40X10) YE CUS	96	0830453	PML-W200 (100X100)R	104	0830631	EML-HA (76X51)R CUS	103
0830027	US-EMP (17X15) SR CUS	95	0830367	US-EMLP (40X10) SR CUS	96	0830454	PML-W201 (25X25)	106	0830632	EML-HA (85X32)R CUS	103
0830036	US-EMP (27X15) CUS	95	0830368	US-EMLSP (28X10) CUS	97	0830455	PML-W201 (50X50)	106	0830633	EML-HA (15X9)R SR CUS	103
0830037	US-EMP (27X15) YE CUS	95	0830369	US-EMLSP (28X10) YE CUS	97	0830456	PML-W201 (100X100)	106	0830634	EML-HA (19X6)R SR CUS	103
0830038	US-EMP (27X15) SR CUS	95	0830370	US-EMLSP (28X10) SR CUS	97	0830457	PML-W201 (200X200)	106	0830635	EML-HA (20X20)R SR CUS	103
0830049	US-EMP (49X15) CUS	95	0830371	US-EMLP (8,8X15) CUS	96	0830458	PML-W300 (52X26)	104	0830636	EML-HA (26.5X12)R SR CUS	103
0830050	US-EMP (49X15) YE CUS	95	0830372	US-EMLP (8,8X15) YE CUS	96	0830459	PML-W300 (74X37)R	104	0830637	EML-HA (40X8)R SR CUS	103
0830051	US-EMP (49X15) SR CUS	95	0830373	US-EMLP (8,8X15) SR CUS	96	0830460	PML-W300 (105X52)R	104	0830638	EML-HA (40X15)R SR CUS	103
0830052	US-EMP (60X15) CUS	95	0830374	US-EMLP (8,8X15) RD CUS	96	0830461	PML-W301 (52X26)	107	0830639	EML-HA (60X30)R SR CUS	103
0830053	US-EMP (60X15) YE CUS	95	0830375	US-EMLP (35X15) CUS	96	0830462	PML-W301 (74X37)	107	0830640	EML-HA (70X32)R SR CUS	103
0830054	US-EMP (60X15) SR CUS	95	0830376	US-EMLP (35X15) YE CUS	96	0830463	PML-W301 (105X52)	107	0830641	EML-HA (70X150)R SR CUS	103
0830061	US-EMP (100X15) CUS	95	0830377	US-EMLP (35X15) SR CUS	96	0830464	PML-W301 (200X100)	107	0830642	EML-HA (76X51)R SR CUS	103
0830062	US-EMP (100X15) YE CUS	95	0830378	US-EMLP (35X15) RD CUS	96	0830465	PML-W302 (52X26)	107	0830643	EML-HA (85X32)R SR CUS	103
0830063	US-EMP (100X15) SR CUS	95	0830379	US-EMLP (52,5X15) CUS	96	0830466	PML-W302 (74X37)	107	0830644	EML-HT (15X6)R	100
0830131	STP 3,5-2	7	0830380	US-EMLP (52,5X15) YE CUS	96	0830467	PML-W302 (105X52)	107	0830645	EML-HT (20X7)R	100
0830166	EML-HT (45X5)R CUS	101	0830381	US-EMLP (52,5X15) SR CUS	96	0830468	PML-W302 (200X100)	107	0830646	EML-HT (24X4)R	100
0830167	EML-HT (50X10)R CUS	101	0830382	US-EMLP (52,5X15) RD CUS	96	0830469	PML-W303 (52X26)	107	0830647	EML-HT (25X8)R	100
0830168	EML-HT (40X15)R CUS	101	0830383	US-EMLP (70X15) CUS	96	0830470	PML-W303 (74X37)	107	0830648	EML-HT (25,4X12,7)R	100
0830169	EML-HT (8X8)R CUS	101	0830384	US-EMLP (70X15) YE CUS	96	0830471	PML-W303 (105X52)	107	0830649	EML-HT (32X10)R	100
0830170	EML-HT (15X15)R CUS	101	0830385	US-EMLP (70X15) SR CUS	96	0830472	PML-W303 (200X100)	107	0830650	EML-HT (35X6,5)R	100
0830290	GBS 3,5-25X3,5	109	0830386	US-EMLP (70X15) RD CUS	96	0830473	PML-W304 (52X26)	107	0830651	EML-HT (8X8)RL-T	101
0830291	EML (24X3)R	109	0830387	US-EMLP (104X140) CUS	96	0830474	PML-W304 (74X37)	107	0830652	EML-HT (15X6)RL-T	101
0830292	GBS 3,5-25X12	109	0830388	US-EMLP (104X140) YE CUS	96	0830475	PML-W304 (105X52)	107	0830653	EML-HT (15X15)RL-T	101
0830293	US-EMP (8,8X15)	94	0830389	US-EMLP (104X140) SR CUS	96	0830476	PML-W304 (200X100)	107	0830654	EML-HT (20X7)RL-T	101
0830295	US-EMP (35X15)	94	0830390	EMT (31X12,5)R GY CUS	99	0830477	PML-W305 (52X26)	107	0830655	EML-HT (24X4)RL-T	101
0830296	US-EMP (52,5X15)	94	0830391	EMT (35X28)R CUS	98	0830478	PML-W305 (74X37)	107	0830656	EML-HT (25X8)RL-T	101
0830297	US-EMP (70X15)	94	0830392	EMT (35X28)R YE CUS	98	0830479	PML-W305 (105X52)	107	0830657	EML-HT (25,4X12,7)RL-T	101
0830300	US-EMLP (35X15)	96	0830393	EMT (35X46)R CUS	98	0830480	PML-W305 (200X100)	107	0830658	EML-HT (32X10)RL-T	101
0830301	US-EMLP (52,5X15)	96	0830394	EMT (35X46)R YE CUS	98	0830481	EML (40X6)R	114	0830659	EML-HT (35X6,5)RL-T	101
0830302	US-EMLP (70X15)	96	0830395	EMT (EX15)R CUS	109	0830482	EML (40X6)R YE	114	0830660	EML-HT (40X15)RL-T	101
0830303	US-EMLP (8,8X15)	96	0830399	THERMOMARK CARD-UCT-MAG12	83	0830483	EML (50X10)R	114	0830661	EML-HT (45X5)RL-T	101
0830304	US-EMLP (104X140)	96	0830400	THERMOMARK CARD-UCT-MAG13	82	0830484	EML (50X10)R YE	114	0830662	EML-HT (50X10)RL-T	101
0830305	US-EMLP (104X140) YE	96	0830401	THERMOMARK CARD-UCT-MAG14	87	0830485	EML (75X10)R	114	0830663	EML-HT (15X6)R CUS	101
0830306	US-EMLP (104X140) SR	96	0830402	THERMOMARK CARD-UCT-MAG15	87	0830486	EML (75X10)R YE	114	0830664	EML-HT (20X7)R CUS	101
0830307	US-EMP (35X15) YE	94	0830403	THERMOMARK CARD-UCT-MAG16	85	0830487	EML (40X6)R CUS	114	0830665	EML-HT (24X4)R CUS	101
0830308	US-EMP (35X15) SR	94	0830404	THERMOMARK CARD-UCT-MAG17	87	0830488	EML (40X6)R YE CUS	114	0830666	EML-HT (25X8)R CUS	101
0830309	US-EMP (35X15) RD	94	0830405	THERMOMARK CARD-UCT-MAG18	85	0830489	EML (50X10)R CUS	114	0830667	EML-HT (25,4X12,7)R CUS	101
0830310	US-EMP (52,5X15) YE	94	0830406	THERMOMARK CARD-UCT-MAG19	84	0830490	EML (50X10)R YE CUS	114	0830668	EML-HT (32X10)R CUS	101
0830311	US-EMP (52,5X15) SR	94	0830407	WMTB HF (40X12)R	113	0830491	EML (75X10)R CUS	114	0830669	WML 14 (38X19)R	101
0830312	US-EMP (52,5X15) RD	94	0830408	WMTB HF (40X12)R YE	113	0830492	EML (75X10)R YE CUS	114	0830671	EMT (EX15)R	109
0830313	US-EMP (70X15) YE	94	0830409	WMTB HF (55X15)R	113	0830493	PML-W100 (25X25)R CUS	104	0830673	WML 5 (25X10)R YE	115
0830314	US-EMP (70X15) SR	94	0830410	WMTB HF (55X15)R YE	113	0830494	PML-W100 (50X50)R CUS	104	0830674	WML 6 (13X13)R YE	115
0830315	US-EMP (70X15) RD	94	0830411	WMTB HF (55X25)R	113	0830495	PML-W100 (100X100)R CUS	104	0830675	WML 14 (38X19)R YE	115
0830316	US-EMLP (8,8X15) YE	96	0830412	WMTB HF (55X25)R YE	113	0830496	PML-W200 (25X25)R CUS	104	0830676	WML 5 (25X10)RL	115
0830317	US-EMLP (8,8X15) SR	96	0830413	WMTB HF (40X12)R CUS	113	0830497	PML-W200 (50X50)R CUS	104	0830677	WML 6 (13X13)RL	115
0830318	US-EMLP (8,8X15) RD	96	0830414	WMTB HF (40X12)R YE CUS	113	0830498	PML-W200 (100X100)R CUS	104	0830678	WML 14 (25X19)RL	115
0830319	US-EMLP (35X15) YE	96	0830415	WMTB HF (55X15)R CUS	113	0830499	PML-W300 (52X26)R CUS	104	0830679	WML 14 (38X19)RL	115
0830320	US-EMLP (35X15) SR	96	0830416	WMTB HF (55X15)R YE CUS	113	0830500	PML-W300 (74X37)R CUS	104	0830680	WML 5 (25X10)R YE CUS	115
0830321	US-EMLP (35X15) RD	96	0830417	WMTB HF (55X25)R CUS	113	0830501	PML-W300 (105X52)R CUS	104	0830681	WML 6 (13X13)R YE CUS	115
0830322	US-EMLP (52,5X15) YE	96	0830418	WMTB HF (55X25)R YE CUS	113	0830600	EML-HA (15X9)R	102	0830682	WML 14 (38X19)R YE CUS	115
0830323	US-EMLP (52,5X15) SR	96	0830423	WM-CARRIER/B (48X10)LP	114	0830601	EML-HA (19X6)R	102	0830729	EML-HA (51X25)R	102
0830324	US-EMLP (52,5X15) RD	96	0830424	WM-CARRIER/B (55X15)LP	114	0830602	EML-HA (20X20)R	102	0830730	EML-HA (70X50)R	102
0830325	US-EMLP (70X15) YE	96	0830425	WM-CARRIER/B (85X15)LP	114	0830603	EML-HA (26,5X12)R	102	0830731	EML-HA (100X73)R	102
0830326	US-EMLP (70X15) SR	96	0830426	US-EMP (8,8X15) YE	94	0830604	EML-HA (40X8)R	102	0830732	EML-HA (100X90)R	102
0830327	US-EMLP (70X15) RD	96	0830427	US-EMP (8,8X15) SR	94	0830605	EML-HA (40X15)R	102	0830733	EML-HA (51X25)R SR	103
0830328	US-EMLP (40X10) SR	96	0830428	US-EMP (8,8X15) RD	94	0830606	EML-HA (60X30)R	102	0830734	EML-HA (70X50)R SR	103
0830329	US-EMLSP (28X10) SR	97	0830429	PML-W100 (25X25)R	104	0830607	EML-HA (70X32)R	102	0830735	EML-HA (100X73)R SR	103
0830340	UCT-EM (30X5) YE	108	0830430	PML-W100 (50X50)R	104	0830608	EML-HA (70X150)R	102	0830736	EML-HA (100X90)R SR	103
0830341	US-EMLP (40X10)	96	0830431	PML-W100 (100X100)R	104	0830609	EML-HA (76X51)R	102	0830737	EML-HA (51X25)R CUS	103
0830342	US-EMLP (40X10) YE	96	0830432	PML-W101 (12,5X12,5)	105	0830610	EML-HA (85X32)R	102	0830738	EML-HA (70X50)R CUS	103
0830343	US-EMLSP (28X10)	97	0830433	PML-W101 (25X25)	105	0830611	EML-HA (15X9)R SR	103	0830739	EML-HA (100X73)R CUS	103
0830344	US-EMLSP (28X10) YE	97	0830434	PML-W101 (50X50)	105	0830612	EML-HA (19X6)R SR	103	0830740	EML-HA (100X90)R SR	103
0830348	UCT-EM (30X5) YE CUS	108	0830435	PML-W101 (100X100)	105	0830613	EML-HA (20X20)R SR	103	0830741	EML-HA (51X25)R SR CUS	103
0830349	US-EMP (8,8X15) CUS	95	0830436	PML-W101 (200X200)	105	0830614	EML-HA (26,5X12)R SR	103	0830742	EML-HA (70X50)R SR CUS	103
0830350	US-EMP (8,8X15) YE CUS	95	0830437	PML-W202 (25X25)	106	0830615	EML-HA (40X8)R SR	103	0830743	EML-HA (100X73)R SR CUS	103
0830351	US-EMP (8,8X15) SR CUS	95	0830438	PML-W202 (50X50)	106	0830616	EML-HA (40X15)R SR	103	0830744	EML-HA (100X90)R SR CUS	103
0830352	US-EMP (8,8X15) RD CUS	95	0830439	PML-W202 (100X100)	106	0830617	EML-HA (60X30)R SR	103	0830751	THERMOMARK CARD-UCT-MAG20	87
0830353	US-EMP (35X15) CUS	95	0830440	PML-W202 (200X200)	106	0830618	EML-HA (70X32)R SR	103	0830752	THERMOMARK CARD-UCT-MAG21	83
0830354	US-EMP (35X15) YE CUS	95	0830441	PML-W203 (25X25)	106	0830619	EML-HA (70X150)R SR	103			
0830355	US-EMP (35X15) SR CUS	95	0830442	PML-W203 (50X50)	106	0830620	EML-HA (76X51)R SR	103			
0830356	US-EMP (35X15) RD CUS	95	0830443	PML-W203 (100X100)	106	0830621	EML-HA (85X32)R SR	103			
0830357	US-EMP (52,5X15) CUS	95	0830444	PML-W203 (200X200)	106	0830622	EML-HA (15X9)R CUS	103			

Order No. Type	Page	Order No. Type	Page	Order No. Type	Page	Order No. Type	Page
1		1403738 QPD W 4PE2,5 M20 0,5 GY	169	1404018 SAC-4P-10,0-600/M12FR FB	202	1404133 SAC-8P-M 8MS/ 0,3-PUR/M 8FS SH	189
		1403739 QPD W 4PE2,5 M20 1,0 BK	169	1404019 SAC-4P-1,5-600/M12FR-3L FB	202	1404134 SAC-8P-M 8MS/ 0,6-PUR/M 8FS SH	189
		1403740 QPD W 4PE2,5 M20 1,0 GY	169	1404020 SAC-4P-3,0-600/M12FR-3L FB	202	1404135 SAC-8P-M 8MS/ 1,5-PUR/M 8FS SH	189
		1403741 QPD W 4PE2,5 M20 FC BK	170	1404021 SAC-4P-5,0-600/M12FR-3L FB	202	1404136 SAC-8P-M 8MS/ 3,0-PUR/M 8FS SH	189
1201662 E/AL-NS 35	66	1403742 QPD W 4PE2,5 M20 FC GY	170	1404022 SAC-4P-10,0-600/M12FR-3L FB	202	1404137 SAC-8P-M 8MS/ 1,5-PUR SH	189
1201934 VDE-ISS 6	64	1403831 QPD C 4PE2,5 1X9-16 BK	168	1404023 SAC-4P-M12MS/0,3-600/M12FS FB	202	1404138 SAC-8P-M 8MS/10,0-PUR SH	189
1201947 VDE-ISS 8	65	1403832 QPD C 4PE2,5 1X6-11 GY	168	1404024 SAC-4P-M12MS/0,6-600/M12FS FB	202	1404140 SAC-8P-M 8MS/ 3,0-PUR SH	189
1204504 SZF 0-0,4X2,5	6	1403834 QPD C 4PE2,5 1X6-11 BK	168	1404025 SAC-4P-M12MS/1,5-600/M12FS FB	202	1404141 SAC-8P-M 8MS/ 5,0-PUR SH	189
1204517 SZF 1-0,6X3,5	11	1403835 QPD C 4PE2,5 2X9-16 GY	168	1404026 SAC-4P-M12MS/3,0-600/M12FS FB	202	1404147 SAC-8P- 1,5-PUR/M 8FS SH	189
1204520 SZF 2-0,8X4,0	17	1403836 QPD C 4PE2,5 2X9-16 BK	168	1404027 SAC-4P-M12MS/0,3-600/M12FR FB	202	1404148 SAC-8P- 3,0-PUR/M 8FS SH	189
1205066 SZS 1,0X4,0 VDE	59	1403837 QPD C 4PE2,5 2X6-11 GY	168	1404028 SAC-4P-M12MS/0,6-600/M12FR FB	202	1404149 SAC-8P- 5,0-PUR/M 8FS SH	189
1205082 SZS 1,2X8,0 VDE	64	1403838 QPD C 4PE2,5 2X6-11 BK	168	1404030 SAC-4P-M12MS/1,5-600/M12FR FB	202	1404150 SAC-8P-10,0-PUR/M 8FS SH	189
1205121 SZG 0,6X3,5 VDE	58	1403839 QPD C 4PE2,5 1X9-16 GY	168	1404031 SAC-4P-M12MS/3,0-600/M12FR FB	202	1404178 SAC-8P-M 8MS/ 1,5-PUR	188
1206612 SZF 3-1,0X5,5	22	1403840 QPD CW 4PE2,5 2X9-16 GY	171	1404033 SAC-4P-MS/0,3-600/M12FR-3L FB	202	1404179 SAC-8P-M 8MS/10,0-PUR	188
1208429 TSD 04 SAC	199	1403841 QPD CW 4PE2,5 2X9-16 BK	171	1404034 SAC-4P-MS/0,6-600/M12FR-3L FB	202	1404180 SAC-8P-M 8MS/ 3,0-PUR	188
1208911 SF-BIT-HEXB 5-89	232	1403843 QPD CW 4PE2,5 2X6-11 GY	171	1404035 SAC-4P-MS/1,5-600/M12FR-3L FB	202	1404181 SAC-8P-M 8MS/ 5,0-PUR	188
1212070 SF-M BH	123	1403844 QPD CW 4PE2,5 2X6-11 BK	171	1404036 SAC-4P-MS/3,0-600/M12FR-3L FB	202	1404182 SAC-8P-M 8MR/ 1,5-PUR	188
1212475 UNIFOX-CT 4,8	146	1403845 QPD CW 4PE2,5 1X9-16 GY	171	1404039 SAC-5P-M12MS/1,5-600 HD	201	1404183 SAC-8P-M 8MR/10,0-PUR	188
1212511 WIREFOX-D SR 6-1	182	1403846 QPD CW 4PE2,5 1X9-16 BK	171	1404041 SAC-5P-M12MS/3,0-600 HD	201	1404185 SAC-8P-M 8MR/ 5,0-PUR	188
1212513 SAC BIT M12-W14	199	1403847 QPD CW 4PE2,5 1X6-11 GY	171	1404042 SAC-5P-M12MS/5,0-600 HD	201	1404186 SAC-8P-M 8MR/ 3,0-PUR	188
1212538 SF-TXH SET	268	1403848 QPD CW 4PE2,5 1X6-11 BK	171	1404043 SAC-5P-M12MS/10,0-600 HD	201	1404187 SAC-8P- 1,5-PUR/M 8FS	188
1212643 SF-M SET	268	1403947 SAC-4P-M12MS/1,5-600 HD	200	1404044 SAC-5P-M12MR/1,5-600 HD	201	1404188 SAC-8P- 3,0-PUR/M 8FS	188
1212587 SF-SL 0,6X3,5-100 S-VDE	52	1403948 SAC-4P-M12MS/3,0-600 HD	200	1404046 SAC-5P-M12MR/3,0-600 HD	201	1404189 SAC-8P- 5,0-PUR/M 8FS	188
1212588 SF-SL 0,8X4,0-100 S-VDE	50	1403949 SAC-4P-M12MS/5,0-600 HD	200	1404047 SAC-5P-M12MR/5,0-600 HD	201	1404190 SAC-8P-10,0-PUR/M 8FS	188
1212610 UNIFOX-CT 4,8P	146	1403951 SAC-4P-M12MS/10,0-600 HD	200	1404048 SAC-5P-M12MR/10,0-600 HD	201	1404191 SAC-8P- 1,5-PUR/M 8FR	188
1212610 UNIFOX-CT M 7,9	152	1403952 SAC-4P-M12MR/1,5-600 HD	200	1404049 SAC-5P-1,5-600/M12FS HD	201	1404192 SAC-8P- 3,0-PUR/M 8FR	188
1212621 CUTFOX-ES	125	1403953 SAC-4P-M12MR/3,0-600 HD	200	1404050 SAC-5P-3,0-600/M12FS HD	201	1404193 SAC-8P- 5,0-PUR/M 8FR	188
1212630 ZAP 40	119	1403954 SAC-4P-M12MR/5,0-600 HD	200	1404051 SAC-5P-5,0-600/M12FS HD	201	1404194 SAC-8P-10,0-PUR/M 8FR	188
1212637 SF-THEX 2-100	123	1403955 SAC-4P-M12MR/10,0-600 HD	200	1404052 SAC-5P-10,0-600/M12FS HD	201	1404196 SAC-8P-M 8MS/ 0,3-PUR/M 8FS	188
1212638 SF-THEX 2,5-100	123	1403956 SAC-4P-1,5-600/M12FS HD	200	1404053 SAC-5P-1,5-600/M12FR HD	201	1404198 SAC-8P-M 8MS/ 0,6-PUR/M 8FS	188
1212639 SF-THEX 3-100	123	1403957 SAC-4P-3,0-600/M12FS HD	200	1404054 SAC-5P-3,0-600/M12FR HD	201	1404199 SAC-8P-M 8MS/ 1,5-PUR/M 8FS	188
1212640 SF-THEX 4-150	123	1403958 SAC-4P-5,0-600/M12FS HD	200	1404055 SAC-5P-5,0-600/M12FR HD	201	1404200 SAC-8P-M 8MS/ 3,0-PUR/M 8FS	188
1212641 SF-THEX 5-150	123	1403959 SAC-4P-10,0-600/M12FS HD	200	1404056 SAC-5P-10,0-600/M12FR HD	201	1404201 SAC-8P-M 8MS/ 0,3-PUR/M 8FR	188
1212642 SF-THEX 6-200	123	1403960 SAC-4P-1,5-600/M12FR HD	200	1404057 SAC-5P-1,5-600/M12FR-3L HD	201	1404202 SAC-8P-M 8MS/ 0,6-PUR/M 8FR	188
1212643 SF-THEX 8-200	123	1403961 SAC-4P-3,0-600/M12FR HD	200	1404059 SAC-5P-3,0-600/M12FR-3L HD	201	1404203 SAC-8P-M 8MS/ 1,5-PUR/M 8FR	188
1212644 SF-THEX 10-200	123	1403962 SAC-4P-5,0-600/M12FR HD	200	1404060 SAC-5P-5,0-600/M12FR-3L HD	201	1404204 SAC-8P-M 8MS/ 3,0-PUR/M 8FR	188
1212645 SF-BIT-HEX 2-50	123	1403963 SAC-4P-10,0-600/M12FR HD	200	1404062 SAC-5P-10,0-600/M12FR-3L HD	201	1404211 HC-CIF-B24-BFFD-FH-AL	221
1212646 SF-BIT-HEX 2,5-50	123	1403964 SAC-4P-1,5-600/M12FR-3L HD	200	1404063 SAC-5P-M12MS/0,3-600/M12FS HD	201	1404212 HC-CIF-B24-BFFD-FH-AL	221
1212647 SF-BIT-HEX 3-50	123	1403965 SAC-4P-3,0-600/M12FR-3L HD	200	1404064 SAC-5P-M12MS/0,6-600/M12FS HD	201	1404213 HC-CIF-B24-BFFD-FH-AL	221
1212648 SF-BIT-HEX 4-50	123	1403966 SAC-4P-5,0-600/M12FR-3L HD	200	1404065 SAC-5P-M12MS/1,5-600/M12FS HD	201	1404214 HC-CIF-B26-BFFD-FH-AL	221
1212649 SF-BIT-HEX 5-50	123	1403967 SAC-4P-10,0-600/M12FR-3L HD	200	1404066 SAC-5P-M12MS/3,0-600/M12FS HD	201	1404215 HC-CIF-B26-BFFD-FH-AL	221
1212650 SF-BIT-HEX 6-50	123	1403968 SAC-4P-M12MS/0,3-600/M12FS HD	200	1404067 SAC-5P-M12MS/0,3-600/M12FR HD	201	1404216 HC-CIF-B16-BFFD-FH-AL	221
1212651 SF-BIT-HEX 8-50	123	1403969 SAC-4P-M12MS/0,6-600/M12FS HD	200	1404068 SAC-5P-M12MS/0,6-600/M12FR HD	201	1404217 HC-CIF-B16-BFFD-FH-AL	221
1212686 CRIMPFOX 16-N	120	1403970 SAC-4P-M12MS/1,5-600/M12FS HD	200	1404069 SAC-5P-M12MS/1,5-600/M12FR HD	201	1404218 HC-CIF-B16-BFFD-FH-AL	221
1212687 CRIMPFOX-RCI 6-N	121	1403971 SAC-4P-M12MS/3,0-600/M12FS HD	200	1404070 SAC-5P-M12MS/3,0-600/M12FR HD	201	1404219 HC-CIF-B10-BFFD-FH-AL	221
1212688 CRIMPFOX-RC 16-N	121	1403972 SAC-4P-M12MS/0,3-600/M12FR HD	200	1404071 SAC-5P-MS/0,3-600/M12FR-3L HD	201	1404220 HC-CIF-B10-BFFD-FH-AL	221
1212689 CRIMPFOX-SC 6-N	121	1403973 SAC-4P-M12MS/0,6-600/M12FR HD	200	1404072 SAC-5P-MS/0,6-600/M12FR-3L HD	201	1404221 HC-CIF-B10-BFFD-FH-AL	221
1212690 CRIMPFOX-WF 6-N/DIE	120	1403974 SAC-4P-M12MS/1,5-600/M12FR HD	200	1404073 SAC-5P-MS/1,5-600/M12FR-3L HD	201	1404222 HC-ADV-B06-HHWH-1TGM20-PL	232
1212693 SF-PH 1-80 S-VDE	122	1403975 SAC-4P-M12MS/3,0-600/M12FR HD	200	1404075 SAC-5P-M12MS/1,5-600 FB	203	1404224 HC-ADV-B06-HHWH-1SGM20-PL	232
1212694 SF-PH 2-100 S-VDE	122	1403976 SAC-4P-MS/0,3-600/M12FR-3L HD	200	1404076 SAC-5P-M12MS/3,0-600 FB	203	1404225 HC-ADV-B06-HHWH-1TGM25-PL	232
1212695 SF-PZ 1-80 S-VDE	122	1403977 SAC-4P-MS/0,6-600/M12FR-3L HD	200	1404077 SAC-5P-M12MS/0,6-600 FB	203	1404226 HC-ADV-B06-HHWH-1SGM25-PL	232
1212696 SF-PZ 2-100 S-VDE	122	1403978 SAC-4P-MS/1,5-600/M12FR-3L HD	200	1404078 SAC-5P-M12MS/10,0-600 FB	203	1404227 HC-ADV-B10-HHWH-1TGM25-PL	233
1212697 SF-PHSL 1-80 S-VDE	122	1403979 SAC-4P-MS/3,0-600/M12FR-3L HD	200	1404079 SAC-5P-M12MR/1,5-600 FB	203	1404228 HC-ADV-B10-HHWH-1SGM25-PL	233
1212698 SF-PHSL 2-100 S-VDE	122	1403981 SAC-4P-M12MS/1,5-600 SH HD	200	1404080 SAC-5P-M12MR/3,0-600 FB	203	1404229 HC-ADV-B10-HHWH-1TGM32-PL	233
1212699 SF-PZSL 1-80 S-VDE	122	1403982 SAC-4P-M12MS/3,0-600 SH HD	200	1404081 SAC-5P-M12MR/5,0-600 FB	203	1404230 HC-ADV-B10-HHWH-1SGM32-PL	233
1212700 SF-PZSL 2-100 S-VDE	122	1403983 SAC-4P-M12MS/5,0-600 SH HD	200	1404082 SAC-5P-M12MR/10,0-600 FB	203	1404231 HC-ADV-B16-HHWH-1TGM32-PL	233
1212701 SF-SL/PH/PZ-SL SET S-VDE	122	1403984 SAC-4P-M12MS/10,0-600 SH HD	200	1404083 SAC-5P-1,5-600/M12FS FB	203	1404232 HC-ADV-B16-HHWH-1SGM32-PL	233
1302338 IS-K 4	58	1403985 SAC-4P-1,5-600/M12FS SH HD	200	1404084 SAC-5P-3,0-600/M12FS FB	203	1404233 HC-ADV-B16-HHWH-1TGM40-PL	233
1403366 VS-PPC-C1-MNNA-4Q5-EMC	205	1403986 SAC-4P-3,0-600/M12FS SH HD	200	1404085 SAC-5P-5,0-600/M12FS FB	203	1404234 HC-ADV-B16-HHWH-1SGM40-PL	233
1403367 VS-PPC-C1-MNNA-8Q5-EMC	205	1403987 SAC-4P-5,0-600/M12FS SH HD	200	1404086 SAC-5P-10,0-600/M12FS FB	203	1404235 HC-ADV-B24-HHWH-1TGM32-PL	233
1403678 VS-MP-PPC/CG-10G	205	1403989 SAC-4P-10,0-600/M12FS SH HD	200	1404088 SAC-5P-1,5-600/M12FR FB	203	1404237 HC-ADV-B24-HHWH-1SGM32-PL	233
1403681 VS-MP-PPC/CG-PO	205	1403990 SAC-4P-M12MS/0,3-600/FS SH HD	200	1404089 SAC-5P-3,0-600/M12FR FB	203	1404238 HC-ADV-B24-HHWH-1TGM40-PL	233
1403682 VS-MP-PPC/CG-PO/10G	205	1403991 SAC-4P-M12MS/0,6-600/FS SH HD	200	1404091 SAC-5P-5,0-600/M12FR FB	203	1404239 HC-ADV-B24-HHWH-1SGM40-PL	233
1403684 VS-MP-PPC/PPC-PO	205	1403992 SAC-4P-M12MS/1,5-600/FS SH HD	200	1404092 SAC-5P-10,0-600/M12FR FB	203	1404319 VS-MP-PPC/CG-FO	206
1403685 VS-MP-PPC/PPC-1G	205	1403993 SAC-4P-M12MS/3,0-600/FS SH HD	200	1404093 SAC-5P-1,5-600/M12FR-3L FB	203	1404321 VS-MP-PPC/CG-PO/FO	206
1403686 VS-MP-PPC/CG-XL-10G	205	1404002 SAC-4P-M12MS/1,5-600 FB	202	1404094 SAC-5P-3,0-600/M12FR-3L FB	203	1404324 VS-MP-PPC/CG-XL-FO	206
1403688 VS-MP-PPC/CG-XL-PO/10G	205	1404003 SAC-4P-M12MS/3,0-600 FB	202	1404095 SAC-5P-5,0-600/M12FR-3L FB	203	1404325 VS-MP-PPC/CG-XL-PO/FO	206
1403725 QPD W 4PE2,5 6-11 M20 0,5 BK	169	1404004 SAC-4P-M12MS/5,0-600 FB	202	1404096 SAC-5P-10,0-600/M12FR-3L FB	203	1404410 SACC-M12MS-12SOL-PG 9-M SH	163
1403726 QPD W 4PE2,5 6-11 M20 0,5 GY	169	1404005 SAC-4P-M12MS/10,0-600 FB	202	1404097 SAC-5P-M12MS/0,3-600/M12FS FB	203	1404411 SACC-M12MS-12SOL-PG 9-M SH	163
1403727 QPD W 4PE2,5 6-11 M20 1,0 BK	169	1404006 SAC-4P-M12MR/1,5-600 FB	202	1404098 SAC-5P-M12MS/0,6-600/M12FS FB	203	1404412 SACC-M12MR-12SOL-PG 9-M SH	163
1403728 QPD W 4PE2,5 6-11 M20 1,0 GY	169	1404007 SAC-4P-M12MR/3,0-600 FB	202	1404099 SAC-5P-M12MS/1,5-600/M12FS FB	203	1404413 SACC-M12FR-12SOL-PG 9-M SH	163
1403729 QPD W 4PE2,5 6-11 M20 FC BK	170	1404008 SAC-4P-M12MR/5,0-600 FB	202	1404101 SAC-5P-M12MS/3,0-600/M12FS FB	203	1404419 SACC-M12MS-12SOL-PG 9-M	163
1403730 QPD W 4PE2,5 6-11 M20 FC GY	170	1404009 SAC-4P-M12MR/10,0-600 FB	202	1404102 SAC-5P-M12MS/0,3-600/M12FR FB	203	1404420 SACC-M12MS-12SOL-PG 9-M	163
1403731 QPD W 4PE2,5 9-16 M20 0,5 BK	169	1404010 SAC-4P-1,5-600/M12FS FB	202	1404103 SAC-5P-M12MS/0,6-600/M12FR FB	203	1404421 SACC-M12MR-12SOL-PG 9-M	163
1403732 QPD W 4PE2,5 9-16 M20 0,5 GY	169	1404011 SAC-4P-3,0-600/M12FS FB	202	1404104 SAC-5P-M12MS/1,5-600/M12FR FB	203	1404423 SACC-M12FR-12SOL-PG 9-M	163
1403733 QPD W 4PE2,5 9-16 M20 1,0 BK	169	1404012 SAC-4P-5,0-600/M12FS FB	202	1404105 SAC-5P-M12MS/3,0-600/M12FR FB	203	1404461 SAC-5P-M 8MSB/ 1,5-115	187
1403734 QPD W 4PE2,5 9-16 M20 1,0 GY	169	1404013 SAC-4P-10,0-600/M12FS FB	202	1404106 SAC-5P-MS/0,3-600			

Index

Numerical

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
1404466	SAC-5P-M 8MRB/ 3,0-115	187	1408850	HC-ADV-B16-SHFH-2STM32-EEE	235	1424237	SACC-DSI-M8FS-8CON-M10-L180	159	1458703	SAC-3P-M8Y/2X0,3-PUR/M 8FR	186
1404467	SAC-5P-M 8MRB/ 5,0-115	187	1408889	HC-ADV-B16-CHFH-1TTM25-EEE	235	1424238	SACC-DSI-M8MS-8CON-M8-L180	159	1458716	SAC-3P-M8Y/2X0,6-PUR/M 8FR	186
1404468	SAC-5P-M 8MRB/10,0-115	187	1408892	HC-ADV-B16-CHFH-1TTM32-EEE	235	1424239	SACC-DSI-M8FS-5CON-M10-L90 DN	159	1458729	SAC-3P-M8Y/2X1,5-PUR/M 8FR	186
1404470	SAC-5P- 1,5-115/M 8FSB	187	1408915	HC-ADV-B24-BHFF-EEE	235	1424240	SACC-DSI-M8MS-5CON-M8-L90 DN	159	1458732	SAC-3P-M8Y/2X3,0-PUR/M 8FR	186
1404471	SAC-5P- 3,0-115/M 8FSB	187	1408931	HC-ADV-B24-SHFH-2STM25-EEE	235	1424241	SACC-DSI-M8FS-5CON-M10-L180 DN	159	1458745	SAC-3P-M8Y/2X0,3-PUR/M 8FR-2L	186
1404473	SAC-5P- 5,0-115/M 8FSB	187	1408957	HC-ADV-B24-SHFH-2STM32-EEE	235	1424242	SACC-DSI-M8MS-5CON-M8-L180 DN	159	1458758	SAC-3P-M8Y/2X0,6-PUR/M 8FR-2L	186
1404474	SAC-5P-10,0-115/M 8FSB	187	1408973	HC-ADV-B16-CHFH-1TTM40-EEE	235	1424243	SACC-DSI-M8FS-6CON-M10-L90 SH	159	1458761	SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L	186
1404475	SAC-5P- 1,5-115/M 8FRB	187	1408986	HC-ADV-B24-CHFH-1TTM25-EEE	235	1424244	SACC-DSI-M8MS-6CON-M8-L90 SH	159	1458774	SAC-3P-M8Y/2X3,0-PUR/M 8FR-2L	186
1404476	SAC-5P- 3,0-115/M 8FRB	187	1408999	HC-ADV-B24-CHFH-1TTM32-EEE	235	1424245	SAC-4P-MSS/ 5,0-PUR PE SH SCO	190	1459016	PV-CFA-S01-2,5/1,0	181
1404477	SAC-5P- 5,0-115/M 8FRB	187	1409008	HC-ADV-B24-CHFH-1TTM40-EEE	235	1457982	SAC- 1,5/0,1-116/2XA-1L-Z	194	1459209	PV-CFA-S01-2,5/1,1	181
1404478	SAC-5P-10,0-115/M 8FRB	187	1409354	HC-B 16-TFQ-H/O1STM32S	226	1457995	SAC- 3,0/0,1-116/2XA-1L-Z	194	1459032	PV-CFA-S01-2,5/1,2	181
1404479	SAC-5P-M 8MSB/ 0,3-115/M 8FSB	187	1409367	HC-B 24-TFQ-H-O1STM32S	227	1458004	SAC- 5,0/0,1-116/2XA-1L-Z	194	1459045	PV-CFA-S01-2,5/1,3	181
1404480	SAC-5P-M 8MSB/ 0,6-115/M 8FSB	187	1409419	HC-Q 12-I-CT-F	230	1458017	SAC-10,0/0,1-116/2XA-1L-Z	194	1459058	PV-CFA-S01-2,5/1,4	181
1404481	SAC-5P-M 8MSB/ 1,5-115/M 8FSB	187	1409422	HC-Q 12-I-CT-M	230	1458020	SAC- 1,5/0,15-116/2XA-1L-Z	194	1459061	PV-CFA-S01-2,5/1,5	181
1404482	SAC-5P-M 8MSB/ 3,0-115/M 8FSB	187	1409435	HC-Q 12-COD	230	1458033	SAC- 3,0/0,15-116/2XA-1L-Z	194	1459074	PV-CMA-S01-2,5/1,0	181
1404495	SI-PP-R1A-U1A-D1B	208	1424096	SAC-4P-FSS/ 1,5-PUR PE SH SCO	190	1458046	SAC- 5,0/0,15-116/2XA-1L-Z	194	1459087	PV-CMA-S01-2,5/1,1	181
1404496	SI-PP-R1A-D1A	208	1424097	SAC-4P-FSS/ 3,0-PUR PE SH SCO	190	1458059	SAC-10,0/0,15-116/2XA-1L-Z	194	1459090	PV-CMA-S01-2,5/1,2	181
1404497	SI-PP-R1A-U1A-D1A	208	1424098	SAC-4P-FSS/ 5,0-PUR PE SH SCO	190	1458062	SAC- 1,5/0,2-116/2XA-1L-Z	194	1459120	PV-CMA-S01-2,5/1,3	181
1404499	SI-PP-R1A-U1A	208	1424099	SAC-4P-FSS/10,0-PUR PE SH SCO	190	1458075	SAC- 3,0/0,2-116/2XA-1L-Z	194	1459113	PV-CMA-S01-2,5/1,4	181
1404500	SI-PP-R1A-D1E	208	1424100	SAC-4P-FRS/ 1,5-PUR PE SH SCO	190	1458088	SAC- 5,0/0,2-116/2XA-1L-Z	194	1459126	PV-CMA-S01-2,5/1,5	181
1404501	SI-PP-D1A	208	1424101	SAC-4P-FRS/ 3,0-PUR PE SH SCO	190	1458091	SAC-10,0/0,2-116/2XA-1L-Z	194	1459197	PV-CFA-S02-4/1,0	181
1404502	SI-PP-R1A-D1B-D3B	208	1424102	SAC-4P-FRS/ 5,0-PUR PE SH SCO	190	1458101	SAC-MS/0,1-116/2XA-1L-Z SCO	196	1459207	PV-CFA-S02-4/1,1	181
1404503	SI-PP-R1A-R2A-2U1A	208	1424103	SAC-4P-FRS/10,0-PUR PE SH SCO	190	1458114	SAC-MS/0,15-116/2XA-1L-Z SCO	196	1459210	PV-CFA-S02-4/1,3	181
1404504	SI-PP-R1A-D1B-U1A/O,7	208	1424104	SAC-4P-MSS/ 1,5-PUR PE SH SCO	190	1458127	SAC-MS/0,2-116/2XA-1L-Z SCO	196	1459223	PV-CFA-S02-4/1,4	181
1404505	SI-PP-U1A	208	1424105	SAC-4P-MSS/ 3,0-PUR PE SH SCO	190	1458130	SAC-MR/0,1-116/2XA-1L-Z SCO	196	1459236	PV-CFA-S02-4/1,5	181
1404506	SI-PP-2R1A-U1A	208	1424107	SAC-4P-MSS/10,0-PUR PE SH SCO	190	1458143	SAC-MR/0,15-116/2XA-1L-Z SCO	196	1459249	PV-CMA-S02-4/1,0	181
1404507	SI-PP-R1A-D1A-D1C	208	1424108	SAC-4P-MRS/ 1,5-PUR PE SH SCO	190	1458156	SAC-MR/0,2-116/2XA-1L-Z SCO	196	1459252	PV-CMA-S02-4/1,2	181
1404509	SI-PP-D1D-D1E	208	1424109	SAC-4P-MRS/ 3,0-PUR PE SH SCO	190	1458169	SAC- 1,5/0,1-116/2XB-1L-Z	195	1459265	PV-CMA-S02-4/1,3	181
1404510	SI-PP-2D1D	208	1424110	SAC-4P-MRS/ 5,0-PUR PE SH SCO	190	1458172	SAC- 3,0/0,1-116/2XB-1L-Z	195	1459278	PV-CMA-S02-4/1,4	181
1404512	SI-PP-R1A-U1A/O,7	208	1424111	SAC-4P-MRS/10,0-PUR PE SH SCO	190	1458185	SAC- 5,0/0,1-116/2XB-1L-Z	195	1459281	PV-CMA-S02-4/1,5	181
1404513	SI-SES-R1A	209	1424112	SAC-4P-FST/ 1,5-PUR SH SCO	191	1458198	SAC-10,0/0,1-116/2XB-1L-Z	195	1459359	PV-CFA-S03-6/1,0	181
1404514	SI-SES-U1A/O,6	209	1424113	SAC-4P-FST/ 3,0-PUR SH SCO	191	1458208	SAC- 1,5/0,15-116/2XB-1L-Z	195	1459362	PV-CFA-S03-6/1,2	181
1404515	SI-SES-U1A/1	209	1424114	SAC-4P-FST/ 5,0-PUR SH SCO	191	1458211	SAC- 3,0/0,15-116/2XB-1L-Z	195	1459375	PV-CFA-S03-6/1,3	181
1404516	SI-PP-R1A-S0A	209	1424115	SAC-4P-FST/10,0-PUR SH SCO	191	1458224	SAC- 5,0/0,15-116/2XB-1L-Z	195	1459388	PV-CFA-S03-6/1,4	181
1404517	SI-PP-R1A	209	1424116	SAC-4P-FRT/ 1,5-PUR SH SCO	191	1458237	SAC-10,0/0,15-116/2XB-1L-Z	195	1459391	PV-CFA-S03-6/1,5	181
1404518	SI-PP-R1A-S0B	209	1424117	SAC-4P-FRT/ 3,0-PUR SH SCO	191	1458240	SAC- 1,5/0,2-116/2XB-1L-Z	195	1459404	PV-CMA-S03-6/1,0	181
1404519	SI-PP-2U1A-D2A	209	1424118	SAC-4P-FRT/ 5,0-PUR SH SCO	191	1458253	SAC- 3,0/0,2-116/2XB-1L-Z	195	1459414	PV-CMA-S03-6/1,2	181
1404520	SI-PP-2R1A	209	1424120	SAC-4P-MST/ 1,5-PUR SH SCO	191	1458266	SAC- 5,0/0,2-116/2XB-1L-Z	195	1459427	PV-CMA-S03-6/1,3	181
1404521	SI-PP-R1A-R3A	209	1424121	SAC-4P-MST/ 3,0-PUR SH SCO	191	1458279	SAC-10,0/0,2-116/2XB-1L-Z	195	1459430	PV-CMA-S03-6/1,4	181
1404522	SI-PP-U1A	209	1424122	SAC-4P-MST/ 5,0-PUR SH SCO	191	1458282	SAC-MS/0,1-116/2XB-1L-Z SCO	197	1459443	PV-CMA-S03-6/1,5	181
1404528	QPD QSK 5X2,5	172	1424123	SAC-4P-MST/10,0-PUR SH SCO	191	1458295	SAC-MS/0,15-116/2XB-1L-Z SCO	197	1459509	PV-1P-100,0/S01-2,5	185
1404529	QPD PSK 5X2,5	172	1424124	SAC-4P-MRT/ 1,5-PUR SH SCO	191	1458305	SAC-MS/0,2-116/2XB-1L-Z SCO	197	1459511	PV-1P-100,0/S02-4,0	185
1404530	CP-QPD 5X2,5	172	1424125	SAC-4P-MRT/ 3,0-PUR SH SCO	191	1458318	SAC-MR/0,1-116/2XB-1L-Z SCO	197	1459524	PV-1P-100,0/S03-6,0	185
1404531	ALU-SB	172	1424126	SAC-4P-MRT/ 5,0-PUR SH SCO	191	1458321	SAC-MR/0,15-116/2XB-1L-Z SCO	197	1459537	PV-1P-100,0/S04-10,0	185
1404548	VS-BH-M12FSX-10G-RJ45/90	207	1424127	SAC-4P-MRT/10,0-PUR SH SCO	191	1458334	SAC-MR/0,2-116/2XB-1L-Z SCO	197	1459540	PV-1P-500,0/S01-2,5	185
1404550	SAC-5P-MS/3,0-600/M12FR-3L HD	201	1424128	SAC-4P-FRT/10,0-PUR SH SCO	191	1458347	SAC- 1,5/0,1-116/2XB-1L-Z	195	1459553	PV-1P-500,0/S04-10,0	185
1404563	EV-T2-PC-M3-1AC20A-4,0M2,5H	176	1424129	SACC-MCI-MSS-4CON/0,5 PE SCO	161	1458350	SAC- 3,0/0,1-116/2XB-1L-Z	195	1459634	QPD N 4PE2,5 9-16 GY	168
1404567	EV-T2-PC-M3-3AC20A-4,0M2,5H	176	1424130	SACC-MCI-MST-4CON/0,5 SCO	161	1458363	SAC- 5,0/0,1-116/2XB-1L-Z	195	1459647	QPD N 4PE2,5 9-16 BK	168
1404568	EV-T2-PC-M3-1AC32A-4,0M6,0S	177	1424131	SACC-MSQ-P-M12MS-25-2,7 SCO	161	1458376	SAC-10,0/0,1-116/2XB-1L-Z	195	1459650	QPD N 4PE2,5 6-11 GY	168
1404569	EV-T2-PC-M3-3AC32A-4,0M6,0S	177	1424132	SACC-DSI-M12MSS-4CON-M16/0,5PE	160	1458389	SAC- 1,5/0,15-116/2XB-1L-Z	195	1459663	QPD N 4PE2,5 6-11 BK	168
1404641	SACC-M12MSS-3PECON-PG11-M	164	1424133	SACC-DSI-M12FSS-4CON-M16/0,5PE	160	1458392	SAC- 3,0/0,15-116/2XB-1L-Z	195	1459691	PV-CFA-S01-2,5/0,65	181
1404642	SACC-M12FSS-3PECON-PG11-M	164	1424134	SACC-DSI-M12FST-4CON-M16/0,5	160	1458402	SAC- 5,0/0,15-116/2XB-1L-Z	195	1459922	PV-CMA-S01-2,5/0,65	181
1404643	SACC-M12MST-3PECON-PG11-M	164	1424135	VS-FSBPX-0E-94F/0,5	207	1458415	SAC-10,0/0,15-116/2XB-1L-Z	195	1459935	PV-CFA-S02-4/1,1	181
1404644	SACC-M12FST-3PECON-PG11-M	164	1424136	SACC-DSI-M12MST-4CON-M16/0,5	160	1458428	SAC- 1,5/0,2-116/2XB-1L-Z	195	1459948	PV-CMA-S02-4/1,1	181
1404741	SACC-M12MSS-3PECON-PG9-L180 SCO	207	1424137	SACC-E-M12FSS-4CON-M16/0,5 PE	160	1458431	SAC- 3,0/0,2-116/2XB-1L-Z	195	1459951	PV-CFA-S03-6/1,1	181
1404876	EV-T2-PC-M3-1AC20A-4,0M2,5S	176	1424138	SACC-E-M12FST-4CON-M16/0,5	160	1458444	SAC- 5,0/0,2-116/2XB-1L-Z	195	1459964	PV-CMA-S03-6/1,1	181
1404877	EV-T2-PC-M3-3AC20A-4,0M2,5S	176	1424139	SACC-E-M12MSS-4CON-M16/0,5 PE	160	1458457	SAC-10,0/0,2-116/2XB-1L-Z	195	1460021	HC-B 6-TFL-H-O1PG21G	222
1405192	EV-T2-PC-M3-1AC20A-4,0M2,5HBK	176	1424140	SACC-E-M12MST-4CON-M16/0,5	160	1458460	SAC-MS/0,1-116/2XB-1L-Z SCO	197	1460022	HC-B 6-TFL-H-O1PG21S	222
1405193	EV-T2-PC-M3-1AC20A-4,0M2,5SBK	176	1424148	VS-FSBPX-0E-94F/1,0	207	1458473	SAC-MS/0,15-116/2XB-1L-Z SCO	197	1460023	PV-CFA-S01-2,5/0,65	181
1405194	EV-T2-C-M3-1AC20A-4,0M2,5HRD	177	1424151	VS-FSBPX-0E-94F/2,0	207	1458486	SAC-MS/0,2-116/2XB-1L-Z SCO	197	1460024	HC-B 6-TFL-H-O1PG29S	222
1405195	EV-T2-C-M3-1AC20A-4,0M2,5HBK	177	1424164	VS-FSBPX-0E-94F/5,0	207	1458499	SAC-MR/0,1-116/2XB-1L-Z SCO	197	1460027	HC-B 6-TFL-H-O1STM25G	222
1405197	EV-T2-C-M3-3AC20A-4,0M2,5HBK	177	1424177	SACC-DSI-FSX-8CON-M16-L180 SCO	207	1458509	SAC-MR/0,15-116/2XB-1L-Z SCO	197	1460028	HC-B 6-TFL-H-O1STM25S	222
1405198	EV-T2-C-M3-1AC32A-4,0M6,0SBK	177	1424180	SACC-CI-M12FSX-8CON-L90	207	1458512	SAC-MR/0,2-116/2XB-1L-Z SCO	197	1460029	HC-B 6-TFL-H-O1STM32G	222
1405199	EV-T2-C-M3-3AC32A-4,0M6,0SBK	177	1424193	SACC-CI-M12FSY-8CON-L90	207	1458525	SAC-3P-MS/A-1L-Z SCO	192	1460030	HC-B 6-TFL-H-O1STM32S	222
1405293	VS-PPC-C1-PC-ROBK-L	205	1424194	SACC-CI-M12MS-12CON-L90	162	1458538	SAC-3P-MR/A-1L-Z SCO	192	1460034	HC-B 10-TFL-N-O1STM20G	222
1405303	VS-PPC-C2-PC-ROBK-L	205	1424195	SACC-CI-M12FS-12CON-L90	162	1458541	SAC-3P-MS/B-1L-Z SCO	193	1460035	HC-B 10-TFL-N-O1STM20S	222
1405316	VS-PPC-F1-PC-POBK	205	1424196	SACC-CI-M12MS-17CON-L90	162	1458554	SAC-3P-MR/B-1L-Z SCO	193	1460036	HC-B 10-TFL-N-O1PG16G	222
1406056	VS-M12MS-IP20-93E-LI/2,0	355	1424197	SACC-CI-M12FS-17CON-L90	162	1458567	SAC-3P-MS/BI-1L-Z SCO	193	1460039	HC-B 10-TFL-N-O1STM25G	222
1408614	HC-ADV-B06-BHFF-EEE	234	1424198	SACC-CI-M12MS-12CON-L90 SH	162	1458570	SAC-3P-MR/BI-1L-Z SCO	193	1460040	HC-B 10-TFL-N-O1STM25S	222
1408630	HC-ADV-B06-SHFH-2STM20-EEE	234	1424199	SACC-CI-M12FS-12CON-L90 SH	162	1458583	SAC-4P-MS/A-1L-Z D SCO	193	1460041	HC-B 10-TFL-N-O1STM20S	222
1408656	HC-ADV-B06-SHFH-2STM25-EEE	234	1424200	SACC-CI-M12MS-17CON-L90 SH	162	1458596	SAC-5P-MS/AD-2L SCO	192	1460042	HC-B 10-KMQ-N-O1PG16	228
1408685	HC-ADV-B06-CHFH-1TTM20-EEE	234	1424201	SACC-CI-M12FS-17CON-L90 SH	162	1458606	SAC-5P-MR/AD-2L SCO	192	1460048	HC-B 10-TFL-H-O1PG21G	222
1408698	HC-ADV-B06-CHFH-1TTM25-EEE	234	1424229	SACC-DSI-M8FS-8CON-M10/0,5	158	1458622	SAC-3P-M8Y/2X				

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
1460062	HC-B 10-TFQ-N-O1STM20S	226	1460276	HC-B 24-KMQ-N-O1STM32	229	1613454	ST-8CS1N8A8K03S	166	1792122	PLH 5/ 4-7,5-ZF	259
1460063	HC-B 10-TFQ-N-O1PG16G	226	1460280	HC-B 6-KML-H-O1PG21	224	1613495	ST-8CS1N8A8K04S	166	1792135	PLH 5/ 5-7,5-ZF	259
1460066	HC-B 10-TFQ-N-O1STM25G	226	1460281	HC-B 6-KML-H-O1PG29	224	1613496	ST-8CS1N8A8K05S	166	1792148	PLH 5/ 6-7,5-ZF	259
1460067	HC-B 10-TFQ-N-O1STM25S	226	1460283	HC-B 6-KML-H-O1STM25	224	1613497	ST-17P1N8A9K02S	166	1792151	PLH 5/ 7-7,5-ZF	259
1460068	HC-B 10-TFQ-N-O1PG16S	226	1460284	HC-B 6-KML-H-O1STM32	224	1613896	ST-17P1N8A9K03S	166	1792164	PLH 5/ 8-7,5-ZF	259
1460074	HC-B 10-TFQ-H-O1PG21G	226	1460287	HC-B 10-KML-N-O1PG16	224	1614532	ST-17P1N8A9K04S	166	1792177	PLH 5/ 9-7,5-ZF	259
1460075	HC-B 10-TFQ-H-O1PG21S	226	1460289	HC-B 10-KML-H-O1PG29	224	1615961	SF-10KP320	166	1792180	PLH 5/ 10-7,5-ZF	259
1460076	HC-B 10-TFQ-H-O1PG29G	226	1460291	HC-B 10-KML-H-O1STM25	224	1615963	SF-10KP350	166	1792193	PLH 5/ 11-7,5-ZF	259
1460077	HC-B 10-TFQ-H-O1PG29S	226	1460292	HC-B 10-KML-H-O1STM32	224	1617795	ST-17P1N8A9K05S	166	1792203	PLH 5/ 12-7,5-ZF	259
1460080	HC-B 10-TFQ-H-O1STM25G	226	1460293	HC-B 24-TFL-N-O1PG29G	223	1617799	ST-08P1N8A9K02S	166	1792216	PLA 5/ 1-7,5	259
1460081	HC-B 10-TFQ-H-O1STM25S	226	1460297	HC-B 24-TFL-N-O1STM32G	223	1617813	ST-08P1N8A9K03S	166	1792229	PLA 5/ 2-7,5-ZF	259
1460082	HC-B 10-TFQ-H-O1STM32G	226	1460298	HC-B 10-KMQ-H-O1PG21	228	1617830	ST-08P1N8A9K04S	166	1792232	PLA 5/ 3-7,5-ZF	259
1460083	HC-B 10-TFQ-H-O1STM32S	226	1460299	HC-B 10-KMQ-H-O1PG29	228	1617834	ST-08P1N8A9K05S	166	1792245	PLA 5/ 4-7,5-ZF	259
1460089	HC-B 16-KMQ-N-O1STM25	228	1460301	HC-B 10-KMQ-H-O1STM25	228	1617835	ST-8CP1N8A9K02S	166	1792258	PLA 5/ 5-7,5-ZF	259
1460093	HC-B 16-KMQ-N-O1STM32	228	1460302	HC-B 10-KMQ-H-O1STM32	228	1617836	ST-8CP1N8A9K03S	166	1792261	PLA 5/ 6-7,5-ZF	259
1460095	HC-B 16-TFL-N-O1STM32G	223	1460306	HC-B 16-KML-H-O1PG21	225	1617841	ST-8CP1N8A9K04S	166	1792274	PLA 5/ 7-7,5-ZF	259
1460100	HC-B 16-TFL-N-O1STM25G	223	1460307	HC-B 16-KML-H-O1PG29	225	1617844	ST-8CP1N8A9K05S	166	1792287	PLA 5/ 8-7,5-ZF	259
1460101	HC-B 16-TFL-N-O1PG21G	223	1460309	HC-B 16-KML-H-O1STM40	225	1617863	ST-17P1N8ACK02S	167	1792290	PLA 5/ 9-7,5-ZF	259
1460102	HC-B 16-TFL-N-O1STM25S	223	1460312	HC-B 16-KMQ-H-O1STM32	228	1617872	ST-17P1N8ACK03S	167	1792300	PLA 5/ 10-7,5-ZF	259
1460103	HC-B 16-TFL-N-O1PG21S	223	1460313	HC-B 16-KMQ-H-O1PG21	228	1617873	ST-17P1N8ACK04S	167	1792313	PLA 5/ 11-7,5-ZF	259
1460109	HC-B 16-TFL-N-O1STM32S	223	1460314	HC-B 16-KMQ-H-O1PG29	228	1617874	ST-17P1N8ACK05S	167	1792326	PLA 5/ 12-7,5-ZF	259
1460118	HC-B 16-TFL-H-O1PG21G	223	1460315	HC-B 16-KMQ-H-O1STM25	228	1617925	ST-08P1N8ACK02S	167	1792517	FKC 2,5/ 9-7,5-LR	241
1460119	HC-B 16-TFL-H-O1PG21S	223	1460316	HC-B 10-KML-N-O1STM20	224	1617929	ST-08P1N8ACK03S	167	1792520	FKC 2,5/ 3-ST-5,08-LR	241
1460120	HC-B 16-TFL-H-O1PG29G	223	1460325	HC-B 24-KML-H-O1STM32	225	1617932	ST-08P1N8ACK04S	167	1792533	FKC 2,5/ 4-ST-5,08-LR	241
1460121	HC-B 16-TFL-H-O1PG29S	223	1460326	HC-B 24-KML-H-O1STM40	225	1617933	ST-08P1N8ACK05S	167	1792546	FKC 2,5/ 5-ST-5,08-LR	241
1460124	HC-B 16-TFL-H-O1STM25G	223	1460329	HC-B 24-KMQ-H-O1PG21	229	1617935	ST-8CP1N8ACK02S	167	1792559	FKC 2,5/ 6-ST-5,08-LR	241
1460125	HC-B 16-TFL-H-O1STM32S	223	1460330	HC-B 24-KMQ-H-O1PG29	229	1617936	ST-8CP1N8ACK03S	167	1792562	FKC 2,5/ 7-ST-5,08-LR	241
1460126	HC-B 16-TFL-H-O1STM40S	223	1460332	HC-B 24-TFQ-N-O1PG29G	227	1617937	ST-8CP1N8ACK04S	167	1792575	FKC 2,5/ 8-ST-5,08-LR	241
1460127	HC-B 16-TFL-H-O1STM40S	223	1460335	HC-B 24-KMQ-H-O1STM32	229	1617948	ST-8CP1N8ACK05S	167	1792588	FKC 2,5/ 9-ST-5,08-LR	241
1460128	HC-B 16-TFQ-N-O1STM25G	226	1460336	HC-B 24-KMQ-H-O1STM40	229	1617949	ST-17P1N8AWQ10S	167	1792591	FKC 2,5/ 10-ST-5,08-LR	241
1460129	HC-B 16-TFQ-N-O1PG21G	226	1460339	HC-B 6-TFL-N-O1STM20G	222	1617950	ST-08P1N8AWQ10S	167	1792601	FKC 2,5/ 11-ST-5,08-LR	241
1460130	HC-B 16-TFQ-N-O1STM25S	226	1460340	HC-B 6-TFL-N-O1PG13,5G	222	1617951	ST-8CP1N8AWQ10S	167	1792614	FKC 2,5/ 12-ST-5,08-LR	241
1460131	HC-B 16-TFQ-N-O1PG21S	226	1460341	HC-B 6-TFL-N-O1PG16G	222	1617993	ST-Z0016	166	1792627	CC 2,5/ 2-GF-5,08-LR P26THR	242
1460134	HC-B 16-TFQ-N-O1STM32G	226	1460342	HC-B 24-TFL-H-O1PG21G	223	1618049	ST-Z0017	166	1792630	CC 2,5/ 3-GF-5,08-LR P26THR	242
1460137	HC-B 6-KML-N-O1STM20	224	1460346	HC-B 6-TFL-N-O1STM20S	222	1618050	ST-Z0018	166	1792643	CC 2,5/ 4-GF-5,08-LR P26THR	242
1460146	HC-B 16-TFQ-H-O1PG21G	226	1460347	HC-B 6-TFL-N-O1STM25S	222	1618239	ST-10KS010	166	1792656	CC 2,5/ 5-GF-5,08-LR P26THR	242
1460147	HC-B 16-TFQ-H-O1PG21S	226	1460348	HC-B 6-TFL-N-O1PG13,5S	222	1618251	ST-10KS020	166	1792669	CC 2,5/ 6-GF-5,08-LR P26THR	242
1460148	HC-B 16-TFQ-H-O1PG29G	226	1460349	HC-B 6-TFL-N-O1PG16S	222	1618254	ST-10KS030	166	1792672	CC 2,5/ 7-GF-5,08-LR P26THR	242
1460149	HC-B 16-TFQ-H-O1PG29S	226	1460350	HC-B 24-TFQ-H-O1PG21G	227	1618255	ST-10KP010	166	1792685	CC 2,5/ 8-GF-5,08-LR P26THR	242
1460151	HC-B 10-KMQ-N-O1STM20	228	1533576	SAC-4P- 2,0-PUR/M12FS	355	1618256	ST-10KP020	166	1792698	CC 2,5/ 9-GF-5,08-LR P26THR	242
1460155	HC-B 16-TFQ-H-O1STM32G	226	1555538	PROT-M12 FB	199	1618261	ST-10KP030	166	1792708	CC 2,5/ 10-GF-5,08-LR P26THR	242
1460157	HC-B 16-TFQ-H-O1STM40G	226	1555541	SACB-8/16-L- 5,0PVC FB	199	1627072	SF-10KP470	166	1792711	CC 2,5/ 11-GF-5,08-LR P26THR	242
1460158	HC-B 16-TFQ-H-O1STM40S	226	1555554	SACB-8/16-L-10,0PVC FB	199	1627073	SF-10KS470	166	1792724	CC 2,5/ 12-GF-5,08-LR P26THR	242
1460160	HC-B 16-TFQ-N-O1STM32S	226	1582557	QPD W 4PE2,5 6-11 M25 0,5 BK	169	1657407	VS-CABLE-STRIP-VARIO	205	1792737	CCV 2,5/ 2-GF-5,08-LR P26THR	243
1460168	HC-B 6-KML-N-O1PG13,5	224	1582558	QPD W 4PE2,5 6-11 M25 1,0 BK	169	1670772	Q-MU PG29 BK	172	1792740	CCV 2,5/ 3-GF-5,08-LR P26THR	243
1460172	HC-B 16-KML-H-O1STM32	225	1582559	QPD W 4PE2,5 6-11 M25 FC BK	170	1686533	HC-B-AF	232	1792753	CCV 2,5/ 4-GF-5,08-LR P26THR	243
1460189	HC-B 24-TFL-N-O1STM25G	223	1582561	QPD W 4PE2,5 9-16 M25 0,5 BK	169	1687419	CRIMPFOX-1,6/2,5-ED-4,0	230	1792766	CCV 2,5/ 5-GF-5,08-LR P26THR	243
1460190	HC-B 24-TFL-N-O1PG21G	223	1582562	QPD W 4PE2,5 9-16 M25 1,0 BK	169	1690778	HC-B 6-TMS-SD-IP65	232	1792779	CCV 2,5/ 6-GF-5,08-LR P26THR	243
1460191	HC-B 24-TFL-N-O1STM25S	223	1582563	QPD W 4PE2,5 9-16 M25 FC BK	170	1690781	HC-B 10-TMS-SD-IP65	233	1792782	CCV 2,5/ 7-GF-5,08-LR P26THR	243
1460192	HC-B 24-TFL-N-O1STM32S	223	1582565	QPD W 4PE2,5 M25 0,5 BK	169	1690794	HC-B 16-TMS-SD-IP65	233	1792795	CCV 2,5/ 8-GF-5,08-LR P26THR	243
1460193	HC-B 24-TFL-N-O1PG21S	223	1582566	QPD W 4PE2,5 M25 1,0 BK	169	1690804	HC-B 24-TMS-SD-IP65	233	1792805	CCV 2,5/ 9-GF-5,08-LR P26THR	243
1460194	HC-B 24-TFL-N-O1PG29S	223	1582567	QPD W 3PE2,5 M25 FC BK	170	1703083	PTS 1,5/ 2-7,5-H	261	1792818	CCV 2,5/ 10-GF-5,08-LR P26THR	243
1460198	HC-B 16-KML-N-O1PG21	225	1582569	QPD W 4PE2,5 6-11 M25 0,5 GY	169	1703084	PTS 1,5/ 3-7,5-H	261	1792821	CCV 2,5/ 11-GF-5,08-LR P26THR	243
1460206	HC-B 24-TFL-H-O1PG21S	223	1582570	QPD W 4PE2,5 6-11 M25 1,0 GY	169	1703086	PTS 1,5/ 4-7,5-H	261	1792834	CCV 2,5/ 12-GF-5,08-LR P26THR	243
1460207	HC-B 24-TFL-H-O1PG29G	223	1582571	QPD W 4PE2,5 6-11 M25 FC GY	170	1703087	PTS 1,5/ 5-7,5-H	261	1795019	PV-YC 4/ 1-0,12-SO2 (+/-)	184
1460208	HC-B 24-TFL-H-O1PG29S	223	1582573	QPD W 4PE2,5 9-16 M25 0,5 GY	169	1703088	PTS 1,5/ 6-7,5-H	261	1795022	PV-YC 4/ 1-0,12-SO2 (+/-)	184
1460212	HC-B 24-TFL-H-O1STM32G	223	1582574	QPD W 4PE2,5 9-16 M25 1,0 GY	169	1703090	PTS 1,5/ 7-7,5-H	261	1805135	PV-FT-CF-C-2,5-130-BU	180
1460213	HC-B 24-TFL-H-O1STM32S	223	1582575	QPD W 4PE2,5 9-16 M25 FC GY	170	1703091	PTS 1,5/ 8-7,5-H	261	1805148	PV-FT-CM-C-2,5-130-RD	180
1460214	HC-B 24-TFL-H-O1STM40S	223	1582577	QPD W 4X2,5 M25 0,5 GY	169	1703093	PTS 1,5/ 9-7,5-H	261	1805151	PV-FT-CF-C-4-130-BU	180
1460215	HC-B 24-TFL-H-O1STM40S	223	1582578	QPD W 4PE2,5 M25 1,0 GY	169	1703094	PTS 1,5/ 10-7,5-H	261	1805164	PV-FT-CM-C-4-130-RD	180
1460217	HC-B 16-KMQ-N-O1PG21	228	1582579	QPD W 4X2,5 M25 FC GY	170	1703095	PTS 1,5/ 11-7,5-H	261	1805177	PV-FT-CF-C-6-130-BU	180
1460218	HC-B 24-TFQ-N-O1STM25G	227	1604638	HC-B-AF-SET	232	1703096	PTS 1,5/ 12-7,5-H	261	1805180	PV-FT-CM-C-6-130-RD	180
1460219	HC-B 24-TFQ-N-O1STM25S	227	1607031	SF-10KS320	166	1774674	PV-CF-S 2,5-6 (+)	182	1805517	PTS 1,5/ 2-PH-5,0	261
1460222	HC-B 24-TFQ-N-O1STM32G	227	1607032	SF-10KS350	166	1774687	PV-CM-S 2,5-6 (-)	182	1805520	PTS 1,5/ 3-PH-5,0	261
1460223	HC-B 24-TFQ-N-O1STM32S	227	1607577	ST-06KP010	166	1775631	PV-C PLUG	182	1805533	PTS 1,5/ 4-PH-5,0	261
1460224	HC-B 24-TFQ-N-O1PG21S	227	1607578	ST-06KP020	166	1775880	PV-FT-C NUT BK	180	1805546	PTS 1,5/ 5-PH-5,0	261
1460226	HC-B 24-KML-N-O1PG29	225	1607579	ST-06KP030	166	1780451	PV-TC (+) 10-1,5M	184	1805559	PTS 1,5/ 6-PH-5,0	261
1460229	HC-B 24-KML-N-O1STM32	225	1607580	ST-06KS010	166	1780464	PV-TC (-) 10-1,5M	184	1805562	PTS 1,5/ 7-PH-5,0	261
1460238	HC-B 24-TFQ-H-O1PG21S	227	1607581	ST-06KS020	166	1785430	PV-C PROTECTION CAP	180	1805575	PTS 1,5/ 8-PH-5,0	261
1460239	HC-B 24-TFQ-H-O1PG29G	227	1607582	ST-06KS030	166	1787700	PV-1P-500,0/SO2-4,0	185	1805588	PTS 1,5/ 9-PH-5,0	261
1460240	HC-B 24-TFQ-H-O1PG29S	227	1607770	ST-Z0001	167	1787713	PV-1P-500,0/SO3-6,0	185	1805591	PTS 1,5/ 10-PH-5,0	261
1460243	HC-B 24-TFQ-H-O1STM32G	227	1613288	ST-17S1N8A8K02S	166	1787726	PV-YC 6/ 1-0,12-SO3 (+/-)	184	1805601	PTS 1,5/ 11-PH-5,0	261
1460245	HC-B 24-TFQ-H-O1STM40S	227	1613324	ST-17S1N8A8K03S	166	1787739	PV-YC 6/ 1-0,12-SO3 (+/-)	184	1805614	PTS 1,5/ 12-PH-5,0	261
1460246	HC-B 24-TFQ-H-O1STM40S	227	1613325	ST-17S1N8A8K04S	166	1789821	PV-C1F-S 2,5-6 (+)	182	1805627	PST 1,3/ 2-5,0-SF	261
1460250	HC-B 24-KML-H-O1PG29	225	1613326	ST-17S1N8A8K05S	166	1789834	PV-C1M-S 2,5-6 (-)	182	1805630	PST 1,3/ 3-5,0-SF	261
1460251	HC-B 24-KMQ-N-O1PG29	229	1613370	ST-							

Index

Numerical

Order No. Type	Page	Order No. Type	Page	Order No. Type	Page	Order No. Type	Page
1808569 FKCS 2,5/ 2-ST-5,08-RF	247	1809720 MVSTBR 2,5/ 7-STF-5,08 EX	251	1810528 ICV 2,5/10-GF-5,08 EX	255	2200950 UM-ALU 4-100,5 FRONT 990	264
1808572 FKCS 2,5/ 3-ST-5,08-RF	247	1809733 MVSTBR 2,5/ 8-STF-5,08 EX	251	1810531 ICV 2,5/11-GF-5,08 EX	255	2200951 UM-ALU 4-100,5 COVER AL	264
1808585 FKCS 2,5/ 4-ST-5,08-RF	247	1809746 MVSTBR 2,5/ 9-STF-5,08 EX	251	1810544 ICV 2,5/12-GF-5,08 EX	255	2200952 UM-ALU 4-100,5 COVER PA BK	264
1808598 FKCS 2,5/ 5-ST-5,08-RF	247	1809759 MVSTBR 2,5/10-STF-5,08 EX	251	1810900 FKC 2,5/13-ST-5,08-LR	241	2200953 UM-ALU 4 AU45 L25	264
1808608 FKCS 2,5/ 6-ST-5,08-RF	247	1809762 MVSTBR 2,5/11-STF-5,08 EX	251	1810913 FKC 2,5/14-ST-5,08-LR	241	2200954 UM-ALU 4 AU45 L42,5	264
1808611 FKCS 2,5/ 7-ST-5,08-RF	247	1809775 MVSTBR 2,5/12-STF-5,08 EX	251	1810926 FKC 2,5/15-ST-5,08-LR	241	2200955 UM-ALU 4 AU45 L60	264
1808624 FKCS 2,5/ 8-ST-5,08-RF	247	1809788 MVSTBW 2,5/ 2-STF-5,08 EX	251	1810939 FKC 2,5/16-ST-5,08-LR	241	2200956 UM-ALU 4-100,5 L95	264
1808637 FKCS 2,5/ 9-ST-5,08-RF	247	1809791 MVSTBW 2,5/ 3-STF-5,08 EX	251	1811145 PTPM 0,4/ 5-P-2,5 PA CAT5	239	2200957 UM-ALU 4 AU45 L130	264
1808640 FKCS 2,5/10-ST-5,08-RF	247	1809801 MVSTBW 2,5/ 4-STF-5,08 EX	251	1811161 PTPM 0,2/ 5-P-2,5 PA CAT5	239	2200958 UM-ALU 4 AU45 L165	264
1808653 FKCS 2,5/11-ST-5,08-RF	247	1809814 MVSTBW 2,5/ 5-STF-5,08 EX	251	1884869 VC-EW 1,6	230	2200959 UM-ALU 4 AU45 L200	264
1808666 FKCS 2,5/12-ST-5,08-RF	247	1809827 MVSTBW 2,5/ 6-STF-5,08 EX	251			2200960 UM-ALU 4 AU45 L235	264
1808679 FKCS 2,5/13-ST-5,08-RF	247	1809830 MVSTBW 2,5/ 7-STF-5,08 EX	251			2200961 UM-ALU 4 AU45 L990	264
1808682 FKCS 2,5/14-ST-5,08-RF	247	1809843 MVSTBW 2,5/ 8-STF-5,08 EX	251			2200962 UM-ALU 4 AU75 L25	264
1808695 FKCS 2,5/15-ST-5,08-RF	247	1809856 MVSTBW 2,5/ 9-STF-5,08 EX	251			2200963 UM-ALU 4 AU75 L42,5	264
1808705 FKCS 2,5/16-ST-5,08-RF	247	1809869 MVSTBW 2,5/10-STF-5,08 EX	251			2200964 UM-ALU 4 AU75 L60	264
1808721 FKCS 2,5/ 2-STD-5,08-RN	247	1809872 MVSTBW 2,5/11-STF-5,08 EX	251			2200965 UM-ALU 4 AU75 L95	264
1808734 FKCS 2,5/ 3-STD-5,08-RN	247	1809885 MVSTBW 2,5/12-STF-5,08 EX	251				
1808747 FKCS 2,5/ 4-STD-5,08-RN	247	1809898 GMVSTBR 2,5/ 2-STF-7,62 EX	257	2200515 FL MGuard RS4000 TX/TX VPN	353	2200966 UM-ALU 4 AU75 L130	264
1808750 FKCS 2,5/ 5-STD-5,08-RN	247	1809897 GMVSTBR 2,5/ 3-STF-7,62 EX	257	2200887 HC-ALU 6-53,5 PROFILE 100	268	2200967 UM-ALU 4 LID45 L165	264
1808763 FKCS 2,5/ 6-STD-5,08-RN	247	1809908 GMVSTBR 2,5/ 3-STF-7,62 EX	257	2200888 HC-ALU 6-53,5 PROFILE 150	268	2200968 UM-ALU 4 AU75 L200	264
1808776 FKCS 2,5/ 7-STD-5,08-RN	247	1809911 GMVSTBR 2,5/ 4-STF-7,62 EX	257	2200889 HC-ALU 6-53,5 PROFILE 200	268	2200969 UM-ALU 4 AU75 L235	264
1808789 FKCS 2,5/ 8-STD-5,08-RN	247	1809924 GMVSTBR 2,5/ 5-STF-7,62 EX	257	2200890 HC-ALU 6-53,5 PROFILE 1000	268	2200970 UM-ALU 4 AU75 L990	264
1808792 FKCS 2,5/ 9-STD-5,08-RN	247	1809929 GMVSTBR 2,5/ 6-STF-7,62 EX	257	2200891 HC-ALU 6-53,5 COVER GY	268	2200971 UM-ALU 4 LID45 PA BK	264
1808802 FKCS 2,5/10-STD-5,08-RN	247	1809940 GMVSTBR 2,5/ 7-STF-7,62 EX	257	2200892 HC-ALU 6-78 PROFILE 100	268	2200972 UM-ALU 4 LID75 PA BK	264
1808802 FKCS 2,5/10-STD-5,08-RN	247	1809953 GMVSTBR 2,5/ 8-STF-7,62 EX	257	2200893 HC-ALU 6-78 PROFILE 150	268	2200973 UM-ALU 4 PE CONTACT	264
1808815 FKCS 2,5/11-STD-5,08-RN	247	1809966 GMVSTBR 2,5/ 9-STF-7,62 EX	257	2200894 HC-ALU 6-78 PROFILE 200	268	2200974 UM-ALU 4 FOOT	264
1808828 FKCS 2,5/12-STD-5,08-RN	247	1809979 GMVSTBR 2,5/10-STF-7,62 EX	257	2200895 HC-ALU 6-78 PROFILE 1000	268	2201121 HC-ALU 6-53,5 DKL-COVER GY	268
1808831 FKCS 2,5/13-STD-5,08-RN	247	1809982 GMVSTBR 2,5/11-STF-7,62 EX	257	2200896 HC-ALU 6-78 COVER GY	268	2201122 HC-ALU 6-78 DKL-COVER GY	268
1808844 FKCS 2,5/14-STD-5,08-RN	247	1809995 GMVSTBR 2,5/12-STF-7,62 EX	257	2200897 HC-ALU 6-100,5 PROFILE 100	269	2201123 HC-ALU 6-100,5 DKL-COVER GY	269
1808857 FKCS 2,5/15-STD-5,08-RN	247	1810007 GMVSTBW 2,5/ 2-STF-7,62 EX	257	2200898 HC-ALU 6-100,5 PROFILE 150	269	2276612 PACT-FAST-MNT-W13-L40	333
1808860 FKCS 2,5/16-STD-5,08-RN	247	1810010 GMVSTBW 2,5/ 3-STF-7,62 EX	257	2200899 HC-ALU 6-100,5 PROFILE 200	269	2276625 PACT-FAST-MNT-W13-L65	333
1808886 MSTB 2,5/ 2-ST-5,08-LR	241	1810023 GMVSTBW 2,5/ 4-STF-7,62 EX	257	2200900 HC-ALU 6-100,5 PROFILE 1000	269	2276638 PACT-FAST-MNT-W16-L40	333
1808899 MSTB 2,5/ 3-ST-5,08-LR	241	1810036 GMVSTBW 2,5/ 5-STF-7,62 EX	257	2200901 HC-ALU 6-100,5 COVER GY	269	2276641 PACT-FAST-MNT-W16-L65	333
1808909 MSTB 2,5/ 4-ST-5,08-LR	241	1810049 GMVSTBW 2,5/ 6-STF-7,62 EX	257	2200902 HC-ALU 6-161 PROFILE 100	269	2313410 FL FOC PN-C-HCS-GI-200/230	317
1808912 MSTB 2,5/ 5-ST-5,08-LR	241	1810052 GMVSTBW 2,5/ 7-STF-7,62 EX	257	2200903 HC-ALU 6-161 PROFILE 150	269	2313779 PSM-SET-SC-DUPLEX/2-HCS/PN	317
1808925 MSTB 2,5/ 6-ST-5,08-LR	241	1810065 GMVSTBW 2,5/ 8-STF-7,62 EX	257	2200904 HC-ALU 6-161 PROFILE 200	269	2313782 PSM-SET-B-FOC/4-HCS/PN	317
1808938 MSTB 2,5/ 7-ST-5,08-LR	241	1810078 GMVSTBW 2,5/ 9-STF-7,62 EX	257	2200905 HC-ALU 6-161 PROFILE 1000	269	2320131 QUINT-PS/12DC/24DC/5	322
1808941 MSTB 2,5/ 8-ST-5,08-LR	241	1810081 GMVSTBW 2,5/10-STF-7,62 EX	257	2200906 HC-ALU 6-161 COVER GY	269	2320144 QUINT-PS/48DC/24DC/5	322
1808954 MSTB 2,5/ 9-ST-5,08-LR	241	1810094 GMVSTBW 2,5/11-STF-7,62 EX	257	2200907 HC-ALU 6-53,5 SEAL EMC	268	2320254 QUINT-UPS/ 24DC/ 24DC/ 5/1.3AH	318
1808967 MSTB 2,5/10-ST-5,08-LR	241	1810104 GMVSTBW 2,5/12-STF-7,62 EX	257	2200908 HC-ALU 6-78 SEAL EMC	268	2320267 QUINT-UPS/ 24DC/ 24DC/ 10/3.4AH	318
1808970 MSTB 2,5/11-ST-5,08-LR	241	1810117 IC 2,5/ 2-STF-5,08 EX	253	2200909 HC-ALU 6 DECO 200 GY	269	2320377 UPS-CAP/24DC/10A/10KJ	320
1808983 MSTB 2,5/12-ST-5,08-LR	241	1810120 IC 2,5/ 3-STF-5,08 EX	253	2200910 HC-ALU 6-161 SEAL EMC	269	2320380 UPS-CAP/24DC/20A/20KJ	320
1808996 MSTB 2,5/13-ST-5,08-LR	241	1810133 IC 2,5/ 4-STF-5,08 EX	253	2200911 HC-ALU 6 MOUNT 100 GY	268	2320416 UPS-BAT/VRLA-WTR/24DC/13AH	321
1809005 MSTB 2,5/14-ST-5,08-LR	241	1810146 IC 2,5/ 5-STF-5,08 EX	253	2200912 HC-ALU 6 MOUNT 150 GY	268	2320429 UPS-BAT/VRLA-WTR/24DC/26AH	321
1809018 MSTB 2,5/15-ST-5,08-LR	241	1810159 IC 2,5/ 6-STF-5,08 EX	253	2200913 HC-ALU 6 MOUNT 200 GY	268	2320490 IFS-RS232-DATACABLE	319
1809021 MSTB 2,5/16-ST-5,08-LR	241	1810162 IC 2,5/ 7-STF-5,08 EX	253	2200914 HC-ALU 6 DECO 100 GY	268	2320788 BATTERY MOUNTING KIT	321
1809076 MSTBA 2,5/ 2-G-5,08-LR	244	1810175 IC 2,5/ 8-STF-5,08 EX	253	2200915 HC-ALU 6 DECO 150 GY	268	2688116 AXL BK S3	356
1809089 MSTBA 2,5/ 3-G-5,08-LR	244	1810188 IC 2,5/ 9-STF-5,08 EX	253	2200916 HC-ALU 6 DECO 200 GY	268	2688129 AXL BS	357
1809092 MSTBA 2,5/ 4-G-5,08-LR	244	1810191 IC 2,5/10-STF-5,08 EX	253	2200917 UM-ALU 4-72 PROFILE 42,5	264	2688310 AXL DI 16/1	357
1809102 MSTBA 2,5/ 5-G-5,08-LR	244	1810201 IC 2,5/11-STF-5,08 EX	253	2200918 UM-ALU 4-72 PROFILE 60	264	2688349 AXL DO 16/1	358
1809115 MSTBA 2,5/ 6-G-5,08-LR	244	1810214 IC 2,5/12-STF-5,08 EX	253	2200919 UM-ALU 4-72 PROFILE 95	264	2688381 AXL DO 8/2-2A	358
1809128 MSTBA 2,5/ 7-G-5,08-LR	244	1810227 FKIC 2,5/ 2-STF-5,08 EX	253	2200920 UM-ALU 4-72 PROFILE 130	264	2688417 AXL UTH 8	359
1809131 MSTBA 2,5/ 8-G-5,08-LR	244	1810230 FKIC 2,5/ 3-STF-5,08 EX	253	2200921 UM-ALU 4-72 PROFILE 165	264	2688433 AXL SSI 1/AO 1	360
1809144 MSTBA 2,5/ 9-G-5,08-LR	244	1810243 FKIC 2,5/ 4-STF-5,08 EX	253	2200922 UM-ALU 4-72 PROFILE 200	264	2700192 FL MGuard LIC VPN-250 GROUP	352
1809157 MSTBA 2,5/10-G-5,08-LR	244	1810256 FKIC 2,5/ 5-STF-5,08 EX	253	2200923 UM-ALU 4-72 PROFILE 235	264	2700193 FL MGuard LIC VPN-250	352
1809160 MSTBA 2,5/11-G-5,08-LR	244	1810269 FKIC 2,5/ 6-STF-5,08 EX	253	2200924 UM-ALU 4-72 PROFILE 990	264	2700194 FL MGuard LIC VPN-10	352
1809173 MSTBA 2,5/12-G-5,08-LR	244	1810272 FKIC 2,5/ 7-STF-5,08 EX	253	2200925 UM-ALU 4-72 FRONT 42,5	264	2700270 FL SD FLASH/MRM	352
1809186 MSTBA 2,5/13-G-5,08-LR	244	1810285 FKIC 2,5/ 8-STF-5,08 EX	253	2200926 UM-ALU 4-72 FRONT 60	264	2700453 NLC-055-024D-081-04QTP-00A	337
1809199 MSTBA 2,5/14-G-5,08-LR	244	1810298 FKIC 2,5/ 9-STF-5,08 EX	253	2200927 UM-ALU 4-72 FRONT 95	264	2700464 NLC-055-024D-081-04QRD-05A	336
1809209 MSTBA 2,5/15-G-5,08-LR	244	1810308 FKIC 2,5/10-STF-5,08 EX	253	2200928 UM-ALU 4-72 FRONT 130	264	2700486 NLC-055-012D-081-04QRD-05A	337
1809212 MSTBA 2,5/16-G-5,08-LR	244	1810311 FKIC 2,5/11-STF-5,08 EX	253	2200929 UM-ALU 4-72 FRONT 165	264	2700487 NLC-055-100A-081-04QRA-05A	337
1809267 MSTBVA 2,5/ 2-G-5,08-LR	245	1810324 FKIC 2,5/12-STF-5,08 EX	253	2200930 UM-ALU 4-72 FRONT 200	264	2700488 FL WLAN EPA 5N	355
1809270 MSTBVA 2,5/ 3-G-5,08-LR	245	1810337 IC 2,5/ 2-GF-5,08 EX	255	2200931 UM-ALU 4-72 FRONT 235	264	2700518 AXL SWITCH SET	359
1809283 MSTBVA 2,5/ 4-G-5,08-LR	245	1810340 IC 2,5/ 3-GF-5,08 EX	255	2200932 UM-ALU 4-72 FRONT 990	264	2700621 TP 5120T	365
1809296 MSTBVA 2,5/ 5-G-5,08-LR	245	1810353 IC 2,5/ 4-GF-5,08 EX	255	2200933 UM-ALU 4-72 COVER AL	264	2700622 TP 5150T	365
1809306 MSTBVA 2,5/ 6-G-5,08-LR	245	1810366 IC 2,5/ 5-GF-5,08 EX	255	2200934 UM-ALU 4-72 COVER PA BK	264	2700623 TP 5170T	365
1809319 MSTBVA 2,5/ 7-G-5,08-LR	245	1810379 IC 2,5/ 6-GF-5,08 EX	255	2200935 UM-ALU 4-100,5 PROFILE 42,5	264	2700634 RFC MGuard RS4000 TX/TX	352
1809322 MSTBVA 2,5/ 8-G-5,08-LR	245	1810382 IC 2,5/ 7-GF-5,08 EX	255	2200936 UM-ALU 4-100,5 PROFILE 60	264	2700642 FL MGuard RS2000 TX/TX VPN	353
1809335 MSTBVA 2,5/ 9-G-5,08-LR	245	1810395 IC 2,5/ 8-GF-5,08 EX	255	2200937 UM-ALU 4-100,5 PROFILE 95	264	2700651 FL PN/PN SDIO-2TX/2TX	344
1809348 MSTBVA 2,5/10-G-5,08-LR	245	1810405 IC 2,5/ 9-GF-5,08 EX	255	2200938 UM-ALU 4-100,5 PROFILE 130	264	2700691 FL SWITCH IRT 2TX 2P0F	346
1809351 MSTBVA 2,5/11-G-5,08-LR	245	1810418 IC 2,5/10-GF-5,08 EX	255	2200939 UM-ALU 4-100,5 PROFILE 165	264	2700784 RFC 460R PN 3TX	347
1809364 MSTBVA 2,5/12-G-5,08-LR	245	1810421 IC 2,5/11-GF-5,08 EX	255	2200940 UM-ALU 4-100,5 PROFILE 200	264	2700718 FL WLAN 5100	354
1809377 MSTBVA 2,5/13-G-5,08-LR	245	1810434 IC 2,5/12-GF-5,08 EX	255	2200941 UM-ALU 4-100,5 PROFILE 235	264	2700745 ELR 5011 IP PN	345
1809380 MSTBVA 2,5/14-G-5,08-LR	245	1810447 ICV 2,5/ 2-GF-5,08 EX	255	2200942 UM-ALU 4-100,5 PROFILE 990	264	2700775 IB IL AO 2/UI-PAC	361
1809393 MSTBVA 2,5/15-G-5,08-LR	245	1810450 ICV 2,5/ 3-GF-5,08 EX	255	2200943 UM-ALU 4-100,5 FRONT 60	264	2700784 RFC 460R PN 3TX	343
1809403 MSTBVA 2,5/16-G-5,08-LR	245	1810463 ICV 2,5/ 4-GF-5,08 EX	255	2200944 UM-ALU 4-100,5 FRONT 95	264	2700878 VMT 3012 EXP SUN	371
1809678 MVSTBR 2,5/ 2-STF-5,08 EX	251	1810476 ICV 2,5/ 5-GF-5,08 EX	255	2200945 UM-ALU 4-100,5 FRONT 130	264	2700893 IB IL RS UNI-PAC	362
1809681 MVSTBR 2,5/ 3-STF-5,08 EX	251	1810489 ICV 2,5/ 6-GF-5,08 EX	255	2200946 UM-ALU 4-100,5 FRONT 165	264	2700934 WP 10T	364
1809694 MVSTBR 2,5/ 4-STF-5,08 EX	251	1810492 ICV 2,5/ 7-GF-5,08 EX	255	2200947 UM-ALU 4-100,5 FRONT 200	264	2700935 WP 15T	364
1809704 MVSTBR 2,5/ 5-STF-5,08 EX	251	1810502 ICV 2,5/ 8-GF-5,08 EX	255	2200948 UM-ALU 4-100,5 FRONT 235	264	2700965 IB IL PM 3P/N/EF-PAC	363
1809717 MVSTBR 2,5/ 6-STF-5,08 EX	251	1810515 ICV 2,5/ 9-GF-5,08 EX	255	2200949 UM-ALU 4-100,5 FRONT 265	264	2700969 VMT 3010 EXP SUN	371

Order No. Type	Page	Order No. Type	Page	Order No. Type	Page	Order No. Type	Page
2700973 ILC 131 ETH	340	2800864 CB TM1 8A F1 P	289	2864134 MINI MCR-SL-PTB	313	2902952 ELR H51-0.6-DIN-RAIL-SET	301
2700974 ILC 151 ETH	341	2800865 CB TM1 10A F1 P	289	2865599 MACX MCR-S-MUX	313	2902953 ELR H51-2.4-DIN-RAIL-SET	301
2700975 ILC 171 ETH 2TX	341	2800866 CB TM1 12A F1 P	289	2865625 MACX MCR-PTB	315	2902954 ELR H51-9-DIN-RAIL-SET	301
2700976 ILC 191 ETH 2TX	341	2800867 CB TM1 16A F1 P	289	2866983 MINI-SYS-PS-100-240AC/24DC/1.5	316	2903034 DFLK 10/FKCT	308
2701003 VMT 3010	370	2800868 CB TM2 0.5A SFB P	287	2891030 FL SWITCH 3005	348	2903035 DFLK 14/FKCT	308
2701007 ELR 5011-2 IP PN	345	2800869 CB TM2 1A SFB P	287	2891031 FL SWITCH 3008	348	2903036 DFLK 16/FKCT	308
2701011 VL I7 250 GB HDD KIT	366	2800870 CB TM2 2A SFB P	287	2891032 FL SWITCH 3005T	349	2903038 DFLK 20/FKCT	308
2701012 VL I7 320 GB HDD KIT	366	2800871 CB TM2 3A SFB P	287	2891033 FL SWITCH 3004T-FX	349	2903039 DFLK 26/FKCT	308
2701013 VL I7 80 GB SSD KIT	366	2800872 CB TM2 4A SFB P	287	2891034 FL SWITCH 3004T-FX ST	349	2903041 DFLK 34/FKCT	308
2701014 VL I7 160 GB SSD KIT	366	2800873 CB TM2 5A SFB P	287	2891035 FL SWITCH 3008T	349	2903042 DFLK 40/FKCT	308
2701015 VL I7 HDD TRAY	366	2800874 CB TM2 6A SFB P	287	2891036 FL SWITCH 3006T-2FX	349	2903043 DFLK 50/FKCT	308
2701034 ILC 131 ETH/XC	342	2800875 CB TM2 8A SFB P	287	2891037 FL SWITCH 3006T-2FX ST	349	2903052 DFLK-D 9 SUB/MFKCT	309
2701040 NLC-IO-2AI-2AO-01	338	2800876 CB TM2 10A SFB P	287	2891246 FL PATCH SAFE CLIP	344	2903054 DFLK-D15 SUB/MFKCT	309
2701127 VL IPC P7000	366	2800877 CB TM2 12A SFB P	287	2891259 FL MEM PLUG	346	2903065 DFLK-D25 SUB/MFKCT	309
2701141 ILC 151 ETH/XC	342	2800878 CB TM2 16A SFB P	287	2891291 FL PATCH CCODE BU	344	2903056 DFLK-D37 SUB/MFKCT	309
2701177 VL PANEL+ MOUNTING KIT	367	2800879 CB TM2 0.5A M1 P	289	2891424 FL PATCH GUARD	344	2903058 DFLK-D50 SUB/MFKCT	309
2701221 NLC-NAV-01	336	2800880 CB TM2 1A M1 P	289	2891521 FL PATCH GUARD KEY	344	2903063 DFLK-D 9 SUB/F/KCT	309
2701276 NLC-OP1-COVER	336	2800881 CB TM2 2A M1 P	289	2891754 FL SFP SX	343	2903065 DFLK-D15 SUB/F/KCT	309
2701289 NLC-MOD-CAP	336	2800882 CB TM2 3A M1 P	289	2891767 FL SFP LX	343	2903067 DFLK-D25 SUB/F/KCT	309
2701292 NLC-MOD-CAP-PXC	336	2800883 CB TM2 4A M1 P	289	2891893 FL PATCH CCODE RD	344	2903069 DFLK-D37 SUB/F/KCT	309
2707437 ME 22.5 TBUS 1,5/ 5-ST-3,81 GN	316	2800884 CB TM2 5A M1 P	289	2900933 VMT HALTEWINKEL LI/RE	370	2903070 DFLK-D50 SUB/F/KCT	309
2726337 IB IL SCN-8	361	2800885 CB TM2 6A M1 P	289	2900946 VMT TISCHFUSS	370	2903098 EU5C-SWD-CAN PXC	304
2727501 IB IL FIELD 2	363	2800886 CB TM2 8A M1 P	289	2900959 VMT HALTERUNG VESA	370	2903100 EU5C-SWD-DP PXC	304
2727515 IB IL FIELD 8	363	2800887 CB TM2 10A M1 P	289	2900962 VMT GALGENANSCHLUSSADAPTER	370	2903101 EU5E-SWD-4D4D PXC	304
2730239 RFC DUAL-FAN	343	2800888 CB TM2 12A M1 P	289	2901533 RAD-DAIO6-IFS	326	2903102 EU5E-SWD-4DX PXC	304
2730611 PRG CAB MINI DIN	340	2800889 CB TM2 16A M1 P	289	2901535 RAD-DI4-IFS	326	2903103 EU5E-SWD-X8D PXC	304
2732664 IB IL AO/CNT-PLSET	362	2800890 CB TM2 0.5A F1 P	289	2901536 RAD-DOR4-IFS	327	2903104 EU5E-SWD-2A2A PXC	304
2732668 IBS IP 400 MBH-F	345	2800891 CB TM2 1A F1 P	289	2901537 RAD-AI4-IFS	327	2903106 SWD4-RC8-10 PXC	304
2734031 IBS IP 400 MBH/MS-F	345	2800892 CB TM2 2A F1 P	289	2901538 RAD-AO4-IFS	327	2903107 SWD4-8SF2-5 PXC	304
2800768 PT-IQ-PTB-UT	276	2800893 CB TM2 3A F1 P	289	2901541 RAD-2400-IFS	325	2903108 SWD4-8MF2 PXC	304
2800770 PT-IQ-1X2-5DC-P	276	2800894 CB TM2 4A F1 P	289	2901799 FL MM PATCH 5,0 LC-LC	343	2903109 SWD4-8SF2-5 PXC	304
2800771 PT-IQ-1X2-12DC-P	276	2800895 CB TM2 5A F1 P	289	2901830 FL SM PATCH 2,0 SC-SC	316	2903110 SWD4-CRP-1 PXC	305
2800772 PT-IQ-1X2-24DC-P	276	2800896 CB TM2 6A F1 P	289	2901879 FLKM-PA-2D15/HW/DI/C300	306	2903111 SWD4-100LF-8-24 PXC	305
2800773 PT-IQ-1X2-48DC-P	276	2800897 CB TM2 8A F1 P	289	2901901 REL-OR/LDP- 24DC/1/MB	298	2903112 SWD4-3LF8-24-2S PXC	305
2800774 PT-IQ-2X1-5DC-P	277	2800898 CB TM2 10A F1 P	289	2901902 REL-OR/LDP-110DC/1/MB	298	2903113 EU5C-SWD-PF2-1 PXC	305
2800775 PT-IQ-2X1-12DC-P	277	2800899 CB TM2 12A F1 P	289	2901904 REL-OR/LDP-220DC/1/MB	298	2903114 SWD4-CRP-2 PXC	305
2800776 PT-IQ-2X1-24DC-P	277	2800900 CB TM2 16A F1 P	289	2901905 REL-OR/L- 24AC/1/MB	298	2903116 ELR H5-IES-SC-SWD/500AC-0.6	303
2800777 PT-IQ-2X1-48DC-P	277	2800901 CB E1 24DC/1A NO P	284	2901906 REL-OR/L-120AC/1/MB	298	2903117 ELR H5-IES-SC-SWD/500AC-2	303
2800778 PT-IQ-2X1-5DC-UT	277	2800902 CB E1 24DC/2A NO P	284	2901907 REL-OR/L-230AC/1/MB	298	2903118 ELR H5-IES-SC-SWD/500AC-9	303
2800779 PT-IQ-2X1+F-5DC-UT	277	2800903 CB E1 24DC/3A NO P	284	2901908 REL-OR/LDP- 24DC/1	298	2903119 FUSE-10X38-30A-MR	301
2800780 PT-IQ-2X1-12DC-UT	277	2800904 CB E1 24DC/4A NO P	284	2901909 REL-OR/LDP-110DC/1	298	2903126 FUSE-10X38-16A-GR	301
2800781 PT-IQ-2X1+F-12DC-UT	277	2800905 CB E1 24DC/6A NO P	284	2901910 REL-OR/LDP-220DC/1	298	2903244 EU5C-SWD-EIP-MODTCP PXC	304
2800787 PT-IQ-2X1-24DC-UT	277	2800908 CB E1 24DC/1A S-R P	285	2901911 REL-OR/L- 24AC/1	298	2903384 FUSE-10X38-20A-GR	301
2800788 PT-IQ-2X1+F-24DC-UT	277	2800909 CB E1 24DC/2A S-R P	285	2901912 REL-OR/L-120AC/1	298	2903388 TC-C-PTSM-50-0000000J1J1	297
2800789 PT-IQ-2X1-48DC-UT	277	2800910 CB E1 24DC/3A S-R P	285	2901913 REL-OR/L-230AC/1	298	2903389 TC-C-PSR3-SC-A10000A20000	297
2800790 PT-IQ-2X1+F-48DC-UT	277	2800911 CB E1 24DC/4A S-R P	285	2901949 EEM-TEMP-MA600	330	2903390 TC-C-PSR3-SC-A10000A23132	297
2800791 PT-IQ-1X2-5DC-UT	276	2800912 CB E1 24DC/6A S-R P	285	2902078 EEM-MKT-DRA	330	2903391 TC-C-PSR3-SC-A100V-A20000	297
2800792 PT-IQ-1X2+F-5DC-UT	277	2800915 CB E1 24DC/1A NC P	285	2902277 RAD-ISM-900-DATA-BD-PLUS	328	2903395 CABLE-EC56F/OE/0,34/S/1,0M	307
2800793 PT-IQ-1X2-12DC-UT	276	2800916 CB E1 24DC/2A NC P	285	2902363 PSR-SCP- 24DC/MSTO/D/4X1	293	2903396 CABLE-EC56F/OE/0,34/S/2,0M	307
2800804 PT-IQ-2X2-24DC-P	278	2800917 CB E1 24DC/3A NC P	285	2902364 PSR-SPP- 24DC/MSTO/D/4X1	293	2903397 CABLE-EC56F/OE/0,34/S/4,0M	307
2800813 PT-IQ-4X1-24DC-P	279	2800918 CB E1 24DC/4A NC P	285	2902578 PSR-OP-UNIT	293	2903398 CABLE-EC56F/OE/0,34/S/6,0M	307
2800835 CB TM1 0.5A SFB P	287	2800919 CB E1 24DC/6A NC P	285	2902658 FL MC EF WDM-A SC	316	2903399 CABLE-EC56F/OE/0,34/S/8,0M	307
2800836 CB TM1 1A SFB P	287	2800922 CB E1 24DC/1A S-C P	285	2902659 FL MC EF WDM-B SC	316	2903400 CABLE-EC56F/OE/0,34/S/10,0M	307
2800837 CB TM1 2A SFB P	287	2800923 CB E1 24DC/2A S-C P	285	2902660 FL MC EF WDM-SET SC	316	2903401 CABLE-EC56F/OE/0,34/S/15,0M	307
2800838 CB TM1 3A SFB P	287	2800924 CB E1 24DC/3A S-C P	285	2902744 ELR H51-IESSC-24DC500AC-2	301	2903402 CABLE-EC56F/OE/0,34/S/20,0M	307
2800839 CB TM1 4A SFB P	287	2800925 CB E1 24DC/4A S-C P	285	2902745 ELR H51-IESSC-24DC500AC-9	301	2903447 RAD-CABLE-USB	325
2800840 CB TM1 5A SFB P	287	2800926 CB E1 24DC/6A S-C P	285	2902746 ELR H51-IESSC-24DC500AC-06	301	2913015 VL FPM 12	368
2800841 CB TM1 6A SFB P	287	2800929 CB 1/6-2/4 PT-BE	286	2902747 EM RD-ADAPTER	301	2913016 VL FPM 12U	368
2800842 CB TM1 8A SFB P	287	2800975 PT-IQ-1X2+F-12DC-UT	277	2902748 EM RI-ADAPTER COMPACT	301	2913017 VL FPM 15	369
2800843 CB TM1 10A SFB P	287	2800976 PT-IQ-1X2-24DC-UT	276	2902776 EM SWD-ADAPTER	304	2913018 VL FPM 15U	369
2800844 CB TM1 12A SFB P	287	2800977 PT-IQ-1X2+F-24DC-UT	277	2902786 PSR-SCP- 24DC/MSTO/4X1	293	2913019 VL FPM 17	369
2800845 CB TM1 16A SFB P	287	2800978 PT-IQ-1X2-48DC-UT	276	2902787 PSR-SPP- 24DC/MSTO/4X1	293	2913020 VL FPM 17U	369
2800846 CB TM1 0.5A M1 P	288	2800979 PT-IQ-1X2+F-48DC-UT	277	2902802 EM-CP-PP-ETH	331	2913021 VL FPM 19U	369
2800847 CB TM1 1A M1 P	288	2800980 PT-IQ-2X2-24DC-UT	278	2902814 RAD-CONF-RF3	325	2913155 VL 1 GB CF	366
2800848 CB TM1 2A M1 P	288	2800981 PT-IQ-2X2+F-24DC-UT	279	2902815 RAD-CONF-RF5	325	2913156 VL 2 GB CF	366
2800849 CB TM1 3A M1 P	288	2800982 PT-IQ-4X1-24DC-UT	279	2902816 RAD-CONF-RF7	325	2913161 VL 4 GB CF	366
2800850 CB TM1 4A M1 P	288	2800983 PT-IQ-4X1+F-24DC-UT	279	2902822 MINI MCR-SL-CVS-24-5-10-NC	311	2913158 VL 8 GB CF	366
2800851 CB TM1 5A M1 P	288	2800989 PT-IQ-PTB-P	276	2902823 MINI MCR-SL-CVS-24-5-10-SP-NC	311	2913159 VL PANEL MOUNTING KIT	367
2800852 CB TM1 6A M1 P	288	2801014 CB PT BRIDGE	284	2902828 RAD-MEMORY	325	2913160 VL BOOKSHELF MOUNTING KIT	366
2800853 CB TM1 8A M1 P	288	2801022 GEB-SET-T1/T2 TAE/TV-SAT	272	2902829 MINI MCR-SL-UH-LP-NC	310	2913161 VL WALL MOUNTING KIT	366
2800854 CB TM1 10A M1 P	288	2801050 CN-UB-280DC-3-BB	280	2902830 MINI MCR-SL-UH-LP-SP-NC	310	2913165 VL 15" DISPLAY PROTECTIVE FOIL	367
2800855 CB TM1 12A M1 P	288	2801051 CN-UB-280DC-3-SB	280	2902831 EM RI-ADAPTER CLASSIC	301	2913933 VMT 301X EXT PS	370
2800856 CB TM1 16A M1 P	288	2801055 TT-ST-2-PE/S1-24DC	273	2902853 FL MC EF 1300 MM SC	317	2924184 MACX MCR-PTB-SP	315
2800857 CB TM1 0.5A F1 P	289	2801056 CN-LAMBDA/4-2.25-SB	281	2902854 FL MC EF 1300 MM ST	317	2924854 TC-D37SUB-ADIO16-EX-P-UNI	315
2800858 CB TM1 1A F1 P	289	2801057 CN-LAMBDA/4-2.25-BB	281	2902856 FL MC EF 1300 MM SC	317	2985945 AX OPC SERVER	340
2800859 CB TM1 2A F1 P	289	2801059 C7/16-LAMBDA/4-2.25-SB	281	2902913 TC-D37SUB-DO16-ESD-AR-UNI	297	2986122 IFS-CONFSTICK	293
2800860 CB TM1 3A F1 P	289	2801060 C7/16-LAMBDA/4-2.25-BB	281	2902914 TC-D37SUB-DO16-F&G-AR-UNI	297	2986562 PSR-SPP- 24DC/ETP/1X1	295
2800861 CB TM1 4A F1 P	289	2811271 IFS-USB-PROG-ADAPTER	356	2902932 TC-D37SUB-AIO16-EX-PS-UNI	315	2986711 PSR-SCP- 24DC/ETP/1X1	295
2800862 CB TM1 5A F1 P	289	2811420 MINI MCR-SL-TB	313	2902933 TC-D37SUB-ADIO16-M-P-UNI	313	2988120 SD FLASH 256MB	341
2800863 CB TM1 6A F1 P	289	2836599 IBS PG SET	345	2902934 TC-D37SUB-AIO16-M-PS-UNI	313	2988780 CF FLASH 256MB	343

Index

Numerical

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
2989158	FL MM PATCH 1,0 LC-LC	343	3030284	FBS 2-8	17	3047167	ATP-UT	50	3062045	KDT-ST 15	218
2989255	FL MM PATCH 2,0 LC-LC	343	3030297	FBS 3-8	18	3047196	ATP-UT-QUATTRO	55	3062058	KDT-ST 16	218
2989336	FL SWITCH LM 5TX-E	350	3030307	FBS 4-8	18	3047303	DP-UTTB 2,5/4	55	3062061	KDT-ST 17	218
2989433	FL SWITCH LM 4TX/1FX-E	351	3030310	FBS 5-8	17	3047316	ATP-UTTB 2,5/4	55	3062744	PTTB 4-L 1000V	13
2989530	FL SWITCH LM 4TX/1FX ST-E	351	3030323	FBS 10-8	17	3047332	WS UT 4	54	3062760	UK 10,3-HESI 1500V	62
2989637	FL SWITCH LM 4TX/1FX SM-E	351	3030336	FBS 2-6	15	3047345	WS UT 6	50	3062766	FUSE 10,3X85 2A PV	63
2989734	FL SWITCH LM 4TX/1FX SM ST-E	351	3030349	FBS 5-6	15	3047358	FBS-PV UT	55	3062767	FUSE 10,3X85 4A PV	63
2989831	FL SWITCH LM 4TX/2FX ST-E	351	3030365	FBS 20-6	15	3047452	UTME 4	56	3062768	FUSE 10,3X85 6A PV	63
2989912	FL SFP LH	343	3030721	ATP-ST 4	6	3047453	UTME 4-P/P	57	3062769	FUSE 10,3X85 8A PV	63
2989938	FL SWITCH LM 4TX/2FX SM ST-E	351	3030747	ATP-STTB 4	7	3047454	UTME 4-P/P BU	57	3062770	FUSE 10,3X85 10A PV	63
			3030860	RB ST 6-(2,5/4)	18	3047465	UTMED 4	57	3062771	FUSE 10,3X85 12A PV	63
			3030873	RB ST 10-(2,5/4)	22	3047478	UTMED 4-PE	57	3062772	FUSE 10,3X85 16A PV	63
			3030983	PS-5	11	3047491	D-UTME 4	56	3062773	FUSE 10,3X85 20A PV	63
			3030996	PS-6	54	3048564	PS-8/2,3MM RD	13	3062774	FUSE 10,3X85 25A PV	63
			3031005	PS-8	13	3048823	UT 4-QUATTRO HV	55	3063507	KEL-EMV 16-4	218
			3032198	FBS 10-6 BU	286	3048836	UT 4-QUATTRO HV BU	55	3063510	KEL-EMV 24-5	218
			3032208	FBS 20-6 BU	286	3048849	UT 4-QUATTRO HV RD	55	3063523	KEL-EMV-F	218
			3032211	FBS 50-6 BU	286	3048852	D-UT 4-QUATTRO HV	55	3063921	KDT-ST 3	218
			3032224	FBS 50-6	286	3060458	UT 4/ 1P-F	50	3063934	KDT-ST 4	218
			3032237	FBS 2-6 GY	286	3060539	UT 6/1P	50	3063947	KDT-ST 5	218
			3032240	FBS 3-6 GY	286	3060542	UT 6/1P BU	50	3063950	KDT-ST 6	218
			3032253	FBS 10-6 GY	286	3060555	UT 6/1P-PE	51	3063921	KDT-ST 7	218
			3032266	FBS 5-6 GY	286	3060568	UT 6-QUATTRO/2P	51	3063976	KDT-ST 8	218
			3032279	FBS 4-6 GY	286	3060571	UT 6-QUATTRO/2P BU	51	3063989	KDT-ST 9	218
			3032470	FBS 6-8	17	3060584	UT 6-QUATTRO/2P-PE	51	3063992	KDT-ST 10	218
			3032729	PAI-4-FIX BU	17	3060607	D-UT 6-QUATTRO/2P	51	3064001	KDT-ST 11	218
			3032732	PAI-4-FIX RD	17	3060610	UP 6/ 1	52	3070300	USST 4-MT	59
			3032745	PAI-4-FIX YE	17	3060623	UP 6/ 2	52	3070301	USST 4-TG	58
			3032758	PAI-4-FIX GN	17	3060636	UP 6/ 3	52	3070302	USST 4-MT P/P	59
			3032761	PAI-4-FIX VT	17	3060649	UP 6/ 4	52	3070303	USST 4-TG P/P	58
			3032774	PAI-4-FIX BK	55	3060652	UP 6/ 5	52	3070304	D-USST 4-MT	58
			3032787	PAI-4-FIX BN	47	3060665	UP 6/ 6	52	3070310	USST 6-T/SB	59
			3032790	PAI-4-FIX GY	47	3060678	UP 6/ 7	52	3070367	D-USST 6-T	59
			3032800	SB-ME 3-8	17	3060681	UP 6/ 8	52	3070383	TS-USST 4/10	58
			3032871	PAI-4-N GY	11	3060694	UP 6/ 9	52	3075842	SB-TB 6-T 2-8	59
			3034387	CARRIER 35-8	17	3060704	UP 6/10	52	3075843	SB-TB 6-T 3-8	59
			3034390	C-ME 6/3	17	3060717	UP 6/ 1 BU	52	3075844	SB-TB 6-T 4-8	59
			3034426	D-DTME 6	17	3060720	UP 6/ 1 GNVE	52	3076044	RBO 8-3L-HC	68
			3034439	S-ME 6	17	3060733	UP 6/ 1-L	53	3076057	RBO 10-3L-HC	69
			3034442	C-ME 6/2	17	3060746	UP 6/ 1-L BU	53	3076060	RBO 12-3L-HC	69
			3034455	PAI-4-FIX OG	17	3060759	UP 6/ 1-L GNVE	53	3076073	RBO 16-3L-HC	69
			3034468	SB-ME 2-8	17	3060762	UP 6/ 1-M	53	3076086	RBO 8-3L/N-HC	68
			3034484	SB-ME 4-8	17	3060775	UP 6/ 1-M BU	53	3076099	RBO 10-3L/N-HC	69
			3035690	DP-STMED 6	17	3060788	UP 6/ 1-M GNVE	53	3076109	RBO 12-3L/N-HC	69
			3035695	PTME 6 HV BU	17	3060791	UP 6/ 1-R	53	3076112	RBO 16-3L/N-HC	69
			3035696	PTME 6 HV	17	3060801	UP 6/ 1-R BU	53	3076124	RBO 8-3L/FE	66
			3035697	PTME 6-DIO/L-R HV	17	3060814	UP 6/ 1-R GNVE	53	3076125	RBO 8-3L/FE-HC	68
			3035698	PTME 6-DIO/R-L HV	17	3060843	UT 6-QUATTRO/2P-F	51	3076137	RBO 10-3L/FE	67
			3035755	SB-ME 2-6	15	3060856	DF-UP 6	52	3076138	RBO 10-3L/FE-HC	69
			3035756	SB-ME 3-6	15	3061541	PP-H 6/ 1	44	3076140	RBO 12-3L/FE	67
			3035757	SB-ME 4-6	15	3061554	PP-H 6/ 1 BU	44	3076141	RBO 12-3L/FE-HC	69
			3035758	S-ME 4	15	3061567	PP-H 6/ 1 GNVE	44	3076153	RBO 16-3L/FE	67
			3035759	C-ME 4/2	15	3061570	PP-H 6/ 2	44	3076154	RBO 16-3L/FE-HC	69
			3035760	C-ME 4/3	15	3061583	PP-H 6/ 3	44	3076167	RBO 8-3L/N/FE-HC	68
			3035974	PAI-4-FIX-5/6 OG	15	3061596	PP-H 6/ 4	44	3076170	RBO 10-3L/N/FE-HC	69
			3035975	PAI-4-FIX-5/6 BU	15	3061606	PP-H 6/ 5	44	3076183	RBO 12-3L/N/FE-HC	69
			3035976	PAI-4-FIX-5/6 RD	15	3061619	PP-H 6/ 6	44	3076196	RBO 16-3L/N/FE-HC	69
			3035977	PAI-4-FIX-5/6 YE	15	3061622	PP-H 6/ 7	44	3076206	RBO 8-3L	66
			3035978	PAI-4-FIX-5/6 GN	15	3061635	PP-H 6/ 8	44	3076219	RBO 10-3L	67
			3035979	PAI-4-FIX-5/6 VT	15	3061648	PP-H 6/ 9	44	3076222	RBO 12-3L	67
			3035980	PAI-4-FIX-5/6 BK	15	3061651	PP-H 6/10	44	3076235	RBO 16-3L	67
			3035981	PAI-4-FIX-5/6 BN	15	3061664	PP-H 6/ 1-L	45	3076248	RBO 8-3L/N	66
			3035982	PAI-4-FIX-5/6 GY	15	3061677	PP-H 6/ 1-L BU	45	3076251	RBO 10-3L/N	67
			3036783	P-DI	11	3061680	PP-H 6/ 1-L GNVE	45	3076264	RBO 12-3L/N	67
			3036796	P-CO	11	3061693	PP-H 6/ 1-M	45	3076277	RBO 16-3L/N	66
			3036932	FBS 2-6 BU	286	3061703	PP-H 6/ 1-M BU	45	3076280	RBO 8-3L/N/FE	67
			3036945	FBS 3-6 BU	286	3061716	PP-H 6/ 1-M GNVE	45	3076293	RBO 10-3L/N/FE	67
			3036958	FBS 4-6 BU	286	3061729	PP-H 6/ 1-R	45	3076303	RBO 12-3L/N/FE	67
			3036961	FBS 5-6 BU	286	3061732	PP-H 6/ 1-R BU	45	3076316	RBO 16-3L/N/FE	67
			3038956	P-FIX	11	3061745	PP-H 6/ 1-R GNVE	45	3076484	UKH 70-3L-F	64
			3040559	PR	44	3061758	PT 6/1P	42	3076497	UKH 95-3L-F	65
			3040588	PC	32	3061761	PT 6/1P BU	42	3076507	UKH 150-3L-F	65
			3040614	PRZ	44	3061774	PT 6/1P-PE	43	3076510	UKH 240-3L-F	65
			3040627	PZ/2	44	3061826	PT 6-QUATTRO/2P	43	3076523	UKH 70-3L/N-F	64
			3040630	PR/2	44	3061839	PT 6-QUATTRO/2P BU	43	3076536	UKH 95-3L/N-F	65
			3044102	UT 4	54	3061842	PT 6-QUATTRO/2P-PE	43	3076549	UKH 150-3L/N-F	65
			3044115	UT 4 BU	54	3061855	D-PT 6-QUATTRO/2P	43	3076552	UKH 240-3L/N-F	65
			3045127	UT 4 RD	54	3062016	KDT-ST 12	218	3076565	UKH 70-3L/FE-F	64
			3047028	D-UT 2,5/10	54	3062029	KDT-ST 13	218	3076578	UKH 95-3L/FE-F	65
			3047154	D-UT 2,5/1P	50	3062032	KDT-ST 14	218	3076581	UKH 150-3L/FE-F	65

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
3076594	UKH 240-3L/FE-F	65	3212617	PP-H 1,5/S/12	38	3216263	FBS 1,5/S-PV	7	3240766	WT-STEEL SH 7,9X838	153
3076604	UKH 70-3L/N/FE-F	64	3212620	PP-H 1,5/S/13	38	3240680	WP-PA HF 10,0 BK	127	3240768	WT-HF 4,5X360	146
3076617	UKH 95-3L/N/FE-F	65	3212633	PP-H 1,5/S/14	38	3240681	WP-PA HF 13,0 BK	127	3240769	WT-HF 4,5X360 BK	147
3076620	UKH 150-3L/N/FE-F	65	3212646	PP-H 1,5/S/15	38	3240682	WP-PA HF 15,8 BK	127	3240770	WT-HF 4,5X430	146
3076633	UKH 240-3L/N/FE-F	65	3212659	PP-H 1,5/S/1-L	39	3240683	WP-PA HF 21,2 BK	127	3240771	WT-HF 4,5X430 BK	147
3076638	UKH 50-3L-F	64	3212662	PP-H 1,5/S/1-L BU	39	3240684	WP-PA HF 28,5 BK	127	3240772	WT-HF 7,8X300	146
3076639	UKH 50-3L/N-F	64	3212675	PP-H 1,5/S/1-L GNYE	39	3240686	WP-STEEL S 10	139	3240773	WT-HF 7,8X300 BK	147
3076640	UKH 50-3L/FE-F	64	3212688	PP-H 1,5/S/1-M	39	3240687	WP-STEEL S 14	139	3240774	WT-HF 7,8X365	146
3076641	UKH 50-3L/N/FE-F	64	3212691	PP-H 1,5/S/1-M BU	39	3240688	WP-STEEL S 21	139	3240775	WT-HF 7,8X365 BK	147
3190438	STG-MTN 0,5-1,0	41	3212701	PP-H 1,5/S/1-M GNYE	39	3240689	WP-STEEL S 36	139	3240778	WT-HF 9X780	146
3190506	STG-MTN 1,5-2,5	41	3212714	PP-H 1,5/S/1-R	39	3240690	WP-STEEL S 45	139	3240779	WT-HF 9X780 BK	147
3200014	AI 0,5 - 8 WH	119	3212727	PP-H 1,5/S/1-R BU	39	3240697	WP-STEEL ZC 10	138	3240780	WT-HT HF 2,5X98	149
3200030	AI 1 - 8 RD	119	3212730	PP-H 1,5/S/1-R GNYE	39	3240698	WP-STEEL ZC 17	138	3240781	WT-HT HF 2,5X98 BK	149
3200043	AI 1,5 - 8 BK	119	3212756	PH 1,5/S/3	38	3240699	WP-STEEL ZC 21	138	3240782	WT-HT HF 3,6X140	149
3200182	AI 1 -10 RD	119	3212769	PH 1,5/S/4	38	3240700	WP-STEEL ZC 36	138	3240783	WT-HT HF 3,6X140 BK	149
3200195	AI 1,5 -10 BK	119	3212772	PH 1,5/S/5	38	3240701	WP-STEEL ZC 45	138	3240784	WT-HT HF 3,6X200	149
3200519	AI 0,75- 8 GY	119	3212785	PH 1,5/S/6	38	3240702	WT-BASE HF 5	154	3240785	WT-HT HF 3,6X200 BK	149
3200535	AI 4 -10 GY	119	3212798	PH 1,5/S/7	38	3240703	WT-BASE HF 5 BK	154	3240786	WT-HT HF 4,5X200	149
3200959	AI 4 -12 GY	119	3212808	PH 1,5/S/8	39	3240704	WT-BASE HF 9	154	3240787	WT-HT HF 4,5X200 BK	149
3200962	AI 2,5 -12 BU	119	3212811	PH 1,5/S/9	39	3240705	WT-BASE HF 9 BK	154	3240788	WT-HT HF 4,5X290	149
3201275	AI 0,5 -10 WH	119	3212824	PH 1,5/S/10	39	3240706	WT-BASE LS HF 4	154	3240789	WT-HT HF 4,5X290 BK	149
3201288	AI 0,75-10 GY	119	3213014	PR 1,5/S	38	3240707	WT-BASE LS HF 4 BK	154	3240792	WT-HT HF 3,6X140	149
3202533	AI 2,5 -10 BU	119	3212895	PR 1,5/S/2	38	3240708	WT-BASE LS HF 6	154	3240793	WT-HT HF 7,8X365 BK	149
3203024	AI 0,25- 6 YE	119	3212905	PRZ 1,5/S	38	3240709	WT-BASE LS HF 6 BK	154	3240794	WT-ID HF 2,5X98 BU	151
3203037	AI 0,25- 8 YE	119	3212918	PZ 1,5/S/2	38	3240710	WT-BASE P HF 9,5 BK	155	3240795	WT-ID HF 3,5X140 BU	151
3206238	ATP-QTTTB	43	3212934	PT 6-QUATTRO	19	3240711	WT-BASE R HF 8	155	3240792	WT-ID HF 3,5X200 BU	151
3208142	D-PT 1,5/S	36	3212947	PT 6-QUATTRO BU	19	3240712	WT-D HF 7,5X200	150	3240797	WT-ID HF 4,5X200 BU	151
3208745	PT 10-TWIN-PE	24	3212950	PT 6-QUATTRO-PE	21	3240713	WT-D HF 7,5X200 BK	150	3240798	WT-ID HF 4,5X290 BU	151
3208746	PT 10-TWIN	23	3212963	D-PT 6-QUATTRO	19	3240714	WT-D HF 7,5X250	150	3240800	WT-ID HF 7,5X365 BU	151
3208747	PT 10-TWIN BU	23	3213014	FBS 2-3,5	6	3240715	WT-D HF 7,5X250 BK	150	3240801	WT-R HF 3,6X150	151
3208748	D-PT 10-TWIN	23	3213027	FBS 3-3,5	6	3240716	WT-D HF 7,5X350	150	3240803	WT-R HF 4,8X200	151
3209235	P-FU 5X20-5	11	3213030	FBS 4-3,5	6	3240717	WT-D HF 7,5X350 BK	150	3240805	WT-STEEL S 4,6X1067	152
3209248	P-FU 5X20 LED 24-5	11	3213043	FBS 5-3,5	6	3240718	WT-E HF 3,6X150	150	3240807	WT-STEEL S 4,6X150	152
3209251	P-FU 5X20 LED 60-5	11	3213056	FBS 10-3,5	6	3240719	WT-HF 7,8X540	146	3240808	WT-STEEL S 4,6X201	152
3209264	P-FU 5X20 LED 250-5	11	3213069	FBS 20-3,5	6	3240720	WT-E HF 4,8X200	150	3240809	WT-STEEL S 4,6X259	152
3210539	PTB 2,5-PE/L/TG	11	3213136	RBO 8 BU	66	3240721	WT-HF 7,8X540 BK	147	3240810	WT-STEEL S 4,6X360	152
3210545	PTB 2,5-PE/L/NTG	11	3213137	RBO 8	66	3240722	WT-E HF 7,8X200	150	3240811	WT-STEEL S 4,6X520	152
3210547	PTB 2,5-PE/L/L	12	3213139	RBO 8-FE	66	3240723	WT-STEEL S 4,6X838	152	3240812	WT-STEEL S 4,6X679	152
3210549	PTB 2,5-PE/L/MT	12	3213179	RBO 8-VS 2	66	3240724	WT-E HF 7,8X300	150	3240813	WT-STEEL S 7,9X1067	152
3210552	D-PTB 2,5/3	11	3213182	RBO 8-VS 3	66	3240725	WT-STEEL S 7,9X838	152	3240814	WT-STEEL S 7,9X259	152
3210553	D-PTB 2,5-PE/L/L	12	3213195	FBI 2-20 N	64	3240726	WT-E HF 7,8X380	150	3240815	WT-STEEL S 7,9X360	152
3211485	PT 6-TWIN BU	19	3213205	FBI 3-20 N	64	3240727	WT-STEEL SH 4,6X838	153	3240816	WT-STEEL S 7,9X520	152
3211498	PT 6-TWIN-PE	21	3213250	RB ST 6-1,5/S	18	3240728	WT-HF 12,6X1000	146	3240817	WT-STEEL S 7,9X679	152
3211508	D-PT 6-TWIN	19	3213784	PT 1,5/S/2P	36	3240729	WT-HF 12,6X1000 BK	147	3240818	WT-STEEL SH 4,6X1067	153
3211813	PT 6	18	3213797	PT 1,5/S/2P BU	36	3240730	WT-HF 12,6X850	146	3240820	WT-STEEL SH 4,6X150	153
3211819	PT 6 BU	18	3213810	PT 1,5/S/2P-PE	37	3240731	WT-HF 12,6X850 BK	147	3240821	WT-STEEL SH 4,6X201	153
3211822	PT 6-PE	20	3213852	PTTB 1,5/S/4P-PV	37	3240732	WT-HF 2,5X98	146	3240822	WT-STEEL SH 4,6X259	153
3211929	PT 6-TWIN	19	3213865	PTTB 1,5/S/4P	37	3240733	WT-HF 2,5X98 BK	147	3240823	WT-STEEL SH 4,6X360	153
3212044	D-PT 6	18	3213878	PTTB 1,5/S/4P BU	37	3240734	WT-HF 2,5X98 BK-L	147	3240824	WT-STEEL SH 4,6X520	153
3212057	D-PT 10	22	3213881	PTTB 1,5/S/4P-PE	37	3240735	WT-HF 2,5X98-L	146	3240825	WT-STEEL SH 4,6X679	153
3212120	PT 10	22	3213894	D-PTTB 1,5/S/4P	37	3240736	WT-HF 2,6X160	146	3240826	WT-STEEL SH 7,9X1067	153
3212123	PT 10 BU	22	3214014	PTU 16/14X2,5 BU	27	3240737	WT-HF 2,6X160 BK	147	3240827	WT-STEEL SH 7,9X259	153
3212131	PT 10-PE	24	3214015	PTU 16/14X2,5 GN	27	3240738	WT-HF 2,6X160 BK-L	147	3240828	WT-STEEL SH 7,9X360	153
3212139	PTME 4	15	3214016	PTU 16/14X2,5 GY	26	3240739	WT-HF 2,6X160-L	146	3240829	WT-STEEL SH 7,9X520	153
3212141	PTMED 4	15	3214453	PTS 1,5/S/1P	32	3240740	WT-HF 2,6X200	146	3240830	WT-STEEL SH 7,9X679	153
3212154	PTMED 4-PE	15	3214466	PTS 1,5/S/1P BU	32	3240741	WT-HF 2,6X200 BK	147	3240831	WT-UV HF 2,5X98 BK	148
3212167	D-PTME 4	15	3214479	PTS 1,5/S/1P-PE	34	3240742	WT-HF 2,6X200 BK-L	147	3240832	WT-UV HF 3,6X140 BK	148
3212300	PTME 6-CT/1P	47	3214495	PTTBS 1,5/S/2P	33	3240743	WT-HF 2,6X200-L	146	3240833	WT-UV HF 3,6X200 BK	148
3212301	PTMED 6-CT/1P	47	3214505	PTTBS 1,5/S/2P BU	33	3240744	WT-HF 3,6X140	146	3240834	WT-UV HF 4,5X200 BK	148
3212302	PTMED 6-CT/1P-PE	47	3214518	PTTBS 1,5/S/2P-PE	35	3240745	WT-HF 3,6X140 BK	147	3240835	WT-UV HF 4,5X290 BK	148
3212303	D-PTME 6-CT/1P	47	3214521	PTTBS 1,5/S/2P-PV	33	3240746	WT-HF 3,6X140 BK-L	147	3240837	WT-UV HF 7,8X365 BK	148
3212304	PPCT 6/2	47	3214534	D-PTTBS 1,5/S/2P	33	3240747	WT-HF 3,6X140-L	146	3240838	WP-PA HF-HB 10,0 BK	127
3212305	PPCT 6/3	47	3214547	PTS 1,5/S	6	3240748	WT-HF 3,6X200	146	3240839	WP-PA HF-HB 13,0 BK	127
3212306	PTME 6/1P	48	3214550	PTS 1,5/S BU	6	3240749	WT-HF 3,6X200 BK	147	3240840	WP-PA HF-HB 15,8 BK	127
3212307	D-PTME 6/1P	48	3214563	PTS 1,5/S-PE	8	3240750	WT-HF 3,6X200 BK-L	147	3240841	WP-PA HF-HB 21,2 BK	127
3212308	PC-CT 6/2	47	3214576	D-PTS 1,5/S	6	3240751	WT-HF 3,6X200-L	146	3240842	WP-PA HF-HB 28,5 BK	127
3212309	PC-CT 6/3	47	3214589	PTS 1,5/S-TWIN	7	3240752	WT-HF 3,6X290	146	3240843	WP-PA HF-HB 34,5 BK	127
3212484	PP-H 1,5/S/1	38	3214592	PTS 1,5/S-TWIN BU	7	3240753	WT-HF 3,6X290 BK	147	3240844	WP-PA HF-HB 42,5 BK	127
3212497	PP-H 1,5/S/1 BU	38	3214602	PTS 1,5/S-TWIN-PE	9	3240754	WT-HF 3,6X290 BK-L	147	3240845	WP-PA HF-SL 21,2 BK	126
3212507	PP-H 1,5/S/1 GNYE	38	3214615	PTS 1,5/S-QUATTRO	7	3240755	WT-HF 4,5X290-L	146	3240846	WP-PA HF-SL 28,5 BK	126
3212510	PP-H 1,5/S/2	38	3214631	PTS 1,5/S-QUATTRO BU	7	3240756	WT-HF 4,5X160	146	3240847	WP-PA HF-SL 34,5 BK	126
3212523	PP-H 1,5/S/3	38	3214644	PTS 1,5/S-QUATTRO-PE	9	3240757	WT-HF 4,5X160 BK	147	3240848	WP-PA HF-SL 42,5 BK	126
3212536	PP-H 1,5/S/4	38	3214657	PTTBS 1,5/S	7	3240758	WT-HF 4,5X160 BK-L	147	3240849	WP-SPIRAL PVC C 10	134
3212549	PP-H 1,5/S/5	38	3214660	PTTBS 1,5/S BU	7	3240759	WT-HF 4,5X160-L	146	3240850	WP-SPIRAL PVC C 14	134
3212552	PP-H 1,5/S/6	38	3214673	PTTBS 1,5/S-PE	9	3240760	WT-HF 4,5X200	146	3240851	WP-SPIRAL PVC C 17	134
3212565	PP-H 1,5/S/7	38	3214686	PTTBS 1,5/S-PV	7	3240761	WT-HF 4,5X200 BK	147	3240852	WP-SPIRAL PVC C 21	134
3212578	PP-H 1,5/S/8	38	3214699	D-PTTBS 1,5/S	7	3240762	WT-HF 4,5X200 BK-L	147	3240853	WP-SPIRAL PVC C 27	134
3212581	PP-H 1,5/S/9	38	3214709	PTS 1,5/S-TWIN/1P	33	3240763	WT-HF 4,5X200-L	146	3240854	WP-SPIRAL PVC C 36	134
3212594	PP-H 1,5/S/10	38	3214712	PTS 1,5/S-TWIN/1P BU	33	3240764	WT-HF 4,5X290	146	3240855	WP-SPIRAL PVC C 45	134
3212604	PP-H 1,5/S/11	38	3214725	PTS 1,5/S-TWIN/1P-PE	35	3240765	WT-HF 4,5X290 BK	147	3240856	WP-SPIRAL PU C HF 10	135

Index

Numerical

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
3240857	WP-SPIRAL PU C HF 14	135	3240938	WP-GR HF IP69K M12 BK	133	3241020	WP-SC HF 27	135	3241110	WG-S HF 15 BK	125
3240858	WP-SPIRAL PU C HF 17	135	3240939	WP-GR HF IP69K M16 BK	133	3241021	WP-SC HF 36	135	3241111	WG-S HF 20	125
3240859	WP-SPIRAL PU C HF 21	135	3240940	WP-GR HF IP69K M20 BK	133	3241022	WP-SC HF 45	135	3241112	WG-S HF 20 BK	125
3240860	WP-SPIRAL PU C HF 27	135	3240941	WP-GR HF IP69K M25 BK	133	3241023	WP-GT BRASS PG7	141	3241113	WG-S HF 40	125
3240861	WP-SPIRAL PU C HF 36	135	3240942	WP-GR HF IP69K M32 BK	133	3241024	WP-GT BRASS PG9	141	3241114	WG-S HF 40 BK	125
3240862	WP-SPIRAL PU C HF 45	135	3240943	WP-GR HF IP69K M40 BK	133	3241025	WP-GT BRASS PG11	141	3241115	WG-S HF 50	125
3240863	WP-STEEL S 17	139	3240944	WP-GR HF IP66 PG7 BK	132	3241026	WP-GT BRASS PG16	141	3241116	WG-S HF 50 BK	125
3240864	WP-STEEL S 27	139	3240945	WP-GR HF IP66 PG9 BK	132	3241027	WP-GT BRASS PG21	141	3241117	WG-S HF 70	125
3240865	WP-STEEL ZC 14	138	3240946	WP-GR HF IP66 PG11 BK	132	3241029	WP-GT BRASS PG36	141	3241118	WG-S HF 70 BK	125
3240866	WP-STEEL ZC 27	138	3240947	WP-GR HF IP66 PG16 BK	132	3241030	WP-GT BRASS M10	141	3241119	WG-S HF 80	125
3240867	WP-STEEL PVC C 10	142	3240948	WP-GR HF IP66 PG21 BK	132	3241031	WP-GT BRASS M12	141	3241120	WG-S HF 80 BK	125
3240868	WP-STEEL PVC C 14	142	3240949	WP-GR HF IP66 PG29 BK	132	3241032	WP-GT BRASS M16	141	3241121	WG-S HF 120	125
3240869	WP-STEEL PVC C 17	142	3240950	WP-GR HF IP66 PG36 BK	132	3241033	WP-GT BRASS M20	141	3241122	WG-S HF 120 BK	125
3240870	WP-STEEL PVC C 21	142	3240952	WP-GR HF IP66 M12 BK	133	3241034	WP-GT BRASS M25	141	3241123	WG-S HF 150	125
3240871	WP-STEEL PVC C 27	142	3240953	WP-GR HF IP66 M16 BK	133	3241035	WP-GT BRASS M32	141	3241124	WG-S HF 150 BK	125
3240872	WP-STEEL PVC C 36	142	3240954	WP-GR HF IP66 M20 BK	133	3241036	WP-GT BRASS M40	141	3244614	RBO 10	67
3240873	WP-STEEL PVC C 45	142	3240955	WP-GR HF IP66 M25 BK	133	3241037	WP-G BRASS IP40 PG7	140	3244615	RBO 10-FE	67
3240874	WP-G HF IP69K PG7 BK	129	3240956	WP-GR HF IP66 M32 BK	133	3241038	WP-G BRASS IP40 PG9	140	3244616	RBO 10 BU	67
3240875	WP-G HF IP69K PG9 BK	129	3240957	WP-GR HF IP66 M40 BK	133	3241039	WP-G BRASS IP40 PG11	140	3244627	RBO 12	67
3240876	WP-G HF IP69K PG11 BK	129	3240958	WP-BASE C PA HF 10,0 BK	144	3241040	WP-G BRASS IP40 PG16	140	3244628	RBO 12-FE	67
3240877	WP-G HF IP69K PG16 BK	129	3240959	WP-BASE C PA HF 13,0 BK	144	3241041	WP-G BRASS IP40 PG21	140	3244629	RBO 12 BU	67
3240878	WP-G HF IP69K PG21 BK	129	3240960	WP-BASE C PA HF 15,8 BK	144	3241042	WP-G BRASS IP40 PG29	140	3244630	RBO 16	67
3240879	WP-G HF IP69K PG29 BK	129	3240961	WP-BASE C PA HF 21,2 BK	144	3241043	WP-G BRASS IP40 PG36	140	3244631	RBO 16-FE	67
3240880	WP-G HF IP69K PG36 BK	129	3240962	WP-BASE C PA HF 28,2 BK	144	3241044	WP-G BRASS IP40 M10	141	3244632	RBO 16 BU	67
3240881	WP-G HF IP69K M10 BK	129	3240963	WP-BASE C PA HF 34,5 BK	144	3241045	WP-G BRASS IP40 M12	141	3244643	RBO 10-VS 2	67
3240882	WP-G HF IP69K M12 BK	129	3240964	WP-BASE C PA HF 42,8 BK	144	3241046	WP-G BRASS IP40 M16	141	3244656	RBO 10-VS 3	67
3240883	WP-G HF IP69K M16 BK	129	3240965	WP-BASE HF 9-10	145	3241047	WP-G BRASS IP40 M20	141	3244669	RBO 12-VS 2	67
3240884	WP-G HF IP69K M20 BK	129	3240966	WP-BASE HF 13	145	3241048	WP-G BRASS IP40 M25	141	3244672	RBO 12-VS 3	67
3240885	WP-G HF IP69K M25 BK	129	3240967	WP-BASE HF 14	145	3241049	WP-G BRASS IP40 M32	141	3244685	RBO 16-VS 2	67
3240886	WP-G HF IP69K M32 BK	129	3240968	WP-BASE HF 15,8	145	3241050	WP-G BRASS IP40 M40	141	3244698	RBO 16-VS 3	67
3240887	WP-G HF IP69K M40 BK	129	3240969	WP-BASE HF 17	145	3241051	WP-G BRASS IP65 PG7	143	3245134	SCBI 10-8,15	59
3240888	WP-G HF IP66 PG7 BK	128	3240970	WP-BASE HF 22	145	3241052	WP-G BRASS IP65 PG9	143	3246586	TPS 3/20/5	59
3240889	WP-G HF IP66 PG9 BK	128	3240971	WP-BASE HF 29	145	3241053	WP-G BRASS IP65 PG11	143	3247019	UKH 50-F	64
3240890	WP-G HF IP66 PG11 BK	128	3240972	WP-BASE HF 37	145	3241054	WP-G BRASS IP65 PG16	143	3247022	UKH 95-F	65
3240891	WP-G HF IP66 PG16 BK	128	3240973	WP-BASE HF 45	145	3241055	WP-G BRASS IP65 PG21	143	3247035	UKH 150-F	65
3240892	WP-G HF IP66 PG21 BK	128	3240974	WP-EC TPE HF 10,0 BK	127	3241056	WP-G BRASS IP65 PG29	143	3247048	UKH 240-F	65
3240893	WP-G HF IP66 PG29 BK	128	3240975	WP-EC TPE HF 13,0 BK	127	3241057	WP-G BRASS IP65 PG36	143	3247051	UKH 70-F	64
3240894	WP-G HF IP66 PG36 BK	128	3240976	WP-EC TPE HF 15,8 BK	127	3241058	WP-G BRASS IP65 M10	143	3247967	HC-RBO 8	66
3240895	WP-G HF IP66 M10 BK	129	3240977	WP-EC TPE HF 21,2 BK	127	3241059	WP-G BRASS IP65 M12	143	3247968	HC-RBO 8-FE	66
3240896	WP-G HF IP66 M12 BK	129	3240978	WP-EC TPE HF 28,5 BK	127	3241060	WP-G BRASS IP65 M16	143	3247969	HC-RBO 8 BU	66
3240897	WP-G HF IP66 M16 BK	129	3240979	WP-EC TPE HF 34,5 BK	127	3241061	WP-G BRASS IP65 M20	143	3247970	HC-RBO 10	67
3240898	WP-G HF IP66 M20 BK	129	3240980	WP-EC TPE HF 42,5 BK	127	3241062	WP-G BRASS IP65 M25	143	3247971	HC-RBO 10-FE	67
3240899	WP-G HF IP66 M25 BK	129	3240981	WP-SC PA HF 10,0 BK	127	3241063	WP-G BRASS IP65 M32	143	3247972	HC-RBO 10 BU	67
3240900	WP-G HF IP66 M32 BK	129	3240982	WP-SC PA HF 13,0 BK	127	3241064	WP-G BRASS IP65 M40	143	3247973	RBO 8-HC	68
3240901	WP-G HF IP66 M40 BK	129	3240983	WP-SC PA HF 15,8 BK	127	3241065	WP-SC BRASS 10	139	3247974	RBO 8-HC BU	68
3240902	WP-GA HF IP69K PG7 BK	131	3240984	WP-SC PA HF 21,2 BK	127	3241066	WP-SC BRASS 14	139	3247975	RBO 8-FE-HC	68
3240903	WP-GA HF IP69K PG9 BK	131	3240985	WP-SC PA HF 28,5 BK	127	3241067	WP-SC BRASS 17	139	3247976	RBO 10-HC	69
3240904	WP-GA HF IP69K PG11 BK	131	3240986	WP-SC PA HF 34,5 BK	127	3241068	WP-SC BRASS 21	139	3247977	RBO 10-HC BU	69
3240905	WP-GA HF IP69K PG16 BK	131	3240987	WP-SC PA HF 42,5 BK	127	3241069	WP-SC BRASS 27	139	3247978	RBO 10-FE-HC	69
3240906	WP-GA HF IP69K PG21 BK	131	3240988	WP-G PP HF PG7	136	3241070	WP-SC BRASS 36	139	3247983	HC-RBO 12	67
3240907	WP-GA HF IP69K PG29 BK	131	3240989	WP-G PP HF PG9	136	3241071	WP-SC BRASS 45	139	3247984	HC-RBO 12-FE	67
3240908	WP-GA HF IP69K PG36 BK	131	3240990	WP-G PP HF PG11	136	3241072	WP-SC BRASS WP PVC 10	142	3247985	HC-RBO 12 BU	67
3240909	WP-GA HF IP69K M10 BK	131	3240991	WP-G PP HF PG16	136	3241073	WP-SC BRASS WP PVC 14	142	3247986	RBO 12-HC	69
3240910	WP-GA HF IP69K M12 BK	131	3240992	WP-G PP HF PG21	136	3241074	WP-SC BRASS WP PVC 17	142	3247987	RBO 12-HC BU	69
3240911	WP-GA HF IP69K M16 BK	131	3240993	WP-G PP HF PG29	136	3241075	WP-SC BRASS WP PVC 21	142	3247988	RBO 12-FE-HC	69
3240912	WP-GA HF IP69K M20 BK	131	3240994	WP-G PP HF PG36	136	3241076	WP-SC BRASS WP PVC 27	142	3247989	RBO 16-HC	69
3240913	WP-GA HF IP69K M25 BK	131	3240995	WP-G PP HF M10	137	3241077	WP-SC BRASS WP PVC 36	142	3247990	RBO 16-HC BU	69
3240914	WP-GA HF IP69K M32 BK	131	3240996	WP-G PP HF M12	137	3241078	WP-SC BRASS WP PVC 45	142	3247991	RBO 16-FE-HC	69
3240915	WP-GA HF IP69K M40 BK	131	3240997	WP-G PP HF M16	137	3241079	WP-BASE A PG16	145	3247996	HC-RBO 16	67
3240916	WP-GA HF IP66 PG7 BK	130	3240998	WP-G PP HF M20	137	3241080	WP-BASE A PG21	145	3247997	HC-RBO 16-FE	67
3240917	WP-GA HF IP66 PG9 BK	130	3240999	WP-G PP HF M25	137	3241081	WP-BASE A PG29	145	3247998	HC-RBO 16 BU	67
3240918	WP-GA HF IP66 PG11 BK	130	3241000	WP-G PP HF M32	137	3241082	WP-BASE A PG36	145			
3240919	WP-GA HF IP66 PG16 BK	130	3241001	WP-G PP HF M40	137	3241083	WP-BASE A M16	145			
3240920	WP-GA HF IP66 PG21 BK	130	3241002	WP-GT PP HF PG7	137	3241084	WP-BASE A M20	145			
3240921	WP-GA HF IP66 PG29 BK	130	3241003	WP-GT PP HF PG9	137	3241085	WP-BASE A M25	145			
3240922	WP-GA HF IP66 PG36 BK	130	3241004	WP-GT PP HF PG11	137	3241086	WP-BASE A M32	145			
3240923	WP-GA HF IP66 M10 BK	131	3241005	WP-GT PP HF PG16	137	3241087	WP-BASE A M40	145			
3240924	WP-GA HF IP66 M12 BK	131	3241006	WP-GT PP HF PG21	137	3241088	WP-PA HF 34,5 BK	127			
3240925	WP-GA HF IP66 M16 BK	131	3241007	WP-GT PP HF PG29	137	3241089	WP-PA HF 42,5 BK	127	5145384	THERMOMARK-RIBBON 110	76
3240926	WP-GA HF IP66 M20 BK	131	3241008	WP-GT PP HF PG36	137	3241099	WG-D HF 7,6	155	5146451	THERMOMARK CARD-US-MAG1	94
3240927	WP-GA HF IP66 M25 BK	131	3241010	WP-GT PP HF M12	137	3241100	WG-D HF 7,6 BK	155	5146480	THERMOMARK CARD-UCT-MAG1	81
3240928	WP-GA HF IP66 M32 BK	131	3241011	WP-GT PP HF M16	137	3241101	WG-D HF 10,2	155	5146655	BLUEMARK CLED-MAG 20	75
3240929	WP-GA HF IP66 M40 BK	131	3241012	WP-GT PP HF M20	137	3241102	WG-D HF 12,7 BK	155	5146656	BLUEMARK CLED-STACKER 20	75
3240930	WP-GR HF IP69K PG7 BK	133	3241013	WP-GT PP HF M25	137	3241103	WG-D HF 12,7	155	5146662	BLUEMARK CLED-FLUID-CARTR.	75
3240931	WP-GR HF IP69K PG9 BK	133	3241014	WP-GT PP HF M32	137	3241104	WG-D HF 12,7 BK	155	5146668	BLUEMARK CLED-MAG 40	75
3240932	WP-GR HF IP69K PG11 BK	133	3241015	WP-GT PP HF M40	137	3241105	WG-D HF 16	155	5146669	BLUEMARK CLED-BASE	75
3240933	WP-GR HF IP69K PG16 BK	133	3241016	WP-SC HF 10	135	3241106	WG-D HF 16 BK	155	5146723	THERMOMARK ROLL X1	76
3240934	WP-GR HF IP69K PG21 BK	133	3241017	WP-SC HF 14	135	3241107	WG-D HF 20,3	155	5146724	THERMOMARK ROLL X1-CASE	76
3240935	WP-GR HF IP69K PG29 BK	133	3241018	WP-SC HF 17	135	3241108	WG-D HF 20,3 BK	155	5146725	BLUEMARK CLED CASE	75
3240936	WP-GR HF IP69K PG36 BK	133	3241019	WP-SC HF 21	135	3241109	WG-S HF 15	125	5146765	THERMOMARK ROLL X1 CUTTER	

Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page	Order No.	Type	Page
5146766	THERMOMARK ROLL X1 CUTTER/P	76									
5147100	MARKING BOX	77									
5147101	MARKING BOX EN	77									
5147200	THERMOMARK CARD SET	78									
5147201	THERMOMARK CARD SET EN	78									
5147211	THERMOMARK CARD SET RU RU	78									
5147212	THERMOMARK CARD SET SE SE	78									
5147213	THERMOMARK CARD SET DK DK	78									
5147214	THERMOMARK CARD SET EN BE	78									
5147215	THERMOMARK CARD SET PL US	78									
5147217	THERMOMARK CARD SET IT IT	78									
5147218	THERMOMARK CARD SET ES ES	78									
5147219	THERMOMARK CARD SET PT PT	78									
5147220	THERMOMARK CARD SET DE CH	78									
5147221	THERMOMARK CARD SET HU HU	78									
5147222	THERMOMARK ROLL SET RU RU	79									
5147223	THERMOMARK ROLL SET SE SE	79									
5147224	THERMOMARK ROLL SET DK DK	79									
5147225	THERMOMARK ROLL SET EN BE	79									
5147226	THERMOMARK ROLL SET PL US	79									
5147227	THERMOMARK ROLL SET IT IT	79									
5147228	THERMOMARK ROLL SET ES ES	79									
5147229	THERMOMARK ROLL SET PT PT	79									
5147230	THERMOMARK ROLL SET DE CH	79									
5147231	THERMOMARK ROLL SET HU HU	79									
5147300	THERMOMARK ROLL SET	79									
5147301	THERMOMARK ROLL SET EN	79									
5147400	BLUEMARK CLED SET	75									
5147401	BLUEMARK CLED SET EN	75									
5147999	BLUEMARK CLED	75									
5148007	THERMOMARK-RIBBON 110-WMTB HF	76									



PHOENIX CONTACT GmbH & Co. KG
 Flachsmarktstraße 8
 32825 Blomberg, Germany
 Phone: +49 (0) 52 35 3-00
 Fax: +49 (0) 52 35 3-4 12 00
 E-Mail: info@phoenixcontact.com
www.phoenixcontact.com