

Switching Devices

Safety Switches
Enclosed Motor Disconnects
Bolted Pressure Switches
OEM Operating Mechanisms



Powering Business Worldwide



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Switching Devices

Safety Switches

Safety Switch Selection Guide

Type	Voltage	Fuse Type	Fuse Class	Ampere Rating	Number of Poles ^③	Enclosure Type			Type 4 Painted Steel	Type 4X Stainless Steel	Type 4X Non Metallic	NEMA 7/9 Hazardous Location
						Type 1	Type 3R	Type 12 ^①				
Air Conditioning Disconnect	Max. 240Vac	Fusible	Cartridge	H	30 and 60	2	—	Yes	—	—	—	—
	Max. 240Vac	Non-Fusible	—	—	60	2	—	Yes	—	—	—	—
		Moulded Case Switch	—	—	60	2	—	Yes	—	—	—	—
	Max. 600Vac	Non-Fusible	—	—	30-80	3	—	Yes	—	—	—	—
General Duty	Single Throw	Fusible	Plug	—	30	1 and 2	Yes	Yes	—	—	—	—
	Max. 240Vac	Cartridge	—	—	30-600	2 and 3	Yes	Yes	—	—	—	—
		Non-Fusible	—	—	30-600	2 and 3	Yes	Yes	—	—	—	—
Heavy Duty	Single Throw	Fusible	Cartridge	H	30-600	2, 3, and 4	Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—
	Max. 600Vac	Non-Fusible	—	—	800-1200	Up to 1200A	Yes	Up to 1200A	Up to 1200A	400-1200A	Up to 1200A	—
		250 Vdc & 600 Vdc	Non-Fusible	—	—	30-1200	2, 3, and 4	Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②
6-Pole Motor Circuit^②	Single Throw	Fusible	Cartridge	H	30-200	6	—	Yes	Yes ^{①②}	—	Yes ^②	—
	Max. 600Vac	Non-Fusible	—	—	30-200	6	—	Yes	Yes ^{①②}	—	Yes ^②	—
Double Throw^③	Max. 600VAV 250Vdc	Fusible	Cartridge	H	30-200	2 and 3	Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—
							Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	400-600A
							Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	400-600A
		Non-Fusible ^③	—	—	30-1200	3	Yes	Yes	Up to 400A	400-600A	Up to 200A	—
Enclosed Rotary Switches	Max. 600Vac	Non-Fusible	—	—	30-80	3	—	—	Yes ^①	—	Yes	Yes
Hazardous Location Disconnect Switch	Max. 600Vac 250Vdc	Fusible	Cartridge	J	30-100	3	—	—	—	—	—	—
		Non-Fusible	—	—	30-100	3	—	—	—	—	—	Yes
Enviroline All Stainless^②	Single Throw	Fusible	Cartridge	H	30-400	2 and 3	—	—	—	—	Yes ^②	—
	Max. 600Vac/ DC	Non-Fusible	—	—	30-400	3	—	—	—	—	Yes ^②	—
Viewing Window	Single Throw	Fusible	Cartridge	H	30-1200	2, 3, 4, 6	—	—	Yes ^①	Yes	Yes	—
	Max. 600Vac/ DC	Non-Fusible	—	—	30-1200	2, 3, 4, 6	—	—	Yes ^①	Yes	Yes	—
Receptacle (Pin & Sleeve)^②	Single Throw	Fusible	Cartridge	H	30-100	3	—	—	Yes ^{①②}	—	Yes ^②	—
	Max. 600Vac/ DC	Non-Fusible	—	—	60	3	—	—	Yes ^{①②}	—	Yes ^②	—
Quick Connect (Cam & Posi Lok)	Single Throw	Fusible	Cartridge	H	100-600	2, 3, and 4	Yes	Yes	—	—	—	—
							Yes	Yes	—	—	—	—
	Max. 600Vac	Non-Fusible	—	—	100-800	2, 3, and 4	Yes	Yes	—	—	—	—
							Yes	Yes	—	—	—	—
		w Fuse	Cartridge	H	100-200	2, 3, and 4	Yes	Yes	—	—	—	
			T	400-800	2, 3, and 4	Yes	Yes	—	—	—	—	
Solar	Single Throw	Fusible	—	R	30-600	1 (3)	—	Yes	Yes ^{①②}	Yes ^②	—	—
	Max. 600Vdc	Non-Fusible	—	—	30-600	1 (3)	—	Yes	Yes ^{①②}	Yes ^②	—	—

Notes

① Type 12 enclosures (30-1200 amperes) can be field modified to meet Type 3R rainproof requirements when a factory provided drain screw is removed.

② Optional windows also available with type 12 or 4/4X enclosures.

③ Double throw non-fusible 4 pole 30-800A, 6 pole 30-100A.

Product Overview

- Used to open or close a circuit
- Non-fusible safety switches provide a means to manually connect or disconnect the load from the source
- Fusible safety switches provide a means to manually open and close a circuit and provide overcurrent protection by means of installed fuses
- Fusible switches certified for use as service entrance equipment (unless noted)
- Also commonly referred to as a disconnect switch or disconnect

- Available from 30–1200A
- All Padlockable
- Horsepower rated
- 100% load break rated (unless noted)
- Non-Fusible switches are 100% continuous duty rated and fusible switches are 80% continuous duty rated per CSA C22.2 No.4

Standards and Certifications

- C22.2 No.4 File #69743
- C22.2 No.14 (Enclosed Rotary) File #162136
- Det Norske Veritas
- ISO 9001:2008
- CSA certified Class I, Div, 1 & 2, Groups B, C & D; Class II, Div 1 & 2, Groups E, G & F; Class III, Div 1 & 2, Zone 1, IIB + H2 for NEMA 7/9.
- Seismic qualified (UBC and CBC) for Heavy Duty 30-800A
- ISO 1400



Fuse Clips/Class

Adaptable to Accept the Following Fuse Class

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	R	J	T
AC Disconnect	H	—	—	—
General Duty	H	30A-600A	400-600A	400-600A
Heavy Duty	H 30-600A L 800-1200A	30A-600A	240V-100-600A 600V-30-600A	200A-800A 1200A
Heavy Duty 6 Pole	H	30A-200A	60A-200A	200A
Double Throw	H 30-200A T 240V-600A-1200A T 600V-400A-800A L 600V-1200A	30A-400A	240V-200A Only 600V-200A-400A	240V-600A-1200A 600V-400A-1200A (Standard)
Enviroline All Stainless & Window	Same as Heavy Duty	Same as Heavy Duty		Same as Heavy Duty
Receptacle (Pin & Sleeve)	H	30A-100A	60A-100A	—
Solar	R	30A - 600A	—	—

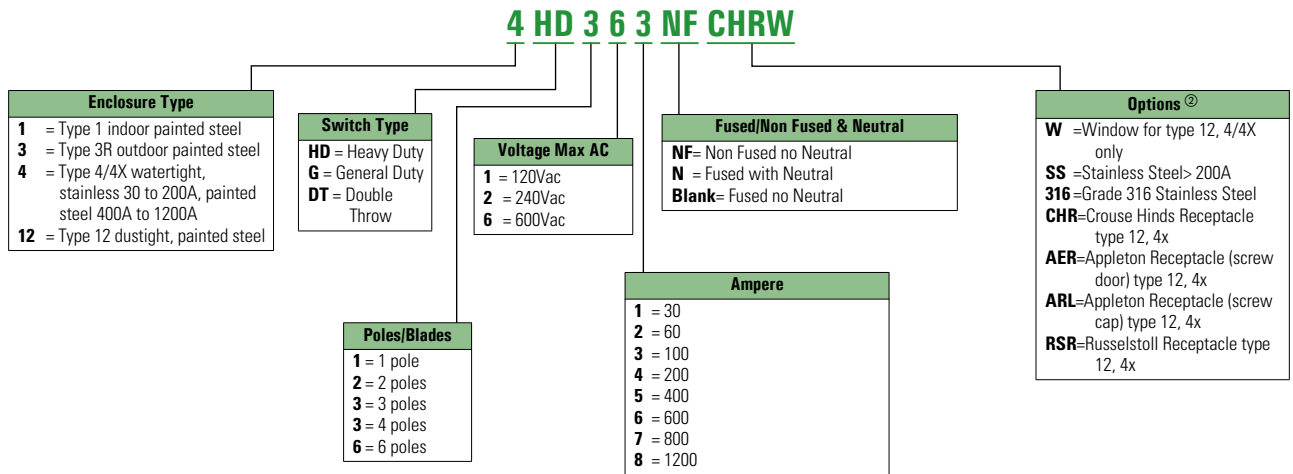
Note: Refer to specific switch technical data page for field adaptation notes.

Switching Devices

Safety Switches

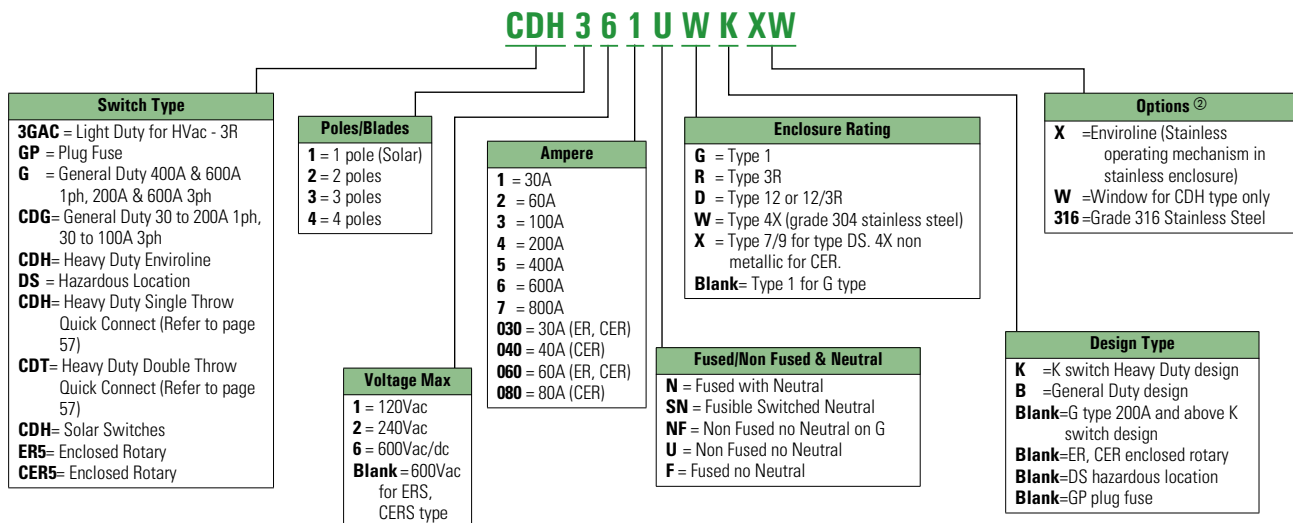
Catalogue Number Selection

Safety Switch



Notes

- ① Always verify the number of poles and wires required since catalogue numbers may appear in multiple tables.
 - ② See **Pages 12** through **14** for additional Flex Centre options.
- This table is intended for use in breaking down existing catalogue numbers. It is not intended for building new catalogue numbers.



Options and Accessories

Safety Switches

Description	Catalogue Number
Neutral Kits/Ground Kits	
30A CDG	DG030NB
60–100A CDG	DG100NB
200A GD, (Type 3R enclosures), CDG	DG200NK
30–60A HD	DH030NK
100A HD	DH100NK
200A HD (Type 1, 3R enclosures)	N200
200A HD (Type 4X, 12 enclosures)	DH200NK
400A GD, HD	DS400NK
600A GD, HD	DS600NK
400–600A fusible DT, 800–1200A HD	DS800NK
30–100A DT	DT100NK
200A DT	DT200NK
400A non-fusible DT	DT400NK
600A non-fusible DT	DT600NK
800A DT	DT800NK
1200A DT	DT1200NK
Ground Lug Kits	
30–100A CDG	DG030GB
30–100A HD, DT ①	DS100GK
200A GD, HD, DT	DS200GK
400–600A GD, 400–1200A HD, 400–800A DT	DS468GK



DS16CP



Control Pole Kit (For 2P, 3P Switches)①

400–600A GD, 30–1200A HD, 30–800A DT, 1 N/O Aux contact	DS16CP
---	---------------

Control Pole Description - Operation - The HD-Series Control Pole provides one normally open contact, late-make, early-break operation (7" lag to main contacts on "make"). It mounts in the same position with pre-drilled holes as the neutral block, directly connected to the power pole operating shaft. Direct connection and visible blades provide more secure electrical interlocking than handle linkage operation of a snap switch type of interlock. This reliability meets the requirements of many specifications for 4-pole switches when the fourth pole is required for secure electrical interlocking. Unit is approved for use with elevating devices.

Wire Size Range - #16 to #12 AWG, copper conductors.

Ratings - 10 A continuous, Ac or Dc

Ac Code Rating A600			Dc Code Rating N600	
Volts Ac	Make	Break	Volts Dc	Make & Break
120V	60A	6A	125V	2.2A
240V	30A	3A	250V	1.1A
480V	15A	1.5A	600V	0.4A
600V	12A	1.2A	—	—

DS200EK1



Auxiliary Contact Kits

All switches (except 30–100A GD) 1NO/1NC	DS200EK1
All switches (except 30–100A GD) 2NO/2NC	DS200EK2
NEMA 7/9 switches (30–100A) 1NO/1NC	178C265G05
NEMA 7/9 switches (30–100A) 2NO/2NC	178C265G06
Enclosed Rotary	See page 72

Safety Switches, continued

Description	Catalogue Number
Fuse Puller Kits	
30A 240V-600V, 60A 240V, 1.5" pole spacing, SLIDER type (3 per kit)	DS32FP
30 & 60A 600V, 1.5" pole spacing STRAP type (3 per kit)	DS30FP
60A 240V-600V, 2" pole spacing SLIDER type (4 per kit)	DS60FP
100A SLIDER integral to fuse clip (3 per kit)	DS100FP
200A SLIDER integral to fuse clip (3 per kit)	DS200FP
"J" Fuse Adapter Kits⑤	
60A 240V HD ②	DS22JK
60A DT and receptacle switches ②	DS26JK
400A 600V DT ④	DT400JK
600A 240–600V HD, 600A GD ③	DS600JK
"R" Fuse Rejector Adapter Kits ②	
30A CDG	DG030RB
100A CDG	DG100RB
30A 240V HD, DT	DS12FK
30A 600V HD, DT, 60A 240V HD, DT, 60A CDG	DS16FK
60A 600V HD, DT	DS26FK
100A 240–600V HD, DT	DS36FK
200A 240–600V HD, DT, 200A GD, CDG	DS46FK
400A 240–600V HD, 240V DT, 400A GD	DS56FK
600A 240–600V HD, 600A GD	DS66FK
"T" Fuse Adapter Kits	
200A 240V HD ②	DS426TK
200A 600V HD ②	DS466TK
400A 240V GD, HD ③	DS526TK
400A 600V HD ③	DS566TK
600A 240V GD, HD ③	DS626TK
600A 600V HD ③	DS666TK
800A 240V HD ③	DS726TK
800A 600V HD ③	DS766TK
Form II Class C Clips⑥	
30, 60A HD (1 kit for 1-3 pole switch)	F2CLIP30
100A HD (1 kit for 3 poles)	F2CLIP100
200A HD (1 kit for 3 poles)	F2CLIP200
400A HD (1 kit for 3 poles)	F2CLIP400

DS60FP



DS22JK



DS12FK



DS426TK



Notes

- ① For 6 pole switches with control pole DS16CP contact sales for special order.
- ② Order one kit for three poles.
- ③ Order one kit for each pole.
- ④ Order one kit per switch.
- ⑤ Majority of switches do not require fuse adapter kits, or kit is included. Fuse blocks or fuse clips are field adaptable. See fuse class adaptation notes under technical data and specifications, for specific switch categories.
- ⑥ Centre blade class 'C' fuse must be used.

Accessories are not applicable to NEMA 7/9 switches unless indicated otherwise.

Options and Accessories - Continued

DS36CL



Safety Switches

Copper Lug Kits

30A HD, DT [Ⓢ]	DS16CL
60A HD, DT [Ⓢ]	DS16CL
100A HD, DT [Ⓢ]	DS36CL
200A HD, DT [Ⓢ]	DS46CL
400A HD, (Type 4, 4X, 12 enclosures) [Ⓢ]	DS56CL
600A-800A HD, (Type 4, 4X, 12 enclosures) [Ⓢ]	DS66CL

DS56CK



Crimp Lug Pad Kit (Type 4, 4X, 12 Enclosures)

400-600A HD [Ⓢ]	DS56CK
800A HD [Ⓢ]	DS76CK
400-800A neutral HD [Ⓢ]	DS800CNK

Replacement Red Operating Handle (Knob only) **53-2601**

Hookstick handle - GD, HD 200-600A, 30-100 Type 12 with or without window **DH800HSH**

Lubricating grease for safety switch blades and contacts (each kit contains three 30 cc tubes of lubricating grease) **DSLUBEKIT**

Clear Line Shields (for General Duty 200-600A)

200A GD	70-7759-11
400A GD	70-8063-8
600A GD	70-8064-8

Note

Refer to page 5 for footnotes [Ⓢ], [Ⓣ], [Ⓤ]

DS075H1



Plate Type Hubs

For Type 3R enclosures (up to 200A)

Group 1
General-Duty, Heavy-Duty,
Double-Throw Through 100A

Group 2
General-Duty, Heavy-Duty,
Double-Throw—200A

Catalogue Number	Conduit Size	Catalogue Number	Conduit Size
DS075H1	0.75 (19.1)	DS200H2	2.00 (50.8)
DS100H1	1.00 (25.4)	DS250H2	2.50 (63.5)
DS125H1	1.25 (31.8)	DS300H2	3.00 (76.2)
DS150H1	1.50 (38.1)	—	—
DS200H1	2.00 (50.8)	—	—

Catalogue number **DS900AP** adapter kit - permits installation of group 1 hubs on 200 ampere general duty, heavy duty, and double throw switches.

Note

3R enclosures include hub opening and cover plate 30-200A.

DS050MH



Myers Type Hubs

For Type 3R (400A and above) and Type 4, 4X (stainless steel), 12

Catalogue Number	Conduit Size
DS050MH	0.50 (12.7)
DS075MH	0.75 (19.1)
DS100MH	1.00 (25.4)
DS125MH	1.25 (31.8)
DS150MH	1.50 (38.1)
DS200MH	2.00 (50.8)
DS250MH	2.50 (63.5)
DS300MH	3.00 (76.2)
DS350MH	3.50 (88.9)
DS400MH	4.00 (101.6)
DS500MH	5.00 (127.0)

Note

3R enclosures include hub opening and cover plate 30-200A

Technical Data and Specifications

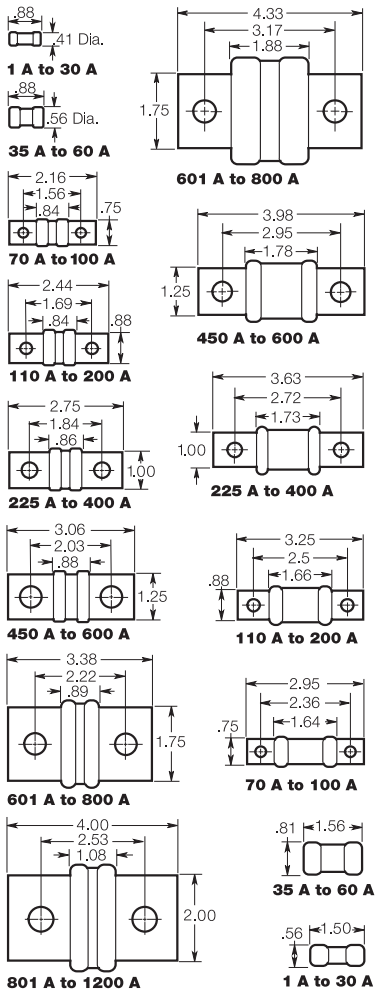
Standard Lug Capacities - Safety Switches/Ground/Neutral/Copper Lug Kits

Description - Safety Switches	Minimum Wire Capacity	Maximum Wire Capacity	Wire Type
30A GP	#14 #12	#10 #10	Cu or Al
30A CDG	#14	#6	Cu/Al
30A HD, DT	#14	#2	Cu/Al
60A CDG	#14	#1/0	Cu/Al
60A HD, DT	#14	#2	Cu/Al
100A CDG [Ⓢ]	#14	#1/0	Cu/Al
100A HD, DT	#14	#1/0	Cu/Al
200A CDG, GD, DT	#6	250 kcmil	Cu/Al
200A HD Type 1 and 3R	#6	250 kcmil	Cu/Al
200A HD Type 4 and 12	#6	300 kcmil	Cu/Al
400A GD, HD, DT	(2) #1/0 (1) #1/0	(2) 300 kcmil or (1) 750 kcmil	Cu/Al Cu/Al
600A GD, HD, fusible DT	(1) #2 (1) #1/0	(1) 600 kcmil and (1) 750 kcmil	Cu/Al Cu/Al
600A non-fusible DT	(2) #250	(2) 500 kcmil	Cu/Al
800A HD	(4) #1/0	(4) 750 kcmil	Cu/Al
800A DT	(3) #250	(3) 500 kcmil	Cu/Al
1200A HD, DT	(4) #1/0	(4) 750 kcmil	Cu/Al
Ground Lugs			
Standard with switch 30-200A	#14	#4 (continuous ground rated)	Cu/Al
Standard with switch 400A-1200A	#6	250mcm (continuous ground rated)	Cu/Al
Optional Ground Lugs			
DG030GB , 30-100A, CDG	#14	#4	Cu/Al
DS100GK , 30-100A HD, DT (10 per kit)	7 x #14	7 x #4	Cu/Al
DS200GK , 200A GD, HD, DT 400-600A GD, 400-800A HD	2 x #14	2 x #2	Cu/Al
DS468GK , 400-800A DT, 1200A HD	2 x #6	2 x 250mcm	Cu/Al
Copper-Bodied Lug Kits			
DS16CL , 30A Cu, 6 per kit	#14	#6	Cu
DS26CL , 60A Cu, 6 per kit	#14	#4	Cu
DS36CL , 100A Cu, 6 per kit	#6	#1/0	Cu
DS46CL , 200A Cu, 6 per kit	#6	250 kcmil	Cu
DS56CL , 400A Cu, 2 per kit	#1/0	500 kcmil	Cu
DS66CL , 600A Cu, 2 per kit	(2) #1/0	(2) 500 kcmil	Cu
Neutral Kits - All neutral lugs accommodate Cu/Al wire			
DG030NB , 30A, CDG	3 x #14 - #4		
DG100NB , 60-100A, CDG	3 x #14 - 1/0		
DG200NK , 200A, GD, CDG	2 x #6 - 250mcm and #14 - #2		
DH030NK , 30-60A, HD	4 x #14 - #2		
DH100NK , 100A, HD	2 x #14 - #2 and #14 - 1/0		
DH200NK , 200A HD (NEMA 12, 4X encl.)	2 x #6 - 300mcm and 2 x #14 - #2		
N200 , 200A HD (NEMA 1, 3R encl.)	2 x #6 - 250mcm and #14 - #2		
DS400NK , 400A HD	2 x 1/0 - (1)750mcm or 1/0 - (2) 300mcm and 3 x #6 - 250mcm		
DS600NK , 600A, GD, HD	2 x 1/0 - (1)750mcm or 1/0 - (2) 300mcm and 1 x #2 - 600mcm and 3 x #6 - 250mcm		
DS800NK , 400-600A Fusible DT, 800A HD, 1200A HD	2 x 3/0 - (4)750mcm and 3 x #6 - 250mcm		
DT100NK , 30-100A DT	1 x #14 - #2 and 3 x #14 - #2		
DT200NK , 200A DT	3 x #6 - 250mcm and 1 x #14 - #2		
DT400NK , 400A Non Fusible DT	7 x #6 - 250mcm		
DT600NK , 600A Non Fusible DT	6 x 250 - 500mcm and 1 x #6 - 250mcm		
DT800NK , 800A DT	3 x (3)250mcm - (3)500mcm		
DT1200NK , 1200A DT	3 x (4)1/0 - (4) 750mcm		

Typical Fuse Dimensions in Inches

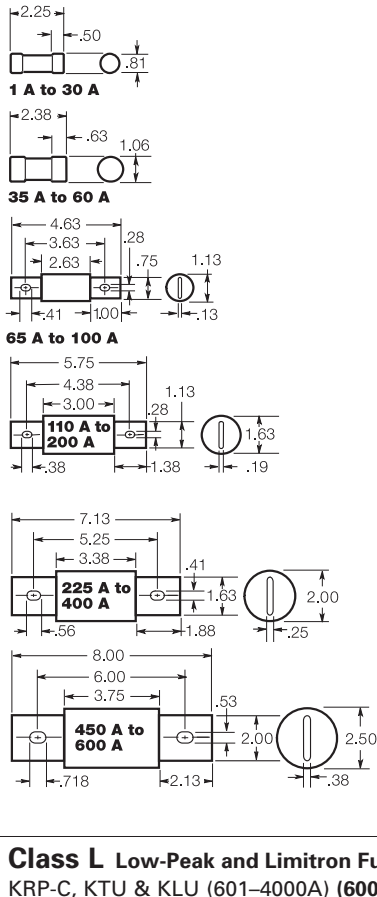
Class T

T-Tron™ Fuses
JJN (300V) JJS (600V)



Class J

Low-Peak® and Limitron® Fuses
LPJ & JKS (600V)



Class RK5 and RK1

Fusetron®, Low-Peak and Limitron Fuses (250 and 600V)

FRN-R and FRS-R; LPN-RK and LPS-RK; KTN-R and KTS-R
Basic dimensions are same as Class H (formerly NEC) ONE-TIME (NON and NOS) and SUPERLAG Renewable RES and REN fuses.

Note: These fuses can be used to replace existing Class H, RK1 and RK5 fuses relating to dimensional compatibility.

Ampere	250V		600V	
	A	B	A	B
1/10-30	2.00	0.56	5.00	0.81
35-60	3.00	0.81	5.50	1.06

Fusetron and Limitron

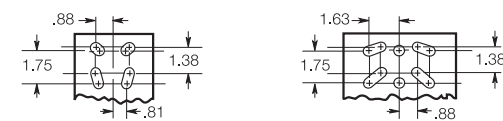
Ampere	250V		600V	
	A	B	A	B
70-100	5.88	1.06	7.88	1.34
110-200	7.13	1.56	9.63	1.84
225-400	8.63	2.06	11.63	2.59
450-600	10.38	2.59	13.38	3.13

Low-Peak

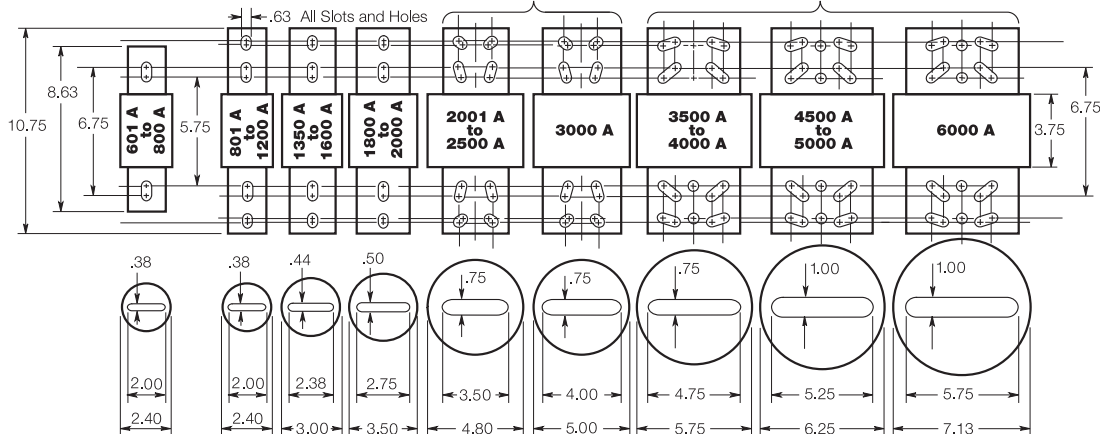
Ampere	250V		600V	
	A	B	A	B
70-100	5.88	1.16	7.88	1.16
110-200	7.13	1.66	9.63	1.66
225-400	8.63	2.38	11.63	2.38
450-600	10.38	2.88	13.38	2.88

Class L Low-Peak and Limitron Fuses

KRP-C, KTU & KLU (601-4000A) (600V)



Note: KRP-CL (150-600A) fuses have same dimensions as 601-800A case size. KTU (200-600A) have same dimensions, except tube 3-inch lgth. x 2-inch dia.; terminal 1.63-inch width x 1.25-inch thick.



Note: Eaton does not supply fuses - information for reference only.

Typical Fuse Dimensions in Millimeters

Class T

T-Tron Fuses

JJN (300V)

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

JJS (600V)

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

Class J

Low-Peak and Limitron Fuses

LPJ and JKS (600V)

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

601 A to 800 A

801 A to 1200 A

1 A to 30 A

35 A to 60 A

70 A to 100 A

110 A to 200 A

225 A to 400 A

450 A to 600 A

Class RK5 and RK1

Fusetron, Low-Peak and

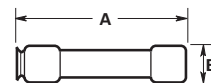
Limitron Fuses (250 and 600V)

FRN-R and FRS-R; LPN-RK

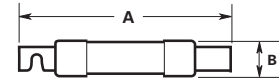
and LPS-RK; KTN-R and KTS-R

Basic dimensions are same as Class H (formerly NEC) ONE-TIME (NON and NOS) and SUPERLAG Renewable RES and REN fuses.

Note: These fuses can be used to replace existing Class H, RK1 and RK5 fuses relating to dimensional compatibility.



Ampere	250V		600V	
	A	B	A	B
1/10-30	50.8	14.3	127.0	20.6
35-60	76.2	20.6	139.7	27.0



Fusetron and Limitron

Ampere	250V		600V	
	A	B	A	B
70-100	149.2	26.9	200.0	34.0
110-200	181.0	39.6	244.5	46.7
225-400	219.1	52.3	295.3	65.8
450-600	263.5	65.8	339.7	79.5

Low-Peak

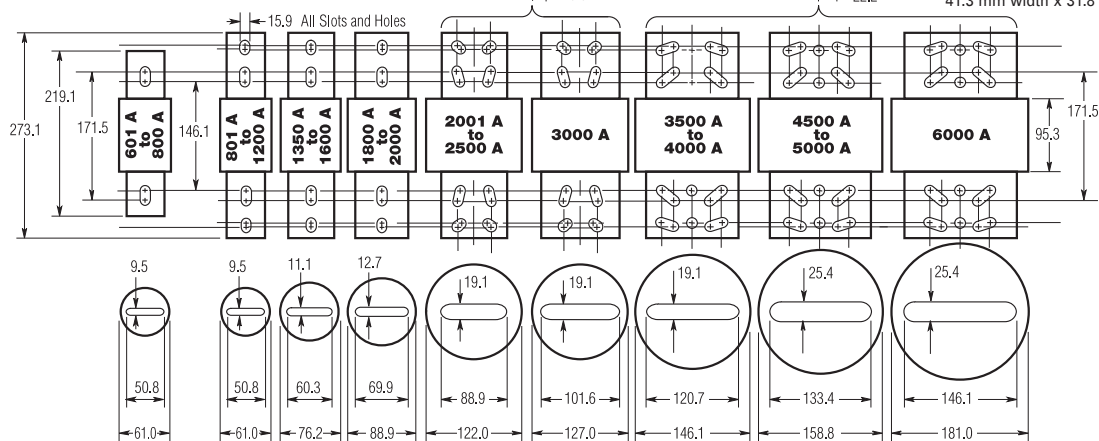
Ampere	250V		600V	
	A	B	A	B
70-100	149.2	29.5	200.0	29.5
110-200	181.0	42.2	244.5	42.2
225-400	219.1	60.5	295.3	60.5
450-600	263.5	73.2	339.7	73.2

Class L Low-Peak and Limitron Fuses

KRP-C, KTU and KLU (601-4000A) (600V)



Note: KRP-CL (150-600A) fuses have same dimensions as 601-800A case size. KTU (200-600A) have same dimensions, except tube 76.2 mm lgth. x 50.8 mm dia.; terminal 41.3 mm width x 31.8 mm thick.



Note: Eaton does not supply fuses - information for reference only.

General Duty Short Circuit Ratings Using Class “R”, “J” or “T” Fusing where Applicable

Ampere	Types 1 & 3R
30	100K @ 240V
60	100K @ 240V
100	100K @ 240V
200	100K @ 240V
400	100K @ 240V
600	100K @ 240V

Heavy Duty Short Circuit Ratings Using Class “R”, “J”, “L” or “T” Fusing where Applicable

Ampere	Type 1	Type 3R	Type 12	Type 4 & 4X
30	200K @ 600V	200K @ 600V	200K @ 600V	200K @ 600V
60	200K @ 600V	200K @ 600V	200K @ 600V	200K @ 600V
100	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 600V	200K @ 600V
200	200K @ 600V	200K @ 600V	200K @ 600V	200K @ 600V
400	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V
600	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V
800 [Ⓛ]	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V	200K @ 480V 100K @ 600V
1200 [Ⓛ]	200K @ 600V	200K @ 600V	200K @ 600V	200K @ 600V

Note: Class “H” fuse clips supplied as standard for 30-600A.
Rated at 10,000 rms when using class “H” fuses.

[Ⓛ] Class “L” fuse connectors supplied as standard for 800A and 1200A.

Double Throw Short Circuit Ratings Using Class “R”, “J” or “T” Fusing where Applicable

Ampere	Type 1	Type 3R	Type 12	Type 4 & 4X
30	100K @ 600V	100K @ 600V	100K @ 600V	100K @ 600V
60	100K @ 600V	100K @ 600V	100K @ 600V	100K @ 600V
100	100K @ 600V	100K @ 600V	100K @ 600V	100K @ 600V
200	100K @ 600V	100K @ 600V	100K @ 600V	100K @ 600V
400	100K @ 600V	100K @ 600V	100K @ 600V	100K @ 600V
600	100K @ 600V	100K @ 600V	100K @ 600V	100K @ 600V
800	100K @ 600V	100K @ 600V	—	—

Note: Class “H” fuse clips supplied as standard for 30-600A except Class “T” for 400A @ 600V and 600A @ 240V.
Rated at 10,000 rms when using Class “H” fuses.

Note: Safety switch short circuit ratings are applicable to AC only. For 600Vdc, 10KA short-circuit applies.

Note: Safety switch I^2t and I_p values are identical to UL maximum acceptable I^2t and I_p values for the corresponding class fuse.

Non-Fusible Switches - Short Circuit Ratings

The circuit breaker or fuse rating is not to exceed the ampere rating of the non-fusible switch. When used on systems with greater than 10 kA short-circuit rating available, the UL Listed short-circuit rating of the non-fusible switch is based upon the switch being used in combination with fuses or moulded-case circuit breakers identified in **Table 1**.

Non-Fusible Safety Switches

Eaton Non-Fusible Safety Switch Ampere Rating ^①	Maximum System Voltage AC	Maximum Short-Circuit Rating	Upstream Device ^②	
			Fuse Class	Breaker Frame
30 and 60	600	10,000	H, K	Any circuit breaker
		14,000		FDB
		18,000		FD, EGE
		25,000		FDC, HFD, HFDE, EGH
		200,000		R, T, J, L
100	480	10,000	H, K	Any circuit breaker
		35,000		FDB
		200,000		R, T, J, L
	600	10,000	H, K	Any circuit breaker
		14,000		FDB
		18,000		FD, EGE
		25,000		FDC, HFD, HFDE, EGH
		200,000 ^③		R, T, J, L
	200	480	10,000	H, K
65,000			HFD, HFDE, HJD, JGH	
200,000			R, T, J, L	
600		10,000	H, K	Any circuit breaker
		14,000		FDB
		18,000		FD, JD, JGE
		25,000		FDC, HFD, HFDE, HJD, JGH
		200,000	R, T, J, L	

① For use on Type 1, 3R, 12/3R, and 4X switches.

② Fuse or circuit breaker rating is not to exceed switch rating.

③ Type 12, 4/4X only. Type 1, 3R are 100 kAIC at 600Vac.

Modifications—Flex Centre/Satellites

Introduction

The Safety Switch Flex Centre is a special facility at the site of our Cleveland, Tennessee plant, that is dedicated to providing customized safety switches that meet customer's challenging applications.

In addition, customized safety switches are available through Eaton's Canadian network of eight regional satellite facilities.

The Eaton Flex Centre and Canadian regional Satellites are solution centres that provide real value:

- A dedicated and knowledgeable engineering/manufacturing/customer service team to meet your needs
- A production facility stocked with a full arsenal of equipment to get the job done
- Local accessibility, eight strategically located satellites in Canada
- Quick turnaround
- For pricing of modification contact Eaton Sales, Satellite or Customer Support (1-800-268-3578)

Description	Suffix	Item
Nameplates	NP	1
Fungus proofing	FP	2
Special paint		3
Lock-on provisions on heavy-duty safety switches for most enclosure types	LO	4
Trapped key interlock systems	TK	5
Viewing window	W	6
Solid neutral factory installed for double-throw safety switches	N	7
Switched neutral factory installed for double throw switches	SN	8
Neutral assemblies for single throw Non-fusible/Fusible switches	N or SN	9
200% neutrals factory installed	200	10
Fuse pullers factory installed	FE	11
Special crimp lug pads factory installed for general-duty and heavy-duty switches	CK	12
Copper lugs factory installed	CL	13
Custom lug configurations	L	14
Auxiliary contacts factory installed	2 or 3	15
Control pole factory installed	CP	16
Grade 316 stainless	316	17
Left hand operated	LH	18

1. Nameplates

Price covers up to three lines of text with a maximum of 25 characters per line. Standard nameplates are laser-engraved plastic and have black letters on a white background. Rotary-engraved lamacoid nameplates are also available. Additional colour combinations and larger nameplates are available upon request. Customer must specify the text when placing an order.

Item 1

Description

Plastic nameplate—up to three lines

Lamacoid nameplate—up to three lines

2. Fungus Proofing

All non-metallic components of the switch are coated with a moisture and fungus-resistant varnish. The inhibitor used meets USA military specification: MIL-V-173C for MOISTURE AND FUNGUS-RESISTANT TREATMENT. The treated switch meets USA military specification: MIL-T-152E for MOISTURE AND FUNGUS-RESISTANT TREATMENT OF COMMUNICATIONS, ELECTRONICS AND ASSOCIATED EQUIPMENT. Not UL listed/CSA Certified.

To order, add Suffix **FP** to standard safety switch catalogue number. *Example:* **1HD363FP**.

3. Special Paint

Special paint colours are available for order quantities of five or more switches. Custom colour is applied over the standard ANSI-61 gray finish.

Minimum quantity of five of the same colour is required. For quantities less than five, higher ampere ratings, or other colour request, contact Eaton Sales.

To order, add the following **suffix** to the standard catalogue number:

Red - **RED**
 Orange - **ORG**
 Yellow - **YEL**
 Green - **GRN**
 White - **WHT**
 Black - **BLK**
 Tan - **TAN**
 Brown - **BRN**
Example: 1HD361NF-ORG

4. Lock-ON Provision

Available on 30–800A heavy-duty and double-throw safety switches. Provision will accept a single lock.

To order, add Suffix **LO** to the standard catalogue number. *Example:* **3HD362LO**.

5. Trapped Key Interlock Systems

Available only on heavy-duty and double-throw safety switches. Trapped key systems are used on safety switches to prevent unauthorized operations or to predetermine a series of power transfers by an authorized operator.

Before system construction can begin, the following information must be provided to the Flex Centre:

- User—name, address and telephone number
- Complete coordination (lock scheme) required with order

To order, add Suffix **TK** to the standard catalogue number. *Example:* **12HD363TK**.

6. Viewing Window

Viewing window is centred over the switching contacts to provide visual verification of ON/OFF status. Available on 30 to 1200A heavy-duty single and double throw switches type 12, 4/4X enclosures. To order, **add Suffix W** to the standard catalogue number. *Example: 12HD362NFW.*

Note: Effective August 2003 30–100A window switches are provided with a full view cover window.

Double throw window switches are provided with two windows.

7. Solid Neutral for Double-Throw Safety Switches

Solid neutrals are suitable for non bonded generator applications. For bonded generators **switched neutrals** are required. See item 8.

To order **solid neutral, add Suffix N.**

Example 1: 3DT361NFN non-fusible double-throw, 600V, three phase, 30A switch with factory-installed solid neutral.

8. Switched Neutral Double-Throw

Switching neutrals are required for separately derived systems when bonding the neutral of the generator to a grounding system at the generator.

For non bonded generator application, a solid neutral would apply. See Item 7.

For a switched neutral application order one more pole than number of power phases. *Example:* single phase order 3 pole switch, three phase order 4 pole switch.

Available rating 30 - 800A.

To order, **add Suffix SN** to the standard safety switch catalogue number.

Example: 3DT324NFSN non-fusible double-throw, 240V, single phase, 200A switch with factory-installed switching neutral.

9. Neutral Assemblies Factory Installed for Single-Throw Non-Fusible/Fusible Safety Switches

Available on 200–600A general-duty safety switches and 30–1200A heavy-duty safety switches.

To order **Solid Neutral, add Suffix N** to the standard safety switch catalogue number.

Example: 4HD364NFN Heavy-duty, three-pole, 200A, non-fusible with solid neutral.

To order **Switched Neutral,** order one more pole than number of power phases and **add Suffix SN** to catalogue number.

Example: 3HD463SN 3 PH, four-pole, 600V, 100A with switched neutral factory installed.

10. 200% Neutrals Factory Installed

Available on heavy duty 30-600A safety switches.

To order, **add Suffix 200** to standard switch catalogue number.

Example: 1HD324N200 Heavy-duty, 200A, 240V, 3 phase with solid neutral 200% rated.

11. Fuse Pullers Factory Installed**Item 11**

Ampere Rating	Switch Type
30-100	Heavy Duty
200	General Duty, Heavy Duty

To order, **add Suffix FE** to the standard catalogue number.

Example: 3HD361FE

12. Special Crimp Lug Pads Factory Installed for General-Duty and Heavy-Duty Switches (Crimp Lugs are Not Included)

To order **add Suffix CK** to the standard safety switch catalogue number.

Item 12

Ampere Rating

400–600, GD
400–800, HD

Note: Heavy-duty Type HD switches, 30–200A are field adaptable to accept crimp lugs, simply remove the box lugs.

13. Copper Lugs Factory Installed

Item 13

Ampere Rating Switch Type

30–100	HD, DT
--------	--------

200	HD
-----	----

400	GD, HD
-----	--------

600	GD, HD
-----	--------

To order, **add Suffix CL** to the standard safety switch catalogue number.

Example: **1HD361CL** heavy-duty, three-pole, 30A fusible switch at 600V with copper lugs factory installed.

14. Custom Lug Configurations

Customer-specified lug arrangements are available on heavy-duty and double-throw safety switches. Contact Eaton.

15. Auxiliary Contacts Factory Installed Provide Early-Make/Early-Break Operation

Item 15

General-Duty Switches 200–600A, Heavy-Duty 30–1200A and Double-Throw Switches 30–800A

Ampere Rating	Description
30–1200	1NO/1NC
	2NO/2NC

To order 1NO/1NC contacts, **add Suffix 2** to the standard safety switch catalogue number.

To order 2NO/2NC contacts, **add Suffix 3** to the standard safety switch catalogue number.

Example: **1HD4232** Heavy-duty, four-pole, 100A fusible switch at 240V with factory-installed 1NO/1NC contacts.

Example: **1DT324NF22** double-throw, three-pole, 200A non-fusible switch at 240V with two factory-installed contacts (one installed in the primary switch ON position and one installed in the secondary switch ON position).

16. Control Pole Factory Installed Provides Late-Make/Early-Break Operation

The DS16CP control pole (1NO aux contact). Approved for use with elevating devices, provides one normally open contact, late-make, early-break operation. It mounts in the exact location as the neutral block using the same pre-drilled holes. This is directly connected to the power pole operating shaft. Direct connection and visible blades provide more secure electrical interlocking than handle linkage operation of a snap/switch type interlock. This reliability meets the requirements of many specifications for four-pole switches when the fourth pole is required for secure electrical interlocking.

Item 16

Ampere Rating	Switch Type
30–1200	HD
30–200	DT
400–600	GD

To order, **add Suffix CP** to the standard safety switch catalogue number.

Example: **1HD364CP** heavy-duty, three-pole, 200A fusible switch at 600V with factory-installed control pole.

17. Grade 316 Stainless Enclosures

Standard stainless enclosures are made from grade 304. For a higher degree of stainless, grade 316 can be specified.

To order, **add -316 to Suffix** of **4HD** standard catalogue number.

Example: **4HD362-316 or >200A 4HD365SS-316.**

18. Left-Hand Operated Safety Switch

Available from 30-200A Heavy Duty, for applications that require an operating handle and door opening of the left side of the enclosure.

To order, add **Suffix LH** to the standard switch catalogue number.

Example: **1HD364NFLH** Heavy Duty 3 pole, 600V, 200A, non-fusible, left hand operated.

Additional Safety Switch Flex/Satellite Centre Design Offerings

- Left-hand design (30–200A)
- Cover-mounted status lights and selector switches
- Integrated:
 - Transient Voltage Surge Suppression (TVSS)
 - Current transformers
- Double-throw receptacle switches
- 200% neutrals
- Seam-welded stainless steel
- Gang-operated kits:
 - Mechanically interlocks two or three separate switches
- Integrated wattmeter
- Custom enclosures
- Double-throw switches with windows
- 316 grade stainless steel
- Breather/drains
- Voltage/phase monitor

Air Condition Disconnects



Air Condition Disconnects

Application Description

Typically used as an outdoor motor disconnect for 240V residential and 600V commercial heating, ventilating and air conditioning applications. Per Section 28-604(5) CEC Part 1, "motor disconnecting means for air-conditioning and refrigeration equipment shall be located within sight of and within 3m of the equipment".

Product Description

240Vac single phase 30A, 60A, and 600Vac three phase 30A, 40A, 60A, 80A, horsepower rated motor disconnects. Rugged 3R outdoor rated padlockable metallic enclosure, ANSI 61 (light grey) electrocoat finish. CSA certified as a motor disconnect.

Single Phase 2 Wire 240Vac 30, 60A.

- 240Vac @10,000 amperes rms short circuit rating when protected by 60A fuse or breaker
- Available in four designs.
- Standard pullout, fused, and non fusible.
- Moulded case switch.
- For additional safe power source, 15A GFI receptacle c/w pullout.
- Swing-up cover remains in place when in the open position. Cover can be easily removed for wiring and mounting. Cover snaps into place and no screws required. Includes provision for padlocking.

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3 ph 3 w 600Vac, 30A, 40A, 60A, 80A non-fusible motor disconnect

- 600Vac @ 65KA rms short circuit rating when protected by J fusing. Applies to 'B' series, effective March 2011, non 'B' series rated 10KA
- 600V unit complies with CEC rule 28-602(3)(b) and are labelled "suitable for motor disconnect." cCSAus approved
- For ease of wiring, din rail mounted removable 600V disconnect
- Versatile cable entry - bottom, sides or back. Both 240V and 600Vac

Standards and Certifications

- 240V meets C22.2 No.4
- 600V meets C22.2 No.14, "suitable for motor disconnect"
- See page 16 for specific catalogue number certifications



Switching Devices

Safety Switches

3GAC222NF

240Vac HVAC Air Condition Disconnect



System	Ampere Rating	Maximum Horsepower Ratings ^①				600V	Type 3R Catalogue Number
		Single-Phase AC		Three-Phase AC			
		120V	240V	240V	480V		
Two Pole, Two-Wire - 240Vac - Fusible - Pullout design^②							
	30	—	3	—	—	—	3GAC221 ^{②③}
	60	—	10	—	—	—	3GAC222 ^{②③}
Two Pole, Two-Wire - 240Vac - Non Fusible - Pullout design^②							
	60	—	10	—	—	—	3GAC222NF ^{②③}
	60	—	10	—	—	—	3GAC222NFGF ^{②③④}

DPB222R



Two Pole, Two-Wire - 240Vac - Non Fusible - Moulded Case Switch^⑤							
	60	—	10	—	—	—	DPB222R ^{⑤⑥}

3GAC362NFB

600Vac HVAC Air Condition Disconnect



System	Ampere Rating	Maximum Horsepower Ratings ^①				600V	Type 3R Catalogue Number
		Single-Phase AC		Three-Phase AC			
		120V	240V	240V	480V		
Three Pole, Three-Wire - 600Vac - Non Fusible - Toggle design							
	30	—	3	7.5	15	20	3GAC361NFB ^{⑦⑧}
	40	—	3	7.5	20	25	3GAC3640NFB ^{⑦⑧}
	60	—	7.5	15	30	30	3GAC362NFB ^{⑦⑧}
	80	—	10	20	40	40	3GAC3680NFB ^{⑦⑧}

Notes

- ① Hp ratings apply when time delay fuses used.
- ② Replacement pullout head 96-3258-4.
- ③ cUL listed.
- ④ c/w factory installed 15A GFI receptacle.
- ⑤ c/w factory installed Moulded Case Switch.
- ⑥ CSA certified
- ⑦ "B" series effective March 2011, 600V @ 65kA rms when protected by J fuse on line side, otherwise 10ka rms.
- ⑧ cCSAus (approved by CSA to CSA and UL standards).

Note: fusible disconnect not approved for service entrance.

Technical Data and Specifications for Air Condition Disconnects

Short-Circuit Ratings Terminal Capacity 240Vac Single Phase Pullout and Moulded Case Switch Design

Ampere Rating	Short Circuit Withstand/Voltage	Upstream Protection	Terminal Capacity
30	10kA @ 240V	30A max Fuse or Breaker [Ⓞ]	#14 - #3 cu/al
60	10kA @ 240V	60A max Fuse or Breaker [Ⓞ]	#14 - #3 cu/al

600Vac Three Phase Toggle Design

Ampere Rating	Short Circuit Withstand/Voltage	Upstream Protection	Terminal Capacity
30	10kA @ 600V	60A max J Fuse	#14 - #4
30	65kA @ 600V	30A max J Fuse	#14 - #4
40	10kA @ 600V	60A max J Fuse	#14 - #4
40	65kA @ 600V	30A max J Fuse	#14 - #4
60	50kA @ 600V	100A max J Fuse	#14 - #1
60	65kA @ 600V	60A max J Fuse	#14 - #1
80	50kA @ 600V	100A max J Fuse	#14 - #1
80	65kA @ 600V	60A max J Fuse	#14 - #1

[Ⓞ] Fuse or Circuit Breaker utilized must have a minimum 10kA short circuit rating

Dimensions

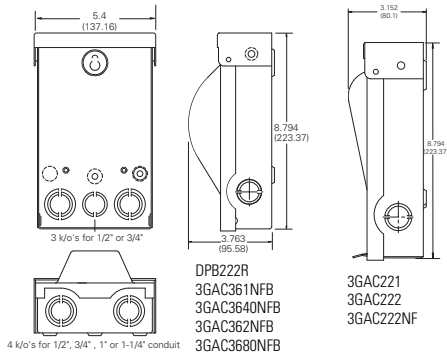
Approximate Dimensions in inches/mm

240Vac Single Phase 1 phase - 2 wire

Ampere Rating	Disconnect Type	Height (H)	Width (W)	Depth (D)	Weight lbs(kg)
30	Fusible	8.79 (223.4)	5.4 (137.16)	3.152 (80.1)	2.7 (1.23)
60	Fusible/ Non fusible	8.79 (223.4)	5.4 (137.16)	3.152 (80.1)	2.7 (1.23)
60	Non fusible with moulded case switch	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	3.4 (1.5)
60	Non fusible with 15A GFI receptacle	11.63 (295.4)	6.63 (168.4)	4.44 (112.8)	8 (3.6)

600Vac 3 phase - 3 wire

Ampere Rating	Disconnect Type	Height (H)	Width (W)	Depth (D)	Weight lbs(kg)
30	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	3.8 (1.7)
40	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	3.8 (1.7)
60	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	4 (1.8)
80	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	4 (1.8)



General-Duty Safety Switch - Cartridge Fuse Design



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General Duty

Application Description

For residential and commercial applications. Suitable for light-duty motor circuits and service entrance.

Product Description

- 30–600A
- 30A Plug type fusible 120V and 120/240V
- 30-60A 120/240V, fusible cartridge type and non fusible
- Fusible and non-fusible switches. Single-pole S/N through four-wire; 120/240, and 240 Vac
- Cartridge type general duty switches are certified for use on low voltage <60Vdc circuits
- Solid neutral standard on all fusible general duty switches
- Fusible, cartridge type suitable for service entrance applications

- Type 1 and 3R enclosures
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% continuous load rated
- 200–600A features K-Series design
- Horsepower rated
- Where applicable with Class R, J, T fuses, switches may be used on systems capable of delivering 100,000A rms symmetrical
- Bolt-on hub provision. Provided for general-duty switches in a Type 3R enclosure.

Note: Plug fuse switches are not service entrance rated.

General-Duty Features (Cartridge Fuse/Non Fusible type)

- Ample wire bending space provides for easier installation
- Visible double-break quick-make, quick-break rotary blade mechanism
- Side opening door on all enclosures
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- Clearly visible and accessible neutral where applicable
- Visible ON/OFF indication
- Double padlocking capability on 30–100A
- Triple padlocking capability on 200–600A
- Additional door locking capability
- Fusible suitable for service entrance

Standards and Certifications

- CSA certified File No. 69743
- Meets C22.2 No.4 for enclosed switches
- ISO 9001:2008

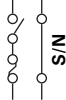
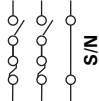


Product Selection

GP121N



120/240 Vac General-Duty, Fusible, Single-Throw (for screw type glass fuses)

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings ^①			DC 250V	Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number
			Single-Phase AC		Three-Phase AC			
			120V	240V	240V			
Plug Type—Two-Wire (One Blade, One Fuse, S/N)—120 Vac^{②③}								
	30	Plug	1/2-2	—	—	—	GP111N	—
Plug Type—Three-Wire (Two Blades, Two Fuses, S/N)—120/240 Vac^{②③}								
	30	Plug	1/2-2	1-1/2-3	—	—	GP121N	—

Notes

- ① Maximum hp ratings apply only when dual element time delay fuses are used.
- ② These switches do not have an interlock that prevents door from being opened when switch is in the ON position.
- ③ WARNING! Plug fuse GP switch is not approved for service entrance

Switching Devices

Safety Switches

CDG321NRB



120/240 Vac General-Duty, Fusible, Single-Throw, continued

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings ^①			DC 250V	Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number
			Single-Phase AC 120V	240V	Three-Phase AC 240V			
Cartridge Type—Three-Wire (Two Blades, Two Fuses, S/N)—120/240 Vac								
	30	H	—	1-1/2–3	3–7-1/2	—	CDG221NGB	CDG221NRB
	60	H	—	3–10	7-1/2–15	—	CDG222NGB	CDG222NRB
	100	H	—	7-1/2–15	15–30	—	CDG223NGB	CDG223NRB
	200	H	—	15	25–60	—	CDG224NGK	CDG224NRK
	400	H	—	—	50–125	50	G225N	3G225N
	600	H	—	—	75–200	—	G226N	3G226N
Cartridge Type—Four-Wire (Three Blades, Three Fuses, S/N)—120/240 Vac								
	30	H	—	1-1/2–3	3–7-1/2	—	CDG321NGB	CDG321NRB
	60	H	—	3–10	7-1/2–15	—	CDG322NGB	CDG322NRB
	100	H	—	7-1/2–15	15–30	—	CDG323NGB	CDG323NRB
	200	H	—	15	25–60	—	G324N	3G324N
	400	H	—	—	50–125	—	G325N	3G325N
	600	H	—	—	75–200	—	G326N	3G326N

CDG322URB



120/240 Vac General-Duty, Non-Fusible, Single-Throw

System	Ampere Rating	Maximum Horsepower Ratings ^①			DC 250V	Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number
		Single-Phase AC 120V	240V	Three-Phase AC 240V			
Two-Pole, Two-Wire (Two Blades)—240 Vac							
	30	2	3	—	—	CDG221UGB ^②	CDG221URB ^②
	60	3	10	—	—	CDG222UGB ^②	CDG222URB ^②
	100	—	15	—	—	— ^②	— ^②
	200	—	—	—	—	— ^②	— ^②
Three-Pole, Three-Wire (Three Blades)—240 Vac							
	30	2	3	7-1/2	—	CDG321UGB	CDG321URB
	60	3	10	15	—	CDG322UGB	CDG322URB
	100	—	15	30	—	CDG323UGB	CDG323URB
	200	—	15	60	—	G324NF	3G324NF
	400	—	—	125	—	G325NF	3G325NF
	600	—	—	200	—	G326NF	3G326NF

Notes

① Maximum hp ratings apply only when dual element time delay fuses are used.

② Use three-wire catalogue numbers below.

All general-duty safety switches are individually packaged.

Accessories are limited in scope on general-duty safety switches. See **Page 5 and 6** for selection. Clear line shields are available as an accessory on 200–600A general-duty switches.

Note: For “J” fusing on General Duty 30-200A use Heavy Duty switch no modification available.

For “J” fusing on General Duty 400-600A, field modification required.

400A, reposition loadside fuse block to accept ‘J’ fuse.

600A, fuse kit adapter for ‘J’ fusing included with switch. For adaptation to “R” and “T” fusing see accessory page 5.

Technical Data and Specifications for General Duty Switches

Short-Circuit Ratings Using Class “R”, “J” or “T” Fusing Where Applicable

Ampere Rating	Voltage Ratings	
	Type 1	Type 3R
30	100k at 240	100k at 240
60	100k at 240	100k at 240
100	100k at 240	100k at 240
200	100k at 240	100k at 240
400	100k at 250	100k at 250
600	100k at 250	100k at 250

Dimensions

Approximate Dimensions in Inches (mm)

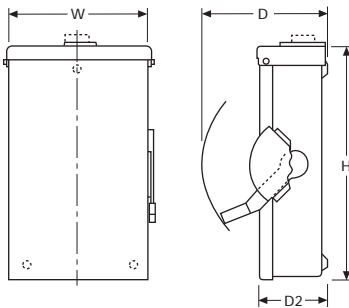
General Duty, Plug Fuse Type 120V, 120/240V, Single-, Two-Pole Solid Neutral, Single-Throw[Ⓜ]

Ampere Rating	Height	Width	Depth	Weight Lbs/(kg)
30	6.88 (174.8)	4.94 (125.5)	3.44 (87.4)	2(.9)

General-Duty, Non-Fusible, 240V, Three-Pole, Single-Throw[Ⓜ]

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1					
30	6.38 (162.1)	10.69 (271.5)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.19 (360.4)	7.38 (187.5)	4.21 (106.9)	9 (4.086)
100	9.13 (231.9)	18.81 (477.8)	7.38 (187.5)	4.23 (107.4)	12 (5.448)
200	16.00 (406.4)	25.25 (641.4)	11.25 (285.8)	6.14 (156.0)	48 (21.792)
400	23.00 (584.2)	44.75 (1136.7)	12.63 (320.8)	7.27 (184.7)	100 (45.4)
600	24.00 (609.6)	52.25 (1327.2)	14.25 (362.0)	8.95 (227.3)	130 (59.02)
Type 3R					
30	6.38 (162.1)	10.81 (274.6)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.38 (365.3)	7.38 (187.5)	4.21 (106.9)	9 (4.086)
100	9.13 (231.9)	19.25 (489.0)	7.38 (187.5)	4.23 (107.4)	12 (5.448)
200	16.00 (406.4)	25.50 (647.7)	11.25 (285.8)	6.14 (156.0)	55 (24.97)
400	23.00 (584.2)	45.19 (1147.8)	12.63 (320.8)	7.27 (184.7)	105 (47.67)
600	24.00 (609.6)	52.70 (1338.6)	14.25 (362.0)	8.95 (227.3)	135 (61.29)

Type 1-3R 30–100A General-Duty Non-Fusible and Fusible Single-Throw[Ⓜ]



Notes

- Ⓜ Dimensions are for estimating purposes only.
- Ⓜ Figure is not applicable to plug fuse design.

Terminal Capacity for General Duty 240V

Ampere	Line/Load (per phase)	Ground	Neutral Catalogue #	Neutral Terminal Capacity
30 (GP type)	#14 - #8	#14 - 4	—	#14 - #8
30	#14 - #6	#14 - 4	DG030NB	3x #14 - #4
60	#14 - 1/0	#14 - 4	DG100NB	3x #14 - 1/0
100	#14 - 1/0	#14 - 4	DG100NB	3x #14 - 1/0
200	#6 - 250mcm	#14 - 4	DG200NK	2x #6 - 250mcm AND 2x #14 - #2
400	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 200mcm	DS400NK	2x 1/0 - 750mcm OR (2) 1/0 - (2)300mcm AND 3x #6 - 250mcm
600	(1) #2 - 600mcm AND (1) 1/0 - 750mcm	#6 - 200mcm	DS600NK	2 x 1/0 - (1)750mcm OR 1/0 - (2) 300mcm AND 1 x #2 - 600mcm AND 3 x #6 - 250mcm

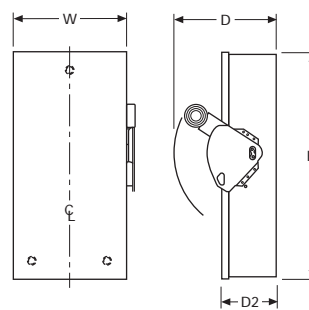
Notes

Use neutral catalogue number when neutral not included with switch
All terminals are rating al/cu unless otherwise noted
For optional ground lug kits see page 5

General-Duty, Fusible (cartridge type), 240V, Three-Pole Solid Neutral, Single-Throw[Ⓜ]

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1					
30	6.38 (162.1)	10.69 (271.5)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.19 (360.4)	7.38 (187.5)	4.21 (106.9)	10 (4.54)
100	9.13 (231.9)	18.81 (477.8)	7.38 (187.5)	4.23 (107.4)	14 (6.356)
200	16.00 (406.4)	24.75 (628.7)	11.25 (285.8)	6.14 (156.0)	48 (21.792)
400	23.00 (584.2)	44.75 (1136.7)	12.63 (320.8)	7.27 (184.7)	110 (49.94)
600	24.00 (609.6)	52.25 (1327.2)	14.25 (362.0)	8.95 (227.3)	145 (65.83)
Type 3R					
30	6.38 (162.1)	10.81 (274.6)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.38 (365.3)	7.38 (187.5)	4.21 (106.9)	10 (4.54)
100	9.13 (231.9)	19.25 (489.0)	7.38 (187.5)	4.23 (107.4)	14 (6.356)
200	16.00 (406.4)	25.50 (647.7)	11.25 (285.8)	6.14 (156.0)	55 (24.97)
400	23.00 (584.2)	45.19 (1147.8)	12.63 (320.8)	7.27 (184.7)	115 (52.21)
600	24.00 (609.6)	52.70 (1338.6)	14.25 (362.0)	8.95 (227.3)	150 (68.1)

Type 1-3R 200–600A General-Duty Non-Fusible and Fusible Single-Throw



Heavy-Duty Safety Switch



Heavy-Duty

Application Description

For light to heavy commercial and industrial applications. Main service entrance, branch and motor circuit protection, disconnecting or transferring to alternate power source. Where reliable performance and service continuity are critical.

Product Description

- 30–1200A
- 600 Vac, 600 Vdc maximum
- Horsepower rated
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100%

- continuous load rated
- Fusible switches suitable for service entrance applications unless otherwise noted
- Enclosures, Type 1, 3R, 12/3R, 4 are painted steel ANSI 61 light grey electrocoat. and 4X are grade 304 stainless steel, grade 316 available upon request.
- For factory modifications, refer to **Pages 12 through 14**

240 Vac Heavy-Duty, Fusible, Single-Throw

- 30–1200A
- Horsepower rated
- Fusible switches suitable for service entrance use, except four-pole switches
- For accessories refer to **Pages 5 and 6**

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600 Vac Heavy-Duty, Fusible, Single-Throw

- 30–1200A
- Horsepower rated
- Suitable for service entrance use, except four pole switches.
- **Note:** Must use suitable ground fault protection @ 1200 Ampere for service entrance.

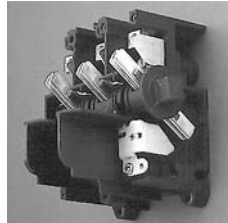
600 Vac Heavy-Duty, Non-Fusible, Single-Throw

- 30–1200A
- Horsepower rated
- Not suitable for service entrance per CEC

Features, Benefits and Functions

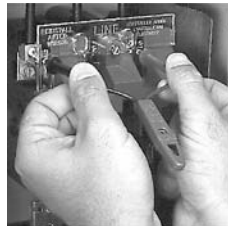
- Visible double-break quick-make, quick-break rotary blade mechanism. Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life
- Triple padlocking capability. Personnel safety feature since the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks. Cabinet door can be further padlocked at the top and bottom
- Interlocking mechanism. Door cannot be opened when the handle is in the ON position. Built-in defeater mechanism provides for user access when necessary
- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- Clear line shield with probe holes
- Clearly visible palm fitting red handle
- Tangential knockouts on Type 1 and Type 3R enclosures through 200A
- Built-in fuse pullers on Type 4X and Type 12 enclosures through 200A
- Additional door locking capability
- Complete accessory and renewal parts data shown on inner door label
- 30–1200A Type 12 designs convertible to Type 3R by opening factory-installed drain hole
- 30–1200A switches are seismic qualified and exceed the requirements of the Uniform Building CodeT (UBC) and California Code Title 24

- Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life



Visible Double-Break Rotary Blade Mechanism

- Protects against accidental contact with energized parts. Probe holes enable the user to test if the line side is energized without removing the shield.



Clear Line Shield

- Provide easy removal of fuses



Built-In Fuse Pullers (Type 12 and 4X 30–200A)

- The position (ON or OFF) can be clearly seen from a distance and the length provides for easy operation



Clearly Visible Handle

- Personnel safety feature since the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks



Triple Padlocking Capability

- Cabinet door can be further padlocked at the top and bottom as applicable



Additional Locking Capability

- Door cannot be opened when the handle is in the ON position. Front and side operable defeater mechanism provides for user access when necessary on single-throw switches



Interlocking Mechanism

- An ample number are provided on the top, bottom and sides of both NEMA Types 1 and 3R enclosures through 200A



Tangential Knockouts

- For switches in a Type 3R, 30–200A. Use a Myers type hub for all others



Bolt-On Hub Kits

- Type 12 and 4X 30–100A have padlockable suitcase latches vs screw type latches.



Padlockable Suitcase Latches

Standards and Certifications

- CSA Certified File No. 69743
- Meets C22.2 No. 4 for enclosed switches
- Refer to page 2 for additional certifications
- ISO 9001:2008



Switching Devices

Safety Switches

Product Selection

3HD221N



240 Vac Heavy-Duty, Fusible, Single-Throw, Fusible—Type 1, 3R

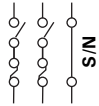
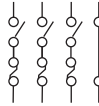

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings AC		Time Delay		DC 250V	Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number
			Standard Fuse Single-Phase	Three-Phase	Single-Phase	Three-Phase			
Three-Wire (Two Blades, Two Fuses, S/N)—240 Vac, 250 Vdc									
	30	H	1-1/2	3	3	7-1/2	5	1HD221N	3HD221N
	60	H	3	7-1/2	10	15	10	1HD222N	3HD222N
	100	H	7-1/2	15	15	30	20	1HD223N	3HD223N
	200	H	15	25	15	60	40	1HD224N	3HD224N
	400	H	—	50	—	125	50	1HD225N	3HD225N
	600	H	—	75	—	200	—	1HD226N	3HD226N
	800	L	—	100	—	—	—	1HD227N	3HD227N
Four-Wire (Three Blades, Three Fuses, S/N)—240 Vac, 250 Vdc									
	30	H	1-1/2	3	3	7-1/2	5	1HD321N	3HD321N
	60	H	3	7-1/2	10	15	10	1HD322N	3HD322N
	100	H	7-1/2	15	15	30	20	1HD323N	3HD323N
	200	H	15	25	15	60	40	1HD324N	3HD324N
	400	H	—	50	—	125	50	1HD325N	3HD325N
	600	H	—	75	—	200	—	1HD326N	3HD326N
	800	L	—	100	—	250	—	1HD327N	3HD327N
Four-Pole—240 Vac, 250 Vdc									
	30	H	3	3	10	7-1/2	5	1HD421	①
	60	H	7-1/2	7-1/2	20	15	10	1HD422	①
	100	H	15	15	30	30	20	1HD423	①
	200	H	30	25	50	60	40	1HD424	①
	400	H	50	50	—	125	50	1HD425	①②
	600	H	—	75	—	200	—	1HD426	①③

Notes

- ① Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ② Contact Customer Support (1-800-268-3578) for availability of this product.
- ③ Type 4x stainless steel enclosure.
- ④ Type 4 painted steel enclosure.

Note: For 'J' Fusing on 240V Heavy Duty Switches Field Modification Required.
 30-60 amperes not available.
 100-400 amperes, reposition loadside fuse block to accept 'J' fuse.
 600 amperes adapter kit included with switch.
 For 'R' fuse rejector adapter kit and 'T' fusing see page 5 accessory application options.

240 Vac Heavy-Duty, Fusible, Single-Throw, Fusible—Type 12/3R^①, 4X^③, and 4^④

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings		Time Delay Single-Phase	Time Delay Three-Phase	DC 250V	Type 12/3R ^① Enclosure Dust-Tight Catalogue Number	Type 4X and 4 ^④ Enclosure Watertight Catalogue Number
			Standard Fuse Single-Phase	Standard Fuse Three-Phase					
Three-Wire (Two Blades, Two Fuses, S/N)—240 Vac, 250 Vdc									
	30	H	1-1/2	3	3	7-1/2	5	12HD221N ^①	4HD221N ^③
	60	H	3	7-1/2	10	15	10	12HD222N ^①	4HD222N ^③
	100	H	7-1/2	15	15	30	20	12HD223N ^①	4HD223N ^③
	200	H	15	25	15	60	40	12HD224N ^①	4HD224N ^③
	400	H	—	50	—	125	50	12HD225N ^①	4HD225N ^④
	400	H	—	50	—	125	50	—	4HD225N ^④
	600	H	—	75	—	200	—	12HD226N ^①	4HD226N ^④
	600	H	—	75	—	200	—	—	4HD226N ^④
	800	L	—	100	—	250	—	12HD227N ^①	4HD227N ^④
800	L	—	100	—	250	—	—	4HD227N ^④	
Four-Wire (Three Blades, Three Fuses, S/N)—240 Vac, 250 Vdc									
	30	H	1-1/2	3	3	7-1/2	5	12HD321N ^①	4HD321N ^③
	60	H	3	7-1/2	10	15	10	12HD322N ^①	4HD322N ^③
	100	H	7-1/2	15	15	30	20	12HD323N ^①	4HD323N ^③
	200	H	15	25	15	60	40	12HD324N ^①	4HD324N ^③
	400	H	—	50	—	125	50	12HD325N ^①	4HD325N ^④
	400	H	—	50	—	125	50	—	4HD325N ^④
	600	H	—	75	—	200	—	12HD326N ^①	4HD326N ^④
	600	H	—	75	—	200	—	—	4HD326N ^④
	800	L	—	100	—	250	—	12HD327N ^①	4HD327N ^④
	800	L	—	100	—	250	—	—	4HD327N ^④
	1200	L	—	—	—	—	—	12HD328N ^①	4HD328N ^④
	1200	L	—	—	—	—	—	—	4HD328N ^④
Four-Pole—240 Vac, 250 Vdc									
	30	H	3	3	10	7-1/2	5	12HD421F ^①	②
	60	H	7-1/2	7-1/2	20	15	10	12HD422F ^①	②
	100	H	15	15	30	30	20	12HD423F ^①	②
	200	H	30	25	50	60	40	12HD424F ^①	②
	400	H	50	50	—	125	50	②	②
	400	H	50	50	—	125	50	②	②
	600	H	—	75	—	200	—	②	②
600	H	—	75	—	200	—	②	②	

Notes

- ① Type 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- ② Contact Customer Support (1-800-268-3578) for availability of this product.
- ③ Type 4x stainless steel enclosure.
- ④ Type 4 painted steel enclosure.

Note: For 'J' Fusing on 240V Heavy Duty Switches Field Modification Required.
 30-60 amperes not available.
 100-400 amperes, reposition loadside fuse block to accept 'J' fuse.
 600 amperes adapter kit included with switch.
 For 'R' fuse rejector adapter kit and 'T' fusing see page 5 accessory application options.

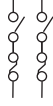

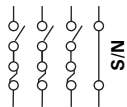
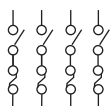
Switching Devices

Safety Switches

3HD362N



600 Vac Heavy-Duty, Fusible, Single-Throw, 277/480–600V—Type 1, 3R

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number
			Single-Phase AC		Three-Phase AC		DC			
			480V	600V	480V	600V	250V	600V		
Two-Pole—480 Vac—600 Vac or Vdc^② (Suitable for Service Entrance Use with a Neutral Kit Installed)										
	30	H	7-1/2	10	—	—	—	15	1HD261	3HD261
	60	H	20	25	—	—	—	25	1HD262	3HD262
	100	H	30	40	—	—	20	25	1HD263	3HD263
	200	H	50	50	—	—	—	50	1HD264	3HD264
	400	H	—	—	—	—	—	50	1HD265	3HD265
	600	H	—	—	—	—	—	—	1HD266	3HD266
	800	L	—	—	—	—	—	—	1HD267 ^②	3HD267 ^②
	1200	L	—	—	—	—	—	—	③	③
Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)										
	30	H	7-1/2	10	15	20	—	—	1HD361	3HD361
	60	H	20	25	30	50	—	—	1HD362	3HD362
	100	H	30	40	60	75	—	—	1HD363	3HD363
	200	H	50	50	125	150	—	—	1HD364	3HD364
	400	H	—	—	250	350	—	—	1HD365	3HD365
	600	H	—	—	400	500	—	—	1HD366	3HD366
	800	L	—	—	500	500	—	—	1HD367	3HD367
	1200	L	—	—	500	500	—	—	1HD368 ^⑤	3HD368 ^⑤
Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc										
	30	H	7-1/2	10	15	20	—	—	1HD361N	3HD361N
	60	H	20	25	30	50	—	—	1HD362N	3HD362N
	100	H	30	40	60	75	—	—	1HD363N	3HD363N
	200	H	50	50	125	150	—	—	1HD364N	3HD364N
	400	H	—	—	250	350	—	—	1HD365N	3HD365N
	600	H	—	—	400	500	—	—	1HD366N	3HD366N
	800	L	—	—	500	500	—	—	1HD367N	3HD367N
	1200	L	—	—	500	500	—	—	1HD368N ^⑤	3HD368N ^⑤
Four-Pole—480 Vac—600 Vac, 250 Vdc										
	30	H	20 ^④	25 ^④	15	20	—	—	1HD461	3HD461
	60	H	40 ^④	50 ^④	30	50	—	—	1HD462	3HD462
	100	H	50 ^④	50 ^④	60	75	—	—	1HD463	3HD463
	200	H	—	—	125	150	40	—	1HD464	3HD464
	400	H	—	—	250	350	50	—	1HD465	3HD465
	600	H	—	—	400	500	—	—	1HD466	3HD466
	800	L	—	—	—	—	—	—	③	③

Notes

- ① Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ② DC rating for 800A switches is 250V.
- ③ Contact Customer Support (1-800-268-3578) for availability of this product.
- ④ Ratings are for two-phase AC.
- ⑤ Must use suitable ground fault protection @1200A for service entrance.
- ⑥ Type 4X stainless steel enclosure.
- ⑦ Type 4 painted steel enclosure.

Note: For 'J' Fusing on 600V Heavy Duty Switches Field Modification Required.
 30-60 ampere reposition clips on loadside of fuse base.
 100-400 amperes, reposition loadside fuse base.
 600 amperes adapter kit included with switch.
 For 'R' fuse rejector adapter kit and 'T' fusing see page 5 accessory application options.

12HD361



600 Vac Heavy-Duty, Fusible, Single-Throw, 277/480–600V—Type 12/3R^①, 4X^④ and 4^⑦

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						Type 12/3R ^① Enclosure Dust-Tight Catalogue Number	Type 4X ^④ and 4 ^⑦ Enclosure Watertight, Catalogue Number
			Single-Phase AC		Three-Phase AC		DC			
			480V	600V	480V	600V	250V	600V		
Two-Pole—480 Vac—600 Vac or Vdc^② (Suitable for Service Entrance Use with a Neutral Kit Installed)										
	30	H	7-1/2	10	—	—	—	15	12HD261 ^①	4HD261 ^④
	60	H	20	25	—	—	—	25	12HD262 ^①	4HD262 ^④
	100	H	30	40	—	—	20	25	12HD263 ^①	4HD263 ^④
	200	H	50	50	—	—	—	50	12HD264 ^①	4HD264 ^④
	400	H	—	—	—	—	50	—	12HD265 ^①	4HD265SS ^④
	400	H	—	—	—	—	50	—	—	4HD265 ^⑦
	600	H	—	—	—	—	—	—	12HD266 ^①	4HD266SS ^④
	600	H	—	—	—	—	—	—	—	4HD266 ^⑦
	800	L	—	—	—	—	—	—	12HD267 ^{①②}	4HD267SS ^④
	800	L	—	—	—	—	—	—	—	4HD267 ^⑦
	1200	L	—	—	—	—	—	—	⑤③	⑤③
Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)										
	30	H	7-1/2	10	15	20	—	—	12HD361 ^①	4HD361 ^④
	60	H	20	25	30	50	—	—	12HD362 ^①	4HD362 ^④
	100	H	30	40	60	75	—	—	12HD363 ^①	4HD363 ^④
	200	H	50	50	125	150	—	—	12HD364 ^①	4HD364 ^④
	400	H	—	—	250	350	—	—	12HD365 ^①	4HD365SS ^④
	400	H	—	—	250	350	—	—	—	4HD365 ^⑦
	600	H	—	—	400	500	—	—	12HD366 ^①	4HD366SS ^④
	600	H	—	—	400	500	—	—	—	4HD366 ^⑦
	800	L	—	—	500	500	—	—	12HD367 ^①	4HD367SS ^④
	800	L	—	—	500	500	—	—	—	4HD367 ^⑦
	1200	L	—	—	500	500	—	—	12HD368 ^{①⑤}	4HD368SS ^{④⑤}
	1200	L	—	—	500	500	—	—	—	4HD368 ^{⑤⑦}
Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc										
	30	H	7-1/2	10	15	20	—	—	12HD361N ^①	4HD361N ^④
	60	H	20	25	30	50	—	—	12HD362N ^①	4HD362N ^④
	100	H	30	40	60	75	—	—	12HD363N ^①	4HD363N ^④
	200	H	50	50	125	150	—	—	12HD364N ^①	4HD364N ^④
	400	H	—	—	250	350	—	—	12HD365N ^①	4HD365N ^④
	400	H	—	—	250	350	—	—	—	4HD365N ^⑦
	600	H	—	—	400	500	—	—	12HD366N ^①	4HD366N ^④
	600	H	—	—	400	500	—	—	—	4HD366N ^⑦
	800	L	—	—	500	500	—	—	12HD367N ^①	4HD367N ^④
	800	L	—	—	500	500	—	—	—	4HD367N ^⑦
	1200	L	—	—	500	500	—	—	12HD368N ^{①⑤}	⑤③
	1200	L	—	—	500	500	—	—	—	⑤③
Four-Pole—480 Vac—600 Vac, 250 Vdc										
	30	H	20 ^④	25 ^④	15	20	—	—	12HD461 ^①	4HD461 ^④
	60	H	40 ^④	50 ^④	30	50	—	—	12HD462 ^①	4HD462 ^④
	100	H	50 ^④	50 ^④	60	75	—	—	12HD463 ^①	4HD463 ^④
	200	H	—	—	125	150	40	—	12HD464 ^①	4HD464 ^④
	400	H	—	—	250	350	50	—	12HD456 ^①	④
	600	H	—	—	400	500	—	—	12HD466 ^①	④

See NOTES listed on Page 26.




Switching Devices

Safety Switches

1HD362NF






600 Vac Heavy-Duty, Non-Fusible, Single-Throw, 277/480–600V—Type 1, 3R

System	Ampere Rating	Maximum Horsepower Ratings						DC		Type 1 Enclosure Indoor Catalogue Number	Type 3R [Ⓢ] Enclosure Rainproof Catalogue Number
		Single-Phase AC			Three-Phase AC			250V	600V		
		240V	480V	600V	240V	480V	600V				
Two-Pole—480 Vac—600 Vac or Vdc [Ⓢ]											
	30	3	7-1/2	10	—	—	—	—	15	1HD261NF	3HD261NF
	60	10	20	25	—	—	—	—	25	1HD262NF	3HD262NF
	100	20	30	40	—	—	—	20	25	1HD263NF	3HD263NF
	200	15	50	50	—	—	—	—	50	1HD264NF	3HD264NF
	400	—	—	—	—	—	—	50	—	1HD265NF	3HD265NF
	600	—	—	—	—	—	—	—	—	1HD266NF	3HD266NF
	800	—	—	—	—	—	—	—	—	1HD267NF [Ⓢ]	3HD267NF [Ⓢ]
	1200	—	—	—	—	—	—	—	—	[Ⓢ]	[Ⓢ]
Three-Pole—480 Vac—600 Vac, 250 Vdc											
	30	3	7-1/2	10	10	20	30	5	—	1HD361NF	3HD361NF
	60	10	20	25	20	50	60	10	—	1HD362NF	3HD362NF
	100	20	40	50	40	75	100	20	—	1HD363NF	3HD363NF
	200	15	50	50	60	125	150	40	—	1HD364NF	3HD364NF
	400	—	—	—	125	250	350	50	—	1HD365NF	3HD365NF
	600	—	—	—	200	400	500	—	—	1HD366NF	3HD366NF
	800	—	—	—	—	500	500	—	—	1HD367NF	3HD367NF
	1200	—	—	—	—	500	500	—	—	1HD368NF	3HD368NF
Four-Pole—480 Vac—600 Vac, 250 Vdc											
	30	10 [Ⓢ]	20 [Ⓢ]	25 [Ⓢ]	10	20	30	5	—	1HD461NF	3HD461NF
	60	20 [Ⓢ]	40 [Ⓢ]	50 [Ⓢ]	20	50	60	10	—	1HD462NF	3HD462NF
	100	40 [Ⓢ]	50 [Ⓢ]	50 [Ⓢ]	40	75	100	20	—	1HD463NF	3HD463NF
	200	50 [Ⓢ]	50 [Ⓢ]	50 [Ⓢ]	60	125	150	40	—	1HD464NF	3HD464NF
	400	50 [Ⓢ]	—	—	125	250	350	50	—	1HD465NF	[Ⓢ]
	600	—	—	—	200	400	500	—	—	1HD466NF	[Ⓢ]
	800	—	—	—	—	—	—	—	—	[Ⓢ] [Ⓢ]	[Ⓢ] [Ⓢ]

Notes

- [Ⓢ] Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- [Ⓢ] DC rating for 800A switches is 250V.
- [Ⓢ] Contact Customer Support (1-800-268-3578) for availability of this product.
- [Ⓢ] Ratings are for two-phase AC.
- [Ⓢ] Type 4X stainless steel enclosure.
- [Ⓢ] Type 4 painted steel enclosure.

600 Vac Heavy-Duty, Non-Fusible, Single-Throw, 277/480–600V—Type 12/3R^①, 4X^⑤ and 4^④

System	Ampere Rating	Maximum Horsepower Ratings Single-Phase AC			Three-Phase AC			DC		Type 12/3R Enclosure Dust-Tight Catalogue Number	Type 4X ^⑤ and 4 ^④ Enclosure Watertight, Painted Steel Catalogue Number
		240V	480V	600V	240V	480V	600V	250V	600V		
Two-Pole—480 Vac—600 Vac or Vdc ^②											
	30	3	7-1/2	10	—	—	—	5	15	12HD261NF ^①	4HD261NF ^⑤
	60	10	20	25	—	—	—	10	25	12HD262NF ^①	4HD262NF ^⑤
	100	20	30	40	—	—	—	20	25	12HD263NF ^①	4HD263NF ^⑤
	200	15	50	50	—	—	—	40	50	12HD264NF ^①	4HD264NF ^⑤
	400	—	—	—	—	—	—	50	—	12HD265NF ^①	4HD265NFSS ^⑤
	400	—	—	—	—	—	—	50	—	—	4HD265NF ^⑤
	600	—	—	—	—	—	—	—	—	12HD266NF ^①	4HD266NFSS ^⑤
	600	—	—	—	—	—	—	—	—	—	4HD266NF ^⑤
	800	—	—	—	—	—	—	—	—	12HD267NF ^{①②}	4HD267NFSS ^⑤
	800	—	—	—	—	—	—	—	—	—	4HD267NF ^⑤
	1200	—	—	—	—	—	—	—	—	③	③
Three-Pole—480 Vac—600 Vac, 250 Vdc											
	30	3	7-1/2	10	10	20	30	5	—	12HD361NF ^①	4HD361NF ^⑤
	60	10	20	25	20	50	60	10	—	12HD362NF ^①	4HD362NF ^⑤
	100	20	40	50	40	75	100	20	—	12HD363NF ^①	4HD363NF ^⑤
	200	15	50	50	60	125	150	40	—	12HD364NF ^①	4HD364NF ^⑤
	400	—	—	—	125	250	350	50	—	12HD365NF ^①	4HD365NFSS ^⑤
	400	—	—	—	125	250	350	50	—	—	4HD365NF ^⑤
	600	—	—	—	200	400	500	—	—	12HD366NF ^①	4HD366NFSS ^⑤
	600	—	—	—	200	400	500	—	—	—	4HD366NF ^⑤
	800	—	—	—	—	500	500	—	—	12HD367NF ^①	4HD367NFSS ^⑤
	800	—	—	—	—	500	500	—	—	—	4HD367NF ^⑤
	1200	—	—	—	—	500	500	—	—	12HD368NF ^①	4HD368NFSS ^⑤
1200	—	—	—	—	500	500	—	—	—	4HD368NF ^⑤	
Four-Pole—480 Vac—600 Vac, 250 Vdc											
	30	10 ^⑥	20 ^⑥	25 ^⑥	10	20	30	5	—	12HD461NF ^①	4HD461NF ^⑤
	60	20 ^⑥	40 ^⑥	50 ^⑥	20	50	60	10	—	12HD462NF ^①	4HD462NF ^⑤
	100	40 ^⑥	50 ^⑥	50 ^⑥	40	75	100	20	—	12HD463NF ^①	4HD463NF ^⑤
	200	50 ^⑥	50 ^⑥	50 ^⑥	60	125	150	40	—	12HD464NF ^①	4HD464NF ^⑤
	400	50 ^⑥	—	—	125	250	350	50	—	①③	—
	600	—	—	—	200	400	500	—	—	①③	—
	800	—	—	—	—	—	—	—	—	①②③	—

Notes

- ① Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ② DC rating for 800A switches is 250V.
- ③ Contact Customer Support (1-800-268-3578) for availability of this product.
- ④ Ratings are for two-phase AC.
- ⑤ Type 4X stainless steel enclosure.
- ⑥ Type 4 painted steel enclosure.

Technical Data and Specifications for 2, 3, 4 Pole Heavy Duty

Short-Circuit Ratings Using Class "R", "J" or "T" Fusing Where Applicable

Ampere Rating	Voltage Ratings			
	Type 1	Type 3R	Type 12	Type 4 and 4X
30	200k at 600	200k at 600	200k at 600	200k at 600
60	200k at 600	200k at 600	200k at 600	200k at 600
100	200k at 480 100k at 600	200k at 480 100k at 600	200k at 600	200k at 600
200	200k at 600	200k at 600	200k at 600	200k at 600
400	200k at 480 100k at 600	200k at 480 100k at 600	200k at 480 100k at 600	200k at 480 100k at 600
600	200k at 480 100k at 600	200k at 480 100k at 600	200k at 480 100k at 600	200k at 480 100k at 600
800	200k at 480 100k at 600	200k at 480 100k at 600	200k at 480 100k at 600	200k at 480 100k at 600
1200	200k at 600	200k at 600	200k at 600	200k at 600

Note

Class "H" fuse clips supplied as standard for 30–600A. Class "L" fuse clips supplied as standard for 800–1200A. Rated at 10,000 rms symmetrical when using Class "H" fuses.

For DC application short circuit rating is 10KA.

Fuse Class Adaptation

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	Adaptable to Accept the Following Fuse Class		
		R	J	T
Heavy Duty	H 30-600A L 800-1200A	30A-600A	240V-100-600A 600V-30-600A	200A-800A 1200A

Note: For 'J' Fusing on 240V Heavy Duty Switches Field Modification Required. 30-60 amperes not available. 100-400 amperes, reposition loadside fuse block to accept 'J' fuse. 600 amperes adapter kit included with switch. For 'R' fuse rejector adapter kit and 'T' fuse adapter kit see accessory options on page 5.

Note: For 'J' fusing on 600V Heavy Duty Switches Field Modification Required. 30-60 amperes, reposition fuse clips on loadside of fuse base. 100-400 amperes, reposition loadside fuse block to accept 'J' fuse. 600 amperes adapter kit included with switch. For 'R' fuse rejector adapter kit and 'T' fusing see page 5 accessory application options.

Terminal Capacity for Heavy Duty Safety Switch 600V Max

Ampere	Line/Load Terminal Capacity (per phase)	Ground terminal Capacity	Neutral Catalogue #	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
60	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
100	#14 - 1/0	#14 - 4	DH100NK	2x #14-#2 AND 2x #14 - 1/0
200 (Type 1 & 3R)	#6 - 250mcm	#14 - 4	N200	2x #6 - 250mcm AND 2x #14 - #2
200 (Type 12 & 4X)	#6 - 300mcm	#14 - #4	DH200NK	2x #6 - 300mcm AND 2x #14 - #2
400	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 250mcm	DS400NK	2X 1/0 - 750mcm OR (2)1/0 - (2)300mcm AND 3x#6 - 250mcm
600	(1) #2 - 600mcm AND (1) 1/0 - 750mcm	#6 - 250mcm	DS600NK	2 x 1/0 - (1)750mcm OR 1/0 - (2) 300mcm AND 1 x #2 - 600mcm AND 3 x #6 - 250mcm
800	(4) 3/0 - (4)750mcm	#6 - 250mcm	DS800NK	2 X (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm
1200	(4) 1/0 - (4)750mcm	#6 - 250mcm	DS800NK	2 X (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm

Note

* Order neutral catalogue number when neutral required and not included with switch.

All terminals are rating al/cu unless otherwise noted.

Ground terminal is standard on all switches. For optional ground lug kits or copper lug kits see page 5 and 6.

UL/CSA Recognized Non-Fusible Safety Switch/Circuit Breaker Series-Connected Ratings

Eaton 30-200A non fusible safety switch withstand ratings when protected with circuit breakers

Non-Fusible Safety Switch Ampere Rating	Max System Voltage AC	Number of Poles Switched	Maximum fault level available at upstream circuit breaker (kA RMS symmetrical)	Circuit Breaker Frame(s)	
30A & 60A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, EGH	
		2, 3, 4, 6	18,000	FD, EGE	
		2, 3, 4, 6	14,000	FDB	
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type	
100A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, EGH	
		2, 3, 4, 6	18,000	FD, EGE	
		2, 3, 4, 6	14,000	FDB	
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type	
480	480	2, 3, 4, 6	35,000	EGH, EGS	
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type	
200A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, HJD, JGH	
		2, 3, 4, 6	18,000	FD, JD, JGE	
		2, 3, 4, 6	14,000	FDB	
	2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type		
	480	480	2, 3, 4, 6	65,000	HFD, HFDE, HJD, JGH
			2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type

Dimensions

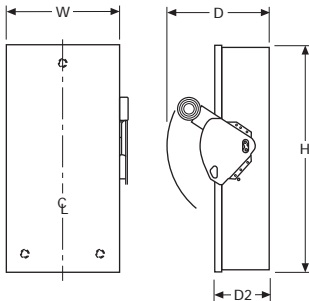
Approximate Dimensions in Inches (mm)

Note: Dimensions are for estimating purposes only.

Heavy-Duty, Non-Fusible, 600V, Three-Pole, Single-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1, 3R					
30	8.13 (206.5)	15.88 (403.4)	9.89 (251.3)	5.25 (133.3)	16 (7.264)
60	8.13 (206.5)	15.88 (403.4)	9.89 (251.3)	5.25 (133.3)	16 (7.264)
100	11.13 (282.7)	21.69 (550.9)	9.89 (251.3)	5.25 (133.3)	22 (9.988)
200	15.91 (404)	27.63 (701.8)	11.25 (285.8)	6.14 (156.0)	46 (20.884)
400	22.66 (576)	44.31 (1125)	12.39 (315)	7.27 (184.7)	110 (49.94)
600	23.66 (601)	51.82 (1316)	14.07 (357)	8.95 (227.3)	135 (61.29)
800	25.38 (644.7)	56.24 (1428)	14.07 (357)	8.95 (227.3)	158 (71.732)
1200	40.00 (1016)	70.31 (1785.9)	19.94 (506.5)	12.44 (316.0)	430 (195.22)
Type 12, 4 Painted Steel, 4X Stainless Steel ①					
30	8.76 (222.5)	14.14 (359)	10.22 (259)	5.50 (139.7)	17 (7.718)
60	8.76 (222.5)	14.14 (359)	10.22 (259)	5.50 (139.7)	17 (7.718)
100	11.79 (299.5)	25.00 (634)	10.22 (259)	5.50 (139.7)	28 (12.712)
200	16.54 (421)	35.38 (899)	11.63 (295)	6.44 (163.6)	55 (24.97)
400	24.12 (613)	57.47 (1460)	12.43 (316)	7.19 (182.6)	125 (56.75)
600	25.08 (637)	63.00 (1600.2)	14.25 (362.0)	8.88 (225.6)	167 (75.818)
800	26.34 (669)	71.75 (1822.5)	14.25 (362.0)	8.88 (225.6)	175 (79.45)
1200	41.47 (1053.3)	73.77 (1874)	19.99 (506.5)	13.51 (343.2)	475 (215.65)

Type 1-3R Heavy-Duty 30–1200A



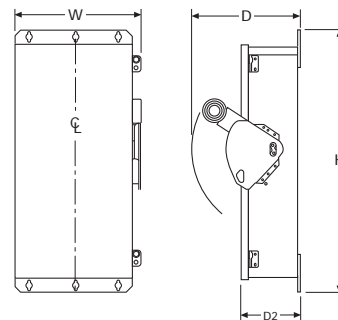
Heavy-Duty, Fusible, 240V and 600V, Three-Pole with or without Neutral, Single-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1, 3R					
30	8.13 (206.5)	15.88 (403.4)	9.89 (251.3)	5.25 (133.3)	20 (9.08)
60	8.13 (206.5)	15.88 (403.4)	9.89 (251.3)	5.25 (133.3)	20 (9.08)
100	11.13 (282.7)	21.69 (550.9)	9.89 (251.3)	5.25 (133.3)	27 (12.258)
200	15.91 (404)	27.63 (701.8)	11.25 (285.8)	6.14 (156.0)	52 (23.608)
400	22.66 (576)	44.31 (1125)	12.39 (315)	7.27 (184.7)	120 (54.48)
600	23.66 (601)	51.82 (1316)	14.07 (357)	8.95 (227.3)	135 (61.29)
800	25.38 (644.7)	56.24 (1428)	14.07 (357)	8.95 (227.3)	168 (76.272)
1200	40.00 (1016)	70.31 (1785.9)	19.94 (506.5)	12.44 (316.0)	465 (211.11)
Type 12, 4 Painted Steel, 4X Stainless Steel ①					
30	8.76 (222.5)	19.08 (485)	10.22 (259)	5.50 (139.7)	22 (9.988)
60	8.76 (222.5)	19.08 (485)	10.22 (259)	5.50 (139.7)	22 (9.988)
100	11.79 (299.5)	25.00 (634)	10.22 (259)	5.50 (139.7)	30 (13.62)
200	16.54 (421)	35.38 (899)	11.63 (295)	6.44 (163.6)	61 (27.694)
400	24.12 (613)	57.47 (1460)	12.43 (316)	7.19 (182.6)	135 (61.29)
600	25.08 (637)	63.00 (1600.2)	14.25 (362.0)	8.88 (225.6)	203 (92.162)
800	26.34 (669)	71.75 (1822.5)	14.25 (362.0)	8.88 (225.6)	213 (96.702)
1200	41.47 (1053.3)	73.77 (1874)	19.99 (506.5)	13.51 (343.2)	510 (231.54)

Note

① Type 12 enclosures (30-1200A) can be field modified to meet type 3R rainproof requirements when factory provided drain hole is opened.

Type 4, 4X and 12 Heavy-Duty 30–1200A ①



Six-Pole Motor Circuit



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Six-Pole Switches

Application Description

A compact safety switch that's ideal for use in heavy industry...when an "in sight" disconnecting means is required for two-speed motors, reversing motors, or two motors separately fed.

Product Description

- 600 Vac, 250 Vdc maximum - fusible
- 600Vac, 600Vdc maximum - non fusible
- 30–200A
- Fusible or non-fusible
- Enclosure Type 12/3R Painted Steel and 4X Stainless Steel

Features, Benefits and Functions

- Suitcase-type latches keep the cover tightly closed and a neoprene gasket seals out moisture and dust from the switch assembly
- Visible double-break quick-make, quick-break rotary blade mechanism. Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life
- Clear line shield protection
- Built-in fuse pullers
- Clearly visible handle
- Triple padlocking capability; cabinet door can be further padlocked at the top and bottom

Standards and Certifications

- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- For factory modifications, refer to **Pages 12 through 14**
- For accessories refer to **Pages 5 and 6**

- CSA Certified File No. 69473
- Meets C22.2 No. 4 standard for enclosed switches.
- ISO 9001:2008



Product Selection

600 Vac Heavy-Duty, Fusible, Six-Pole, Single-Throw

System	Ampere Rating	Maximum Horsepower Ratings, Three-Phase AC (Higher Rating with Time Delay Fuses)			Three-Phase DC		Type 12/3R Enclosure ^① Dust-Tight Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
		240V	480V	600V	250V	250V		
600 Vac with Fuse Clips—250 Vdc								
	30	3-7-1/2	5-15	7-1/2-20	5		12HD661 ①	②
	60	7-1/2-15	15-30	15-50	10		12HD662 ①	②
	100	15-30	25-60	30-75	20		12HD663 ①	②
	200	25-60	50-125	60-150	40		12HD664 ①	②

12DH661NF



600 Vac Heavy-Duty, Non-Fusible, Six-Pole, Single-Throw

System	Ampere Rating	Maximum Horsepower Ratings, Three-Phase AC			Three-Phase DC		Type 12/3R Enclosure ^① Dust-Tight Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
		240V	480V	600V	250V	600V ^③		
600 Vac—250 Vdc								
	30	10	20	30	5	15 ^③	12HD661NF ①	4HD661NF
	60	20	50	60	10	25 ^③	12HD662NF ①	4HD662NF
	100	40	75	100	20	25 ^③	12HD663NF ①	4HD663NF
	200	60	125	150	40	50 ^③	12HD664NF ①	4HD664NF

Notes

① Type 12 enclosures (30–800A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.

② Contact Customer Support (1-800-268-3578) for availability of this product.

③ 600 Vdc rating requires that the switch be wired per the wiring diagram on the device publication.

When control pole accessory required or custom enclosure required, contact Customer Support (1-800-268-3578)

Add 'W' to catalogue number suffix for window version.

Note: For 'J' Fusing on 6-Pole 600V Heavy Duty Switches Field Modification Required.

30-60 amperes not available to convert.

60 amperes must order DS26JK adapter kit.

100-200 amperes reposition loadside fuse base to accept 'J' fuse.

Technical Data and Specifications for 6 Pole Heavy Duty

Short-Circuit Ratings Using Class "R", "J" or "T" Fusing Where Applicable

Ampere Rating	Voltage Ratings	
	Type 12	Type 4 and 4X
30	200k at 600	200k at 600
60	200k at 600	200k at 600
100	200k at 600	200k at 600
200	200k at 600	200k at 600

Note

Class "H" fuse clips supplied as standard for 30–200A. Rated at 10,000 rms symmetrical when using Class "H" fuses.

Fuse Class Adaptation

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	Adaptable to Accept the Following Fuse Class		
		R	J	T
Heavy Duty 6 Pole	H	30A-200A	60A-200A	200A

Note

For 'J' Fusing on 6-Pole 600V Heavy Duty Switch, Field Modification Required
 30 amperes not available to convert
 60 amperes must order DS26JK adapter kit
 100-200 amperes reposition loadside fuse base to accept 'J' fuse
 For 'R' fuse rejector adapter kits, and 'T' class adapter kits see accessories page 5

Dimensions

Approximate Dimensions in Inches (mm)

Note: Dimensions are for estimating purposes only.

Heavy-Duty 6 pole Type 12 Enclosure[Ⓞ]

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Fusible					
30	12.88 (327)	19.08 (485)	10.22 (259)	5.5 (140)	30 (13.6)
60	12.88 (327)	19.08 (485)	10.22 (259)	5.5 (140)	30 (13.6)
100	16.13 (410)	24.95 (634)	10.22 (259)	5.5 (140)	40 (18.2)
200	24.16 (614)	35.38 (899)	11.63 (295)	6.44 (164)	65 (29.5)
Non Fusible					
30	12.88 (327)	19.8 (485)	10.22 (259)	5.5 (140)	28 (12.7)
60	12.88 (327)	19.8 (485)	10.22 (259)	5.5 (140)	28 (12.7)
100	16.13 (410)	24.95 (634)	10.22 (259)	5.5 (140)	37 (16.6)
200	24.16 (614)	35.38 (899)	11.63 (295)	6.44 (164)	62 (28.1)

Heavy-Duty 6 pole Non-Fusible Type 4X Enclosure

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	16.13 (410)	18.95 (481)	10.22 (259)	5.5 (140)	28 (12.7)
60	16.13 (410)	18.95 (481)	10.22 (259)	5.5 (140)	28 (12.7)
100	16.13 (410)	18.95 (481)	10.22 (259)	5.5 (140)	35 (15.9)
200	24.16 (614)	35.38 (899)	11.63 (295)	6.44 (164)	65 (29.5)

Notes

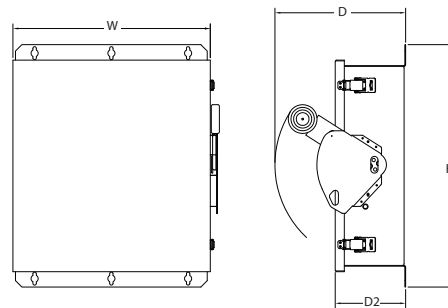
Ⓞ Type 12 enclosures can be field modified to meet 3R rainproof rating when factory provided drain hole opened.
 For 6 pole switch with window, 30, 60A same dimensions as 100A

UL/CSA Recognized Non-Fusible Safety Switch/Circuit Breaker Series-Connected Ratings

Eaton 30-200A non fusible safety switch withstand ratings when protected with circuit breakers

Non-Fusible Safety Switch Ampere Rating	Max System Voltage AC	Number of Poles Switched	Maximum fault level available at upstream circuit breaker (kA RMS symmetrical)	Circuit Breaker Frame(s)		
30A & 60A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, EGH		
		2, 3, 4, 6	18,000	FD, EGE		
		2, 3, 4, 6	14,000	FDB		
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type		
100A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, EGH		
		2, 3, 4, 6	18,000	FD, EGE		
		2, 3, 4, 6	14,000	FDB		
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type		
480	600	2, 3, 4, 6	35,000	EGH, EGS		
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type		
		200A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, HJD, JGH
				2, 3, 4, 6	18,000	FD, JD, JGE
200A	600	2, 3, 4, 6	14,000	FDB		
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type		
		480	600	2, 3, 4, 6	65,000	HFD, HFDE, HJD, JGH
				2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type

Type 12, 4X - 6 pole 30–200A[Ⓞ]



Terminal Capacity for Heavy Duty Safety Switch 6 pole 600V Max

Ampere	Line/Load Terminal Capacity (per phase)	Ground terminal Capacity	Neutral Catalogue #	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
60	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
100	#14 - 1/0	#14 - 4	DH100NK	2x #14-#2 AND 2x #14 - 1/0
200 (type 12 & 4X)	#6 - 300mcm	#14 - 4	DH200NK	2x #6 - 300mcm AND 2x #14 - #2

Note

* Order neutral catalogue number when neutral required and not included with switch.
 All terminals are rating al/cu unless otherwise noted.
 Ground terminal is standard on all switches. For optional ground lug kits or copper lug kits see page 5 and 6

Heavy Duty Non-fusible Double-Throw



Double-Throw Switches

Application Description

Used to manually transfer a load from one power source to an alternate source, or to connect a single source of power to either of two different loads.

Product Description

- 30–1200A
- Horsepower rated
- 600 Vac, 250 Vdc maximum
- 2, 3, 4, 6 pole designs available
- Enclosures type 1, 3R, 12, 4, painted steel and 4X stainless steel
- 800–1200A fusible utilize common set of fuses; two Source 1 load applications
- Fusible or non-fusible
- Fusible and non-fusible switches are 100% load break and 100% load make rated

- Suitable for use on systems capable of delivering 100,000 rms symmetrical fault current when used with class J, R, or T fuses.
- The handle operating mechanism actuates either the upper or lower switch. When the handle is in the centre position, both switches are OFF.
- The handle and door are interlocked to keep the door closed when a switch is ON and hold the handle OFF when the door is open
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% continuous duty rated
- Double throw switches are not approved for service entrance in Canada, per CEC and C22.2 No.4.
- Wiring configuration from factory allows a single load to be supplied by a normal or alternate source. Can be field modified to allow two loads to be alternately supplied by a single power source
- Clear line shield (provided on **fusible** double-throw) protects against accidental contact with energized parts. Probe holes enable the user to test if the line side is energized without removing the shield
- For accessories, refer to **Pages 5 and 6**
- Window option available for type 12 and 4X enclosures
- For factory modifications refer to **Pages 12 through 14**

- Same heavy duty features per page 23 for double throw switches, unless noted.
- Triple padlocking capability. Two on door and up to three 3/8" shank locks in 'OFF' (centre) handle position. Special modification available for locking in 'ON' position, see page 12 note 4.

Standards and Certifications

- CSA Certified File No. 69473
- Meets C22.2 No. 4 standard for enclosed switches.
- ISO 9001:2008



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Switching Devices

Safety Switches

240 Vac Heavy-Duty, Fusible, Double-Throw

Ampere Rating Main and Standby	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						DC 250V	Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number
		Single-Phase AC			Three-Phase AC					
		240V	480V	600V	240V	480V	600V			
Two-Pole – 240 Vac – 250 Vdc										
200	H	15	—	—	—	—	—	40	1DT224	3DT224
Three-Pole – 240 Vac – 250 Vdc										
30	H	3	—	—	7-1/2	—	—	5	1DT321	3DT321
60	H	10	—	—	15	—	—	10	1DT322	3DT322
100	H	15	—	—	30	—	—	20	1DT323	3DT323
200	H	15	—	—	60	—	—	40	1DT324	3DT324
400	H	—	—	—	125	—	—	50	1DT325	3DT325
600 ①	T	—	—	—	50	—	—	50	1DT326	3DT326
800	T	—	—	—	—	—	—	—	DT327FGK	DT327FRK
1200	T	—	—	—	—	—	—	—	DT328FGK	DT328FRK

240 Vac Heavy-Duty, Non-Fusible, Double-Throw

Ampere Rating Main and Standby	Maximum Horsepower Ratings						DC 250V	Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number	
	Single-Phase AC			Three-Phase AC						
	240V	480V	600V	240V	480V	600V				
Two-Pole – 240 Vac – 250 Vdc										
30		3	—	—	—	—	—	5	1DT221NF	3DT221NF
60		10	—	—	—	—	—	10	1DT222NF	3DT222NF
100		20	—	—	—	—	—	20	1DT223NF	3DT223NF
200		15	—	—	—	—	—	40	1DT224NF	3DT224NF
400		—	—	—	—	—	—	50	1DT225NF	3DT225NF
600		—	—	—	—	—	—	—	1DT226NF	3DT226NF
800		—	—	—	—	—	—	—	②	②
1200		—	—	—	—	—	—	—	②	②
Three-Pole – 240 Vac – 250 Vdc										
30		3	—	—	10	—	—	5	1DT321NF	3DT321NF
60		10	—	—	20	—	—	10	1DT322NF	3DT322NF
100		20	—	—	40	—	—	20	1DT323NF	3DT323NF
200		15	—	—	60	—	—	40	1DT324NF	3DT324NF
400		—	—	—	125	—	—	50	1DT325NF	3DT325NF
600		—	—	—	125	—	—	50	1DT326NF	3DT326NF
800		—	—	—	125	—	—	50	1DT327NF	3DT327NF
800		—	—	—	125	—	—	50	1DT327NF-N	3DT327NF-N
1200		—	—	—	125	—	—	50	②	②

Notes

① Only available for use with fast-acting fuses. Standard hp rating is shown.

② Contact Customer Support (1-800-268-3578) for availability of this product.

Note

For 'J' Fusing on 240V @ 30A, 60A, 100A, 400A, 600A not available.

For 'J' Fusing on 240V @ 200A reposition loadside fuse block to accept J fusing.

1DT363



600 Vac Heavy-Duty, Fusible, Double-Throw

Ampere Rating Main and Standby	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses					Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number	Type 12 ^③ Enclosure Dust-Tight Catalogue Number	Type 4X Enclosure ^④ Corrosion-Resistant, Stainless Steel Catalogue Number
		Single-Phase AC		Three-Phase AC		DC				
		480V	600V	480V	600V	250V				
Three-Pole – 600 Vac – 250 Vdc										
30	H	7-1/2	10	15	20	—	1DT361	3DT361	①	①
60	H	20	25	30	50	—	1DT362	3DT362	①	①
100	H	30	40	60	75	—	1DT363	3DT363	①	①
200	H	50	50	125	150	40	1DT364	3DT364	①	①
400	T	—	—	250	350	50	1DT365	3DT365	①	①④
600	T	—	—	—	—	—	1DT366	3DT366	①	①④
800	T	—	—	—	—	—	DT367FGK	DT367FRK	①	①④
1200	L	—	—	—	—	—	DT368FGK	DT368FRK	—	①④

3DT363NF



600 Vac Heavy-Duty, Non-Fusible, Double-Throw

Ampere Rating Main and Standby	Maximum Horsepower Ratings					Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number	Type 12 ^③ Enclosure Dust-Tight Catalogue Number	Type 4X Enclosure ^④ Corrosion-Resistant, Stainless Steel Catalogue Number
	Single-Phase AC		Three-Phase AC		DC				
	480V	600V	480V	600V	250V				
Two-Pole – 600 Vac – 250 Vdc									
30	7-1/2	10	—	—	5	1DT261NF	3DT261NF	①	①
60	20	25	—	—	10	1DT262NF	3DT262NF	①	①
100	40	50	—	—	20	1DT263NF	3DT263NF	①	①
200	50	50	—	—	40	1DT264NF ^②	3DT264NF ^②	①	①
400	—	—	—	—	50	1DT265NF	3DT265NF	①	①④
600	—	—	—	—	50	1DT266NF	3DT266NF	①	①④
800	—	—	—	—	50	DT267UGK	DT267URK	①	①④
1200	—	—	—	—	50	DT268UGK	DT268URK	—	①④
Three-Pole – 600 Vac – 250 Vdc									
30	7-1/2	10	20	30	5	1DT361NF	3DT361NF	12DT361NF	4DT361NF
60	20	25	50	60	10	1DT362NF	3DT362NF	12DT362NF	4DT362NF
100	40	50	75	100	20	1DT363NF	3DT363NF	12DT363NF	4DT363NF
200	50	50	125	150	40	1DT364NF	3DT364NF	12DT364NF	4DT364NF
400	—	—	250	350	50	1DT365NF	3DT365NF	12DT365NF	①④
600	—	—	250	350	50	1DT366NF	3DT366NF	①③	①④
800	—	—	250	350	50	1DT367NF	3DT367NF	①③	①④
800	—	—	250	350	50	1DT367NF-N	3DT367NF-N	①③	①④
1200	—	—	250	350	50	DT368UGK	DT368URK	—	①④

Notes

- ① Contact Customer Support (1-800-268-3578) for availability of this product.
- ② Rated 600 Vdc, 50 hp in addition to ratings shown in table.
- ③ Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ④ 30-200A, stainless steel 4X standard, 400-800A Type 4 painted steel standard. For stainless @ 400-1200A add 'SS' to catalogue number suffix.

Note: For 'J' Fusing on 600V DT, 30, 60, 100, 600A not available..

For 200A reposition loadside fuse base to accept J fuse.

For 400A order DT400JK.

For applications with bonded generators, switched neutrals required, for 240V use 3 pole switch, for 600V use 4 pole switch, for factory installation of solid or switched neutrals refer to page 13.

For window option see factory modifications pages 12-14.

3DT363NF



600 Vac Heavy-Duty, Non-Fusible, Double-Throw

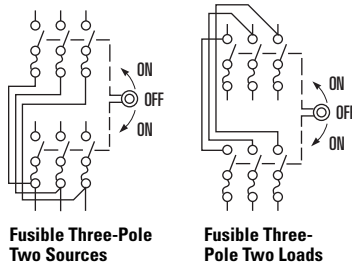
Ampere Rating Main and Standby	Maximum Horsepower Ratings					Type 1 Enclosure Indoor Catalogue Number	Type 3R Enclosure Rainproof Catalogue Number	Type 12 [Ⓞ] Enclosure Industrial, Dust-Tight Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
	Single-Phase AC 480V	600V	Three-Phase AC 480V		600V				
Four-Pole—600 Vac—250 Vdc [Ⓛ]									
30	7-1/2	10	20	30	5	1DT461NF	3DT461NF	Ⓞ	Ⓞ
60	20	25	50	60	10	1DT462NF	3DT462NF	Ⓞ	Ⓞ
100	40	50	75	100	20	1DT463NF	3DT463NF	Ⓞ	Ⓞ
200	—	50	125	150	40	1DT464NF	3DT464NF	Ⓞ	Ⓞ
400	—	—	250	350	50	1DT465NF	Ⓞ	Ⓞ	Ⓞ
600	—	—	250	350	50	1DT466NF	Ⓞ	Ⓞ	Ⓞ
800	—	—	250	350	50	1DT467NF	Ⓞ	Ⓞ	Ⓞ
Six-Pole—600 Vac—250 Vdc [Ⓛ]									
30	7-1/2	10	15	30	5	1DT661NF	3DT661NF	Ⓞ	Ⓞ
60	20	25	50	60	10	1DT662NF	3DT662NF	Ⓞ	Ⓞ
100	40	50	75	100	20	1DT663NF	3DT663NF	Ⓞ	Ⓞ

Notes

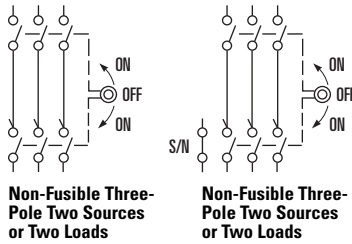
- Ⓛ **Field installable neutral kit is not available. If a neutral is required, order the catalogue number shown in the table add "N" suffix.**
- Ⓞ Contact Customer Support (1-800-268-3578) for availability of this product.
- Ⓞ Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- Ⓞ 30-200A stainless steel 4X standard, 400-800A Type 4 painted steel standard. For stainless @ 400-800A add 'SS' to catalogue number suffix.

Technical Data and Specifications for Double Throw Switches

Typical Fusible, Double-Throw Schematic Diagram



Typical Non-Fusible, Double-Throw Schematic Diagram



Short-Circuit Ratings Using Class “R”, “J” or “T” Fusing Where Applicable

Ampere Rating	Voltage Ratings			
	Type 1	Type 3R	Type 12	Type 4 and 4X
30	100k at 600	100k at 600	100k at 600	100k at 600
60	100k at 600	100k at 600	100k at 600	100k at 600
100	100k at 600	100k at 600	100k at 600	100k at 600
200	100k at 600	100k at 600	100k at 600	100k at 600
400	100k at 600	100k at 600	100k at 600	100k at 600
600	100k at 600	100k at 600	100k at 600	100k at 600
800	100k at 600	100k at 600	—	—
1200	100k at 600	100k at 600	—	—

Fuse Class Adaptation

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	Adaptable to Accept the Following Fuse Class	
		R	J
Double Throw	H 30-200A T 240V - 600A - 1200A T 600V - 400A - 800A L 600V - 1200A	30A-400A	240V 200A Only 600V 200A-400A Only

Note

For ‘J’ Fusing on 600V DT, 30, 60, 100, 600A, not available.

For ‘J’ Fusing on 200A reposition loadside fuse base.

For ‘J’ fuse on 400A order DT400JK

For ‘R’ fuse rejector adapter kits, and ‘T’ class adapter kits see accessories page 5

For ‘J’ Fusing on 240V 30, 60, 100, 400, 600A not available

For ‘J’ Fusing on 200A reposition loadside fuse block to accept J fuse

Terminal Capacity for Heavy Duty Double Throw Safety Switch 600V Max

Ampere	Line/Load Terminal Capacity (per phase)	Ground terminal Capacity	Neutral Catalogue # ①	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DT100NK	1x #14 - #2 AND 3x #14 - #2
60	#14 - #2	#14 - 4	DT100NK	1x #14 - #2 AND 3x #14 - #2
100	#14 - 1/0	#14 - 4	DT100NK	1x #14 - #2 AND 3x #14 - #2
200	#6 - 250mcm	#14 - 4	DT200NK	3x #6 - 250mcm AND 1x #14 - #2
400 (non fusible)	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 250mcm	DT400NK	7x #6 - 250mcm
400 (fusible)	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 250mcm	DS800NK	2x (4)3/0 - (4)750mcm AND 3x #6 - 250mcm
600 (non fusible)	(2)250mcm - (2)500mcm	#6 - 250mcm	DT600NK	6x 250mcm - 500mcm AND 1x #6 - 250mcm
600 (fusible)	(1)#2 - 600mcm AND (1)1/0 - 750mcm	#6 - 250mcm	DS800NK	2x (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm
800	(3)250mcm - (3)500mcm	#6 - 250mcm	DT800NK	3x (3) 250mcm - (3) 500mcm
1200	(4) 1/0 - (4)750mcm	#6 - 250mcm	DT1200NK	3x (4)1/0 - (4)750mcm

Notes

① Order neutral catalogue number when neutral required and not included with switch.

All terminals are rating al/cu unless otherwise noted.

Ground terminal is standard on all switches. For optional ground lug kits or copper lug kits see page 5 and 7.

Switching Devices

Safety Switches

Dimensions

Approximate Dimensions in Inches (mm)

Heavy-Duty, Non-Fusible, 240V and 600V, Two and Three-Pole, Double-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1, 3R					
30	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15)
60	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15)
100	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15)
200	19.56 (496.8)	37.38 (949.5)	11.25 (285.8)	6.10 (154.9)	80 (36)
400	23.13 (587.5)	53.81 (1366.8)	12.50 (317.5)	7.25 (184.2)	130 (59)
600	24.13 (612.9)	63.31 (1608.1)	14.13 (358.9)	8.88 (225.6)	160 (73)
800	24.13 (612.9)	63.31 (1608.1)	14.13 (358.9)	8.88 (225.6)	175 (79)
1200	42.62 (1082.5)	78.11 (1984.0)	25.62 (650.7)	20.47 (519.9)	471 (214)

Type 12, 4X Stainless Steel, 4 Painted Steel > 200A

30	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27)
60	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27)
100	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27)
200	19.50 (495.3)	41.00 (1041.4)	11.63 (295.4)	6.48 (164.6)	105 (48)
400	23.05 (587)	57.48 (1460)	12.5 (317)	7.25 (184.2)	135 (61)
600	24.07 (612)	67.02 (1702)	14.05 (357)	8.88 (225.6)	180 (82)
800	24.07 (612)	67.02 (1702)	14.05 (357)	8.88 (225.6)	200 (91)

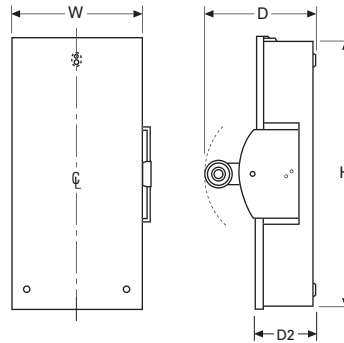
Heavy-Duty, Fusible, 240V and 600V, Three-Pole, Double-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1, 3R					
30	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (20)
60	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (20)
100	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (20)
200	19.56 (496.8)	50.88 (1292.4)	11.25 (285.8)	6.10 (154.9)	95 (43)
400	25.38 (644.7)	74.75 (1898.7)	14.13 (358.9)	8.88 (225.6)	195 (89)
600	27.44 (697.0)	86.13 (2187.7)	14.13 (358.9)	8.88 (225.6)	230 (104)
800	28.12 (714.2)	58.86 (1495.0)	25.62 (650.7)	20.47 (519.9)	277 (126)
1200	42.62 (1082.5)	78.11 (1984.0)	25.62 (650.7)	20.47 (519.9)	501 (228)

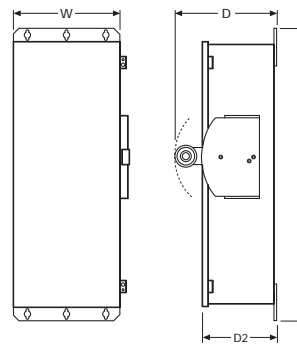
Type 12, 4X Stainless Steel, 4 Painted Steel > 200A

30	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20)
60	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20)
100	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20)
200	19.56 (496.8)	55.63 (1413.0)	11.63 (295.4)	6.46 (164.1)	100 (45)
400	25.32 (643)	77 (1956)	14.05 (357)	8.92 (226)	—
600	25.32 (643)	77 (1956)	14.05 (357)	8.92 (226)	—

Type 1-3R Double-Throw 30-1200A



Type 12-4X Double-Throw 30-1200A



Heavy-Duty, Non-Fusible, 600V, Four and Six-Pole[Ⓢ], Double-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 1, 3R					
30	17.75 (451)	24.63 (625)	9.88 (251.0)	5.28 (134)	45 (20.5)
60	17.75 (451)	24.63 (625)	9.88 (251.0)	5.28 (134)	45 (20.5)
100	17.75 (451)	24.63 (625)	9.88 (251.0)	5.28 (134)	45 (20.5)
200	19.50 (497)	37.25 (946)	11.25 (285.8)	6.10 (155)	95 (43)
400	27.50 (697)	63.31 (1608)	14.13 (358.9)	8.88 (226)	160 (72.6)
600	27.50 (697)	63.31 (1608)	14.13 (358.9)	8.88 (226)	185 (84)
800	27.50 (697)	63.31 (1608)	14.13 (358.9)	8.88 (226)	185 (84)

Notes

Six pole dimensions listed 30, 60, 100A only.

EnviroLine/Stainless Steel Switch



EnviroLine—Stainless Steel Switch

Application Description

Primarily for use in high moisture or corrosive environments. Applications where water is frequently used to hose down equipment. ie. food processing, farm industry, fisheries, rendering plants.

In addition to the Type 4X standard stainless steel enclosure, the EnviroLine operating mechanism, backpan and springs are all stainless, and all hardware is grade 316 stainless.

Product Description

- 30–400A
- 240V fusible
- 600V fusible and non fusible
- Type 4X stainless steel enclosure
- Interior operating mechanism, backpan and springs are stainless steel
- All hardware grade 316 stainless
- Horsepower rated
- 100% load make/break rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% continuous duty rated
- Current carrying parts are not stainless steel

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Features

- Stainless steel enclosure (304 grade)
- Stainless steel interior operating mechanism (304 grade)
- Fusible switch suitable for service entrance use when neutral installed
- Similar features as Heavy Duty design
- Visible double-break quick-make, quick-break rotary blade mechanism. Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life
- Clear line shield protection
- Triple padlocking capability plus additional locking at the door top and bottom
- For accessories refer to page 5 and 6

- For factory modifications refer to pages 12-14.

Standards and Certifications

- CSA certified File No. 69743
- Meets C22.2 No.4 standard for enclosed switches
- ISO 9001:2008



Product Selection

CDH321NWKX



240 Vac Heavy-Duty, Fusible, Single-Throw Stainless Steel Enclosure and Operating Mechanism

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
			AC Standard Fuse		Time Delay			
			Single-Phase	Three-Phase	Single-Phase	Three-Phase		
Three-Wire (Two Blades, Two Fuses, S/N), 240 Vac—250 Vdc								
	30	H	1-1/2	3	3	7-1/2	5	CDH221NWKX
	60	H	3	7-1/2	10	15	10	CDH222NWKX
	100	H	7-1/2	15	15	30	20	CDH223NWKX
	200	H	15	25	15	60	40	CDH224NWKX
	400	H	—	50	—	125	50	CDH225NWKX
Three-Pole, 240 Vac—250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)								
	30	H	1-1/2	3	—	7-1/2	—	CDH321FWKX
	60	H	3	7-1/2	—	15	—	CDH322FWKX
	100	H	—	—	—	—	—	CDH323FWKX
	200	H	15	25	—	60	40	CDH324FWKX
	400	H	—	50	—	125	50	CDH325FWKX
Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc								
	30	H	—	3	—	7-1/2	—	CDH321NWKX
	60	H	—	7-1/2	—	15	—	CDH322NWKX
	100	H	—	15	—	30	20	CDH323NWKX
	200	H	—	25	—	60	—	CDH324NWKX
	400	H	—	50	—	125	50	CDH325NWKX

Notes

See page 30 for technical data and specifications, page 31 for dimensions, pages 5 and 6 for accessories, pages 12 to 14 for factory modifications. For fuse adaptation refer to page 30.

CDH361UWKX



600 Vac Heavy-Duty, Fusible 277/480-600V, Single-Throw Stainless Steel Enclosure and Operating Mechanism

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
			Single-Phase AC		Three-Phase AC		DC		
			480V	600V	480V	600V	250V	600V	
Two-Pole, 480 Vac—600 Vac or Vdc ^① (Suitable for Service Entrance Use with a Neutral Kit Installed)									
	30	H	7-1/2	10	—	—	—	15	CDH261FWKX
	60	H	—	—	—	—	—	25	CDH262FWKX
	100	H	—	—	—	—	—	25	CDH263FWKX
	200	H	50	50	—	—	—	50	CDH264FWKX
	400	H	—	—	—	—	50	—	CDH265FWKX
Three-Pole, 480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)									
	30	H	7-1/2	10	15	20	—	—	CDH361FWKX
	60	H	20	25	30	50	—	—	CDH362FWKX
	100	H	30	30	60	75	—	—	CDH363FWKX
	200	H	50	50	125	150	—	—	CDH364FWKX
	400	H	—	—	250	350	—	—	CDH365FWKX
Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc									
	30	H	7-1/2	10	20	30	—	—	CDH361NWKX
	60	H	20	25	50	60	—	—	CDH362NWKX
	100	H	40	50	75	100	—	—	CDH363NWKX
	200	H	50	50	125	150	—	—	CDH364NWKX
	400	H	—	—	250	350	—	—	CDH365NWKX

600 Vac Heavy-Duty, Non-Fusible, Single-Throw Stainless Steel Enclosure and Operating Mechanism

System	Ampere Rating	Maximum Horsepower Ratings						Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
		Single-Phase AC		Three-Phase AC		DC		
		480V	600V	480V	600V	250V	600V	
Three-Pole, 480 Vac—600 Vac, 250 Vdc								
	30	7-1/2	10	20	30	5	—	CDH361UWKX
	60	20	25	50	60	10	—	CDH362UWKX
	100	40	50	75	100	20	—	CDH363UWKX
	200	50	50	125	150	40	—	CDH364UWKX
	400	—	—	250	350	50	—	CDH365UWKX

Notes

- DC rating for 400A switch is 250V.
- See Heavy Duty Switch page 30 for technical data and specifications, page 31 for dimensions, pages 5 and 6 for accessories, pages 12 to 14 for factory modifications. See page 13 item 6 for optional window. For fuse adaptation refer to page 30.

Heavy Duty/Window Switch



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Heavy Duty Window Switches

Application Description

Typically used but not limited to industrial applications such as mining, forestry, saw mills, steel mills. Recommended for any application where verification of the blade contact status is required without opening the door of the switch.

Product Description

- Available on type 12 and 4 painted steel and 4X stainless steel heavy duty switches
- 30–1200Ampere
- 30-60A full window design provides visible blade and blown fuse verification
- 100A-1200A window design provides visible blade verification
- Fusible and non-fusible
- Also available on double throw, receptacle switches, 6 pole, and enviroline switches
- Windows are constructed from tempered safety glass.
- 30-100A field replaceable window kit available (effective August 2003)
- Fusible switches with neutral installed suitable for service entrance

Features & Benefits

- Full range offering 30A–1200A
- Tempered safety glass, resists scratching, fading and blistering
- Large full window at 30 & 60A, provides unrestricted view without opening the door of the switch
 - Visible blade indication
 - Fuse presence, condition and type
 - Better visibility in low light or restricted areas
- Benefits operator safety
- Labour savings
- Field replaceable window kit for 30-100Ampere
- Type 12 enclosure can be field converted to 3R

Standards and Certifications

- CSA certified File No. 69743
- Meets C22.2 No.4 standard for enclosed switches
- ISO 9001:2008



Product Selection

12HD361W



240 Vac Heavy-Duty, Fusible Single-Throw with Viewing Window

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V	Type 12 ^② Enclosure Dust-Tight Catalogue Number	Type 4 Enclosure Watertight, Painted Steel Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
			AC Standard Fuse		Time Delay					
			Single-Phase	Three-Phase	Single-Phase	Three-Phase				
Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc^①										
	30	H	—	3	—	7-1/2	—	12HD321NW ^②	—	4HD321NW
	60	H	—	7-1/2	—	15	—	12HD322NW ^②	—	4HD322NW
	100	H	—	15	—	30	20	12HD323NW ^②	—	4HD323NW
	200	H	—	25	—	60	40	12HD324NW ^②	—	4HD324NW
	400	H	—	50	—	125	50	12HD325NW ^②	4HD325NW	4HD325NWSS
	600	H	—	75	—	200	—	12HD326NW ^②	4HD326NW	4HD326NWSS
	800	L	—	100	—	250	—	12HD327NW ^②	4HD327NW	4HD327NWSS
	1200	L	—	—	—	—	—	③	③	③

600 Vac Heavy-Duty, Fusible Single-Throw with Viewing Window

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V 600V	Type 12 ^② Enclosure Industrial, Dust-Tight Catalogue Number	Type 4 Enclosure Watertight, Painted Steel Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
			Single-Phase AC		Three-Phase AC					
			480V	600V	480V	600V				
Three Pole (Three Blades, Three Fuses), 600 Vac—250 Vdc^①										
	30	H	7-1/2	10	15	20	—	12HD361W ^②	—	4HD361W
	60	H	20	25	30	50	—	12HD362W ^②	—	4HD362W
	100	H	30	40	60	75	—	12HD363W ^②	—	4HD363W
	200	H	50	50	125	150	—	12HD364W ^②	—	4HD364W
	400	H	—	—	250	350	—	12HD365W ^②	4HD365W	4HD365WSS
	600	H	—	—	400	500	—	12HD366W ^②	4HD366W	4HD366WSS
	800	L	—	—	500	500	—	12HD367W ^②	4HD367W	4HD367WSS
	1200	L	—	—	—	—	—	③	③	③

4HD361NFW



600 Vac Heavy-Duty, Non-Fusible Single-Throw with Viewing Window

System	Ampere Rating	Maximum Horsepower Ratings						Type 12 Enclosure ^② Dust-Tight Catalogue Number	Type 4 Enclosure Watertight, Painted Steel Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
		Single-Phase AC		Three-Phase AC		DC				
		480V	600V	480V	600V	250V	600V			
Three-Pole—600 Vac, 250 Vdc^① (Not Suitable for Service Entrance)										
	30	7-1/2	10	20	30	5	—	12HD361NFW ^②	—	4HD361NFW
	60	20	25	50	60	10	—	12HD362NFW ^②	—	4HD362NFW
	100	40	50	75	100	20	—	12HD363NFW ^②	—	4HD363NFW
	200	50	50	125	150	40	—	12HD364NFW ^②	—	4HD364NFW
	400	—	—	250	350	50	—	12HD365NFW ^②	4HD365NFW	4HD365NFWSS
	600	—	—	400	500	—	—	12HD366NFW ^②	4HD366NFW	4HD366NFWSS
	800	—	—	500	500	—	—	12HD367NFW ^②	4HD367NFW	4HD367NFWSS
	1200	—	—	—	—	—	—	③	③	③

Notes

- ① For two-pole applications, use outside poles of three-pole switch.
- ② Type 12 enclosures (30–800A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ③ Contact Customer Support (1-800-268-3578) for availability of this product.

Effective August 2003, 30–100A window switches offer visible blade verification and blown fuse indication in a single design as shown in the photos. The window is field replaceable 30–100A. Higher ampere ratings will continue to be manufactured with a non-replaceable epoxy affixed design with visible blade verification only.

Technical Data and Specifications for Heavy Duty Window Switch

Short-Circuit Ratings Using Class “R”, “J” or “T” Fusing Where Applicable

Ampere Rating	Voltage Ratings	
	Type 12	Type 4 and 4X
30	200k at 600	200k at 600
60	200k at 600	200k at 600
100	200k at 600	200k at 600
200	200k at 600	200k at 600
400	200k at 480 100k at 600	200k at 480 100k at 600
600	200k at 480 100k at 600	200k at 480 100k at 600
800	200k at 480 100k at 600	200k at 480 100k at 600
1200	200k at 600	200k at 600

Note

Class “H” fuse clips supplied as standard for 30–600A. Class “L” fuse clips supplied as standard for 800–1200A. Rated at 10,000 rms symmetrical when using Class “H” fuses.

Fuse Class Adaptation

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	Adaptable to Accept the Following Fuse Class		
		R	J	T
		Heavy Duty	H 30-600A L 800-1200A	30A-600A

Note: For ‘J’ Fusing on 240V Heavy Duty Switches Field Modification Required. 30-60 amperes not available.

100-400 amperes, reposition loadside fuse block to accept ‘J’ fuse.

600 amperes adapter kit included with switch.

For ‘R’ fuse rejector adapter kit and ‘T’ fuse adapter kit see accessory options on page 5.

Note: For ‘J’ fusing on 600V Heavy Duty Switches Field Modification Required.

30-60 amperes, reposition fuse clips on loadside of fuse base.

100-400 amperes, reposition loadside fuse block to accept ‘J’ fuse.

600 amperes adapter kit included with switch.

For ‘R’ fuse rejector adapter kit and ‘T’ fusing see page 5 accessory application options.

Window Replacement Kit (for 30-100A switches built after August 2003)

30-60A	Type 12, 4X	70-8564
100A	Type 12, 4X	70-8564-3
30-60A	Enviroline	70-8564-2
100A	Enviroline	70-8564-4

UL/CSA Recognized Non-Fusible Safety Switch/Circuit Breaker Series-Connected Ratings

Eaton 30-200A non fusible safety switch withstand ratings when protected with circuit breakers

Non-Fusible Safety Switch Ampere Rating	Max System Voltage AC	Number of Poles Switched	Maximum fault level available at upstream circuit breaker (kA RMS symmetrical)	Circuit Breaker Frame(s)
30A & 60A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, EGH
		2, 3, 4, 6	18,000	FD, EGE
		2, 3, 4, 6	14,000	FDB
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type
100A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, EGH
		2, 3, 4, 6	18,000	FD, EGE
		2, 3, 4, 6	14,000	FDB
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type
200A	600	2, 3, 4, 6	25,000	FDC, HFD, HFDE, HJD, JGH
		2, 3, 4, 6	18,000	FD, JD, JGE
		2, 3, 4, 6	14,000	FDB
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type
480	480	2, 3, 4, 6	65,000	HFD, HFDE, HJD, JGH
		2, 3, 4, 6	10,000	Any manufacturer or Eaton breaker type

Dimensions

Approximate Dimensions in Inches (mm)

Note: Dimensions are for estimating purposes only.

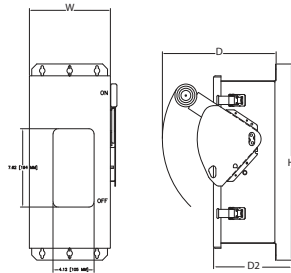
Heavy-Duty, Non-Fusible, 600V, Three-Pole, Single-Throw with Window

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
60	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
100	11.84 (301)	24.95 (634)	11.44 (291)	6.30 (160)	30 (13.64)
200	16.95 (430)	35.38 (899)	11.63 (295)	6.44 (164)	55 (24.97)
400	24.12 (612)	57.47(1460)	12.43 (316)	7.19 (183)	125 (56.75)
600	25.12 (638)	63.00 (1600)	13.92 (353)	8.91 (226)	167 (75.82)
800	25.34 (644)	71.75 (1823)	13.92 (353)	8.91 (226)	175 (79.45)
1200	41.47 (1053)	73.77 (1874)	20 (508)	13.50 (343)	519 (231.54)

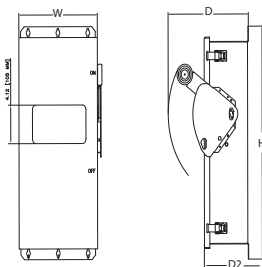
Note:

For 6 pole switches with windows, refer to page 40 for dimensions - NOTE 30, 60A same as 100A dimensions
 For DT (Double Throw) switches with windows refer to page 40 for dimensions.
 Type 12 enclosures (30-1200A) can be field modified to meet Type 3R rainproof requirements when factory provided drain hole is opened.

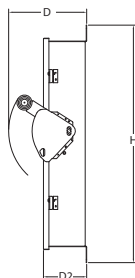
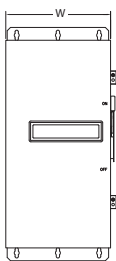
Type 12, 4X 30-60A



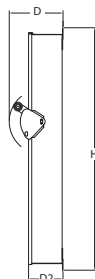
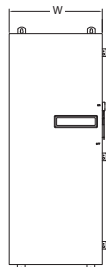
Type 12, 4X 100A



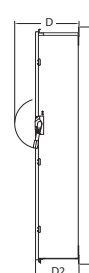
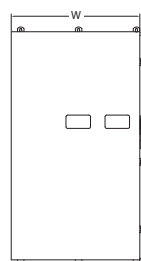
Type 12, 4/4X 200A



Type 12, 4/4X 400A - 800A



Type 12, 4/4X 1200A



Heavy-Duty, Fusible, 240V and 600V, Three-Pole Single-Throw, with Window

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
60	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
100	11.84 (301)	24.95 (634)	11.44 (291)	6.30 (160)	30 (13.64)
200	16.95 (430)	35.38 (899)	11.63 (295)	6.44 (164)	55 (24.97)
400	24.12 (612)	57.47(1460)	12.43 (316)	7.19 (183)	125 (56.75)
600	25.12 (638)	63.00 (1600)	13.92 (353)	8.91 (226)	167 (75.82)
800	25.34 (644)	71.75 (1823)	13.92 (353)	8.91 (226)	175 (79.45)
1200	41.47 (1053)	73.77 (1874)	20 (508)	13.50 (343)	519 (231.54)

Terminal Capacity for Heavy Duty Safety Switch 600V Max

Ampere	Line/Load Terminal Capacity (per phase)	Ground Terminal Capacity	Neutral Catalogue #	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
60	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
100	#14 - 1/0	#14 - 4	DH100NK	2x #14-#2 AND 2x #14 - 1/0
200 (Type 12 & 4X)	#6 - 300mcm	#14 - #4	DH200NK	2x #6 - 300mcm AND 2x #14 - #2
400	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 250mcm	DS400NK	2X 1/0 - 750mcm OR (2)1/0 - (2)300mcm AND 3x#6 - 250mcm
600	(1)#2 - 600mcm AND (1) 1/0 - 750mcm	#6 - 250mcm	DS600NK	2 x 1/0 - (1)750mcm OR 1/0 - (2) 300mcm AND 1 x #2 - 600mcm AND 3 x #6 - 250mcm
800	(4) 3/0 - (4)750mcm	#6 - 250mcm	DS800NK	2 X (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm
1200	(4) 1/0 - (4)750mcm	#6 - 250mcm	DS800NK	2 X (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm

Note

* Order neutral catalogue number when neutral required and not included with switch.

All terminals are rating al/cu unless otherwise noted.

Ground terminal is standard on all switches. For optional ground lug kits or copper lug kits see page 5 and 6

Pin & Sleeve Type Receptacle Switch



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Pin & Sleeve Receptacle Switches

Application Description

These switches are used with pin & sleeve type power plugs for portable power applications such as welders, infrared ovens, batch feeders, conveyors, truck and marine docks.

Product Description

These heavy-duty switches are pre-wired and interlocked to polarized receptacles for three-phase, three-wire, grounded type power plugs. Referred as 3W4P (4th pole used for grounding).

Receptacles are interlocked to the handle mechanism so that power plugs may not be inserted or removed when the switch is in the ON position.

- 30–100A
- 600Vac
- Fusible and non-fusible
- Type 12/3R painted steel, 4X stainless enclosure and receptacle rating
- 200A and 400A receptacles available upon request - Note 200A and 400A not mechanically interlocked

- Utilizes 3W 4P Style 2 Powertite®, Arktite®, or Max-Gard® series pin and sleeve receptacles
- Windows available upon request
- 3W 3P receptacles available upon request
- Receptacles with a 22.5 degree interior rotation available upon request
- Receptacles with reverse contacts available upon request
- Power plugs not supplied with the receptacle

Standards and Certifications

- CSA certified File No. 69743
- Meets C22.2 No.4 standard for enclosed switches
- ISO - 9001:2008



Product Selection

600 Vac Heavy-Duty, Single-Throw with Pin & Sleeve Type Receptacle, Fusible, Non-Fusible

DH362FDK2WR

**Safety Switch 3PH 3W with Pin and Sleeve Type Receptacle 3W4P, 600 Volt Single Throw—Fusible**

Ampere Rating			Type 12 Enclosure Dusttight Catalogue Number ^②	Type 4X Enclosure Corrosion Resistant, Stainless Steel Catalogue Number	Power Plug ^①
Switch	Receptacle	Maximum Horsepower Rating with Time Delay Fuses			
Crouse-Hinds ARKTITE® Receptacle					
30	30	20	12HD361CHR	4HD361CHR	Accepts Crouse-Hinds APJ3485
60	60	50	12HD362CHR	4HD362CHR	APJ6485
100	100	75	12HD363CHR	4HD363CHR	APJ10487
Appleton POWERTITE® Receptacle					
30	30	20	12HD361AER	4HD361AER	Accepts Appleton ACP3034BC
60	60	50	12HD362AER	4HD362AER	ACP6034BC
100	100	75	12HD363AER	4HD363AER	ACP1034CD
M-R-S (Russellstoll) MAX-GARD® Receptacle					
30	30	20	12HD361RSR ^③	③	Accepts Russellstoll DS3404MP
60	60	50	12HD362RSR ^③	③	DS6404MP
100	100	75	12HD363RSR ^③	③	DS1404MP

Safety Switch 3PH 3W with Pin and Sleeve Type Receptacle 3W4P, 600 Volt Single Throw—Non-Fusible

Ampere Rating			Type 12 Enclosure Dusttight Catalogue Number ^②	Type 4X Enclosure Corrosion Resistant, Stainless Steel Catalogue Number	Power Plug ^①
Switch	Receptacle	Maximum Horsepower Rating with Time Delay Fuses			
Crouse-Hinds ARKTITE® Receptacle					
30	30	30	12HD361NFCHR	4HD361NFCHR	Accepts Crouse-Hinds APJ3485
60	60	60	12HD362NFCHR	4HD362NFCHR	APJ6485
100	100	75	12HD363NFCHR	4HD363NFCHR	APJ10487
Appleton POWERTITE® Receptacle					
30	30	30	12HD361NFAER	4HD361NFAER	Accepts Appleton ACP3034BC
60	60	60	12HD362NFAER	4HD362NFAER	ACP6034BC
100	100	75	12HD363NFAER	4HD363NFAER	ACP1034CD

Notes

- ① Power plugs are not included with switch and not available through Eaton.
- ② Type 12 enclosures can be field modified to meet Type 3R rainproof rating when factory provided drain hole is opened.
- ③ Contact Customer Support (1-800-268-3578) for availability of this product.
For viewing window add 'W' to suffix of catalogue number.

Switching Devices

Safety Switches

Technical Data and Specifications - For Heavy Duty Switches with Pin and Sleeve Receptacles

Short-Circuit Ratings Using Class "R", "J" or "T" Fusing Where Applicable

Ampere Rating	Voltage Ratings			
	Type 1	Type 3R	Type 12/3R	Type 4X
30	—	—	200k at 600	200k at 600
60	—	—	200k at 600	200k at 600
100	—	—	200k at 600	200k at 600

Note

Class "H" fuse clips supplied as standard. Rated at 10,000 rms symmetrical when using Class "H" fuses.

Fuse Class Adaptation

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	Adaptable to Accept the Following Fuse Class		
		R	J	T
Pin & Sleeve Receptacle Switch	H	30A-100A	60A-100A	—

Note

For 'J' Fusing on 600V heavy duty with receptacle field modification required.

- 30A reposition fuse clips on loadside of fuse base for 'J' fusing.
- 60A reposition fuse clips on loadside of fuse base for 'J' fusing.
- 100A reposition loadside fuse blocks to accept 'J' fusing.

Terminal Capacity for Heavy Duty Safety Switch with pin & sleeve receptacles 600V Max

Ampere	Line/Load Terminal Capacity (per phase)	Ground terminal Capacity	Neutral Catalogue #	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
60	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
100	#14 - 1/0	#14 - 4	DH100NK	2x #14-#2 AND 2x #14 - 1/0

Note

* Order neutral catalogue number when neutral required and not included with switch.

All terminals are rating al/cu unless otherwise noted.

Ground terminal is standard on all switches. For optional ground lug kits or copper lug kits see pages 5 and 6.

Dimensions

Approximate Dimensions in Inches (mm)

Note: Dimensions are for estimating purposes only.

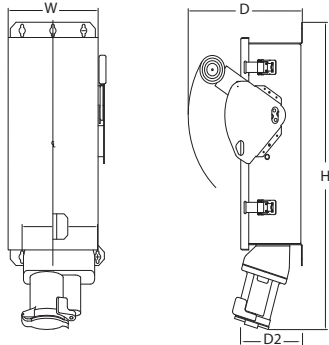
Heavy-Duty, Non-Fusible, 600V, Three Pole, Single Throw, with Crouse Hinds Pin & Sleeve Receptacle

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight	Weight
					Lbs (kg) Type 12	Lbs (kg) Type 4X
Type 12, 4X Stainless Steel						
30	8 (203)	24.13 (612)	10.25 (260)	5.5 (140)	23 (10.5)	32 (14.54)
60	8 (203)	24.13 (612)	10.25 (260)	5.5 (140)	23 (10.5)	34 (15.45)
100	11.13 (281)	30.88 (786)	10.25 (260)	5.5 (140)	28 (12.7)	32 (14.54)

Heavy-Duty, Fusible, 600V, Three Pole, Single Throw, with Crouse Hinds Pin & Sleeve Receptacle

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight	Weight
					Lbs (kg) Type 12	Lbs (kg) Type 4X
Type 12, 4X Stainless Steel[Ⓢ]						
30	8 (203)	24.13 (612)	10.25 (260)	5.5 (140)	23 (10.5)	35 (15.9)
60	8 (203)	24.13 (612)	10.25 (260)	5.5 (140)	23 (10.5)	35 (15.9)
100	11.13 (281)	30.88 (786)	10.25 (260)	5.5 (140)	28 (12.7)	36 (16.36)

Switch with Crouse Hinds Receptacle 30, 60, 100A



Note

Type 12 enclosures can be field modified to meet type 3R rainproof requirements when factory provided drain hole is opened.

Depth listed is for non window design.

For 30 - 100A window version increase depth (D) by 1.22" (32mm) and (D2) by .8" (20mm)

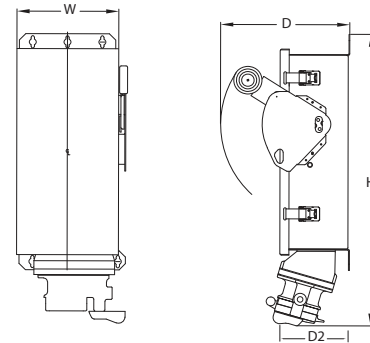
Heavy-Duty, Non-Fusible, 600V, Three Pole, Single Throw, with Appleton Pin & Sleeve Receptacle

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight	Weight
					Lbs (kg) Type 12	Lbs (kg) Type 4X
Type 12, 4X Stainless Steel						
30	8 (203)	23.5 (597)	10.25 (260)	5.5 (140)	23 (10.5)	31 (14.1)
60	8 (203)	23.5 (597)	10.25 (260)	5.5 (140)	23 (10.5)	31 (14.1)
100	11.13 (281)	29.5 (749)	10.25 (260)	5.5 (140)	28 (12.7)	36 (16.3)

Heavy-Duty, Fusible, 600V, Three Pole, Single Throw, with Appleton Pin & Sleeve Receptacle

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight	Weight
					Lbs (kg) Type 12	Lbs (kg) Type 4X
Type 12, 4X Stainless Steel						
30	8 (203)	23.5 (597)	10.25 (260)	5.5 (140)	23 (10.5)	31 (14.1)
60	8 (203)	23.5 (597)	10.25 (260)	5.5 (140)	23 (10.5)	31 (14.1)
100	11.13 (281)	29.5 (749)	10.25 (260)	5.5 (140)	28 (12.7)	36 (16.3)

Switch with Appleton Receptacle 30, 60, 100A



Heavy Duty Voltage Indicator Switch



Heavy Duty Voltage Indicator Switch

Application Description

Primarily used; but not limited to Industrial applications. LED's on the Line and /or Load side of the safety switch provide additional operator safety with highly visual voltage indication, warning of existing voltage presence and potentially dangerous situations.

Product Description

- 30A to 800Ampere
- Fusible and Non-Fusible
- Heavy Duty K switch design@ 600Vac/dc maximum
- Enclosure ratings 12/3R, 4/4X
- Viewing windows standard
- LED's factory installed on line side or load side or both sides of safety switch
- Switch is padlockable, up to 3 x 3/8" shank locks
- 100% load break rated
- Horsepower rated
- All heavy duty features per pages 23 and 44
- Options such as auxiliary contacts, control pole, kirk interlocking available, see options under catalogue configurator page 53

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Features

- Two options of LED's available – static or flashing indication
- **Static continuous indication** – CSA – 208V to 600Vac, detects voltage or any current leakage greater than 2mA. Highly visible yellow lamacoid nameplates standard.
- **Flashing indication** – cULus – max 750Vac/ 1000Vdc detects line to line or line to ground voltage at 29Vac 3ph, 40Vac single phase, 27Vdc or stored energy.
- Flashing indication can be front or side mounted
- Warning nameplate standard

- Enhanced safety with bright, luninescent LED's indicating power status per individual phase, of line, load or both.
- Two options of LED's available, static and flashing, providing a wide range of voltage application options.
- Utilizes the robust heavy duty K switch features, and options
- Highly visible line/load lamacoid nameplates

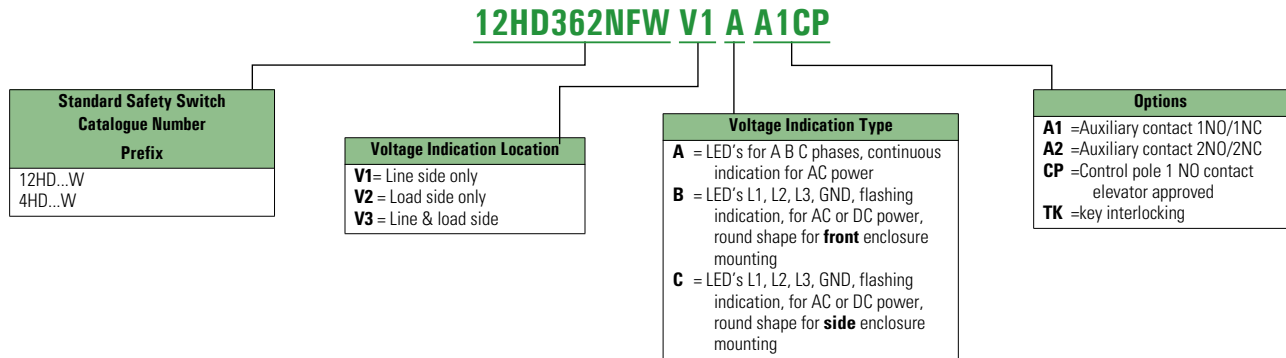
Standards and Certifications

- CSA approved
- Meets C22.2 No.4
- Compliant with article 185 & 186 of RSST (CSST) for lock off procedure in Quebec.



Catalogue Number Selection

Voltage Indicator Switch - Sample 12HD362NFWV1A A1CP



Note

For dimensions, terminal capacity, fuse adaptation refer to pages 46 and 47.

Hazardous Location Switch



NEMA 7/9—Hazardous Location Disconnect Switch

Application Description

The cast aluminum enclosure is ideally suited for harsh industrial applications including but not limited to petrochemical facilities, mining operations, pharmaceutical plants and wastewater treatment facilities.

Product Description

Type DS switch is used as the switching device in a NEMA 4, 4X, 7, 9 enclosure. Ratings are 30–100A, 600 Vac, fusible and non-fusible.

Features

- 30–100A
- 600 Vac 250V dc
- Explosion Proof NEMA 7/9 (4/4X) rated enclosure
- Fusible and non fusible
- Horsepower rated
- 3 pole, 3 wire
- Field installable auxiliaries
- Optional breather, drain grounding stud and nameplates available
- 200A moulded case switch or breaker in NEMA 7/9 enclosure available via Eaton regional satellite locations in Canada

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Standards and Certifications

Compliances

UL Classified— Standard 886 File No. E84577	CSA Certified— Standard C22.2 File No. LR 42131-6
Class I, Division 1 and 2, Groups B, C and D	Class I, Division 1 and 2, Groups B, C and D
Class II, Division 1 and 2, Groups E, F and G	Class II, Division 1 and 2, Groups E, F and G
Class III, Division 1 and 2	Class III, Division 1 and 2
NEMA 7/9	NEMA 7/9
Zone 1, IIB + H ₂	Zone 1, IIB + H ₂



Product Selection

DS361UX



NEMA 7/9 Enclosure Sizes—Fusible ①

Ampere Rating	Maximum Horsepower Ratings			Fuse Class Provision	Number of Poles	Voltage	Enclosure Number	Catalogue Number
	Three-Phase AC		DC					
	480V	600V	250V					
30	15	20	5	J	3	600 Vac, 125/250 Vdc	1 [Ⓢ]	DS361FX
60	30	50	10	J	3	600 Vac, 125/250 Vdc	2 [Ⓢ]	DS362FX
100	60	75	20	J	3	600 Vac, 125/250 Vdc	3	DS363FX

NEMA 7/9 Enclosure Sizes—Non-Fusible ①

Ampere Rating	Maximum Horsepower Ratings			Fuse Class Provision	Number of Poles	Voltage	Enclosure Number	Catalogue Number
	Three-Phase AC		DC					
	480V	600V	250V					
30	15	20	5	—	3	600 Vac, 125/250 Vdc	1 [Ⓢ]	DS361UX
60	30	50	10	—	3	600 Vac, 125/250 Vdc	1 [Ⓢ]	DS362UX
100	60	75	20	—	3	600 Vac, 125/250 Vdc	2 [Ⓢ]	DS363UX

Dimensions

Approximate Dimensions in Inches (mm)

Catalogue Number	Standard Conduit Size
DS361FX	1.50 (38.1)
DS362FX	2.00 (50.8)
DS363FX	2.50 (63.5)
DS361UX	1.50 (38.1)
DS362UX	1.50 (38.1)
DS363UX	2.00 (50.8)

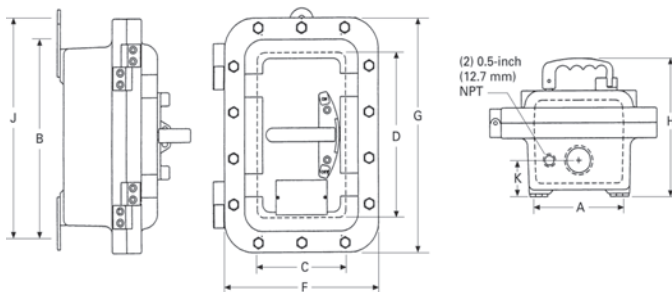
Terminal Capacity

Ampere	Line/Load per Phase Min - Max Copper	Line/Load per Phase Min - Max Aluminum
30A	#14 - #2	#12 - #2
60A	#14 - #2	#12 - #2
100A	#14 - 1/0	#12 - 1/0

NEMA 7/9 Fusible and Non-Fusible Dimensions - via Enclosure Number

Enclosure Number	Mounting Dimensions			Inside Dimensions			Outside Dimensions			Number of Outlets	Dimension K	Approximate Weight Lbs (kg)
	A	B	J	C	D	F	G	H				
1	5.50 (139.7)	13.13 (333.5)	14.13 (358.9)	5.94 (150.9)	10.75 (273.1)	10.63 (270.0)	15.25 (387.4)	8.84 (224.5)	2 (1.5 In. Dia.)	2.00 (50.8)	38 (17)	
2	6.00 (152.4)	18.00 (457.2)	19.00 (482.6)	6.50 (165.1)	16.00 (406.4)	11.00 (279.4)	20.50 (520.7)	8.97 (227.8)	2 (1.5 In. Dia.)	2.31 (58.6)	57 (26)	
3	10.25 (260.4)	22.63 (574.8)	—	11.75 (298.4)	20.00 (508.0)	16.38 (416.1)	25.13 (638.3)	9.59 (243.6)	2 (1.5 In. Dia.)	3.50 (88.9)	104 (47)	

NEMA 7/9—30–100A ②



Notes

① Accessories and modifications shown on **Pages 12 through 14** are NOT applicable to NEMA 7/9 disconnect switches.

② Dual three- and four-point mounting available as standard on enclosures 1 and 2.

For field installable auxiliary contacts order. **178C265G05** - 30-100A 1NO/1NC, **178C265G06** - 30-100A 2NO/2NC.

Breather/drain group B (1) including outlets and installation, catalogue suffix **BR, DN**.

External ground stud (3/8"), catalogue suffix **ES**.

CDH364URKNLC Single Throw Quick Connect

CDT364URKNLC Double Throw Quick Connect



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Heavy Duty Quick Connect Switches

Application Description

The heavy duty quick connect **single throw** design is typically used with your main utility when temporary power is required such as, to connect a sound or lighting system, media equipment, carnival equipment. When portable power from a generator is required either a **single throw (reverse configuration)** or a **double throw** quick connect could be used. CEC does not permit double throw safety switches to be used for service entrance.

Product Description

- 100A through 800 Ampere, (1200A pending for 2012)
- 240V - 600Vac heavy duty
- Utilizes Crouse-Hinds "J" Power series E1015, E1016, E1017 Cam-Lok® connectors or Crouse-

Hinds E200, E400 Posi-Lok® receptacles

- Fusible, Non-fusible switch design
- CDH – single throw switch design
- CDT – double throw switch design
- Single or Three phase, ground receptacle standard. Fourth pole, solid or switched neutral optional
- Type 1 or 3R enclosure. Optional type 12 or 4/4X (assembly rating 3R)
- 100% load break make rated
- Key interlocking available upon request
- Windows for Type 12 or 4/4X (assembly rating 3R) available upon request

Features

- Both designs provide a superior safety solution, interlocking the operation of the switch with the door interlock of the receptacle compartment.
- The switch cannot be turned to the ON position without first closing the receptacle compartment door.
- Convenient and safe method to quickly connect and disconnect portable equipment.
- Spring loaded flap door in the receptacle compartment allows the cables to exit the compartment, but seals the compartment when the switch is not in use.

- An additional flap door on the main compartment allows for quick connection in the event that the appropriate plugs are not readily available.
- Additional options such as Key Interlocking, Windows, Type 12, 4/4X enclosures available upon request

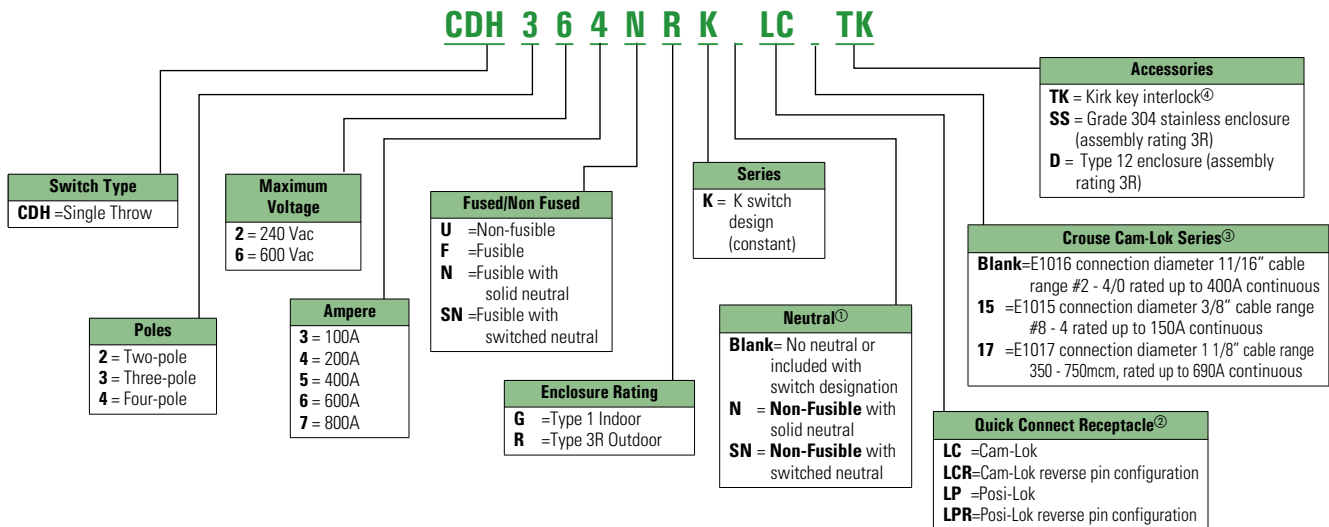
Standards and Certifications

- CSA certified File No. LR69743
- Meets C22.2 No. 4
- ISO-9001



Catalogue Number Selection

Heavy Duty Single Throw with Cam or Posi-Lok Receptacles

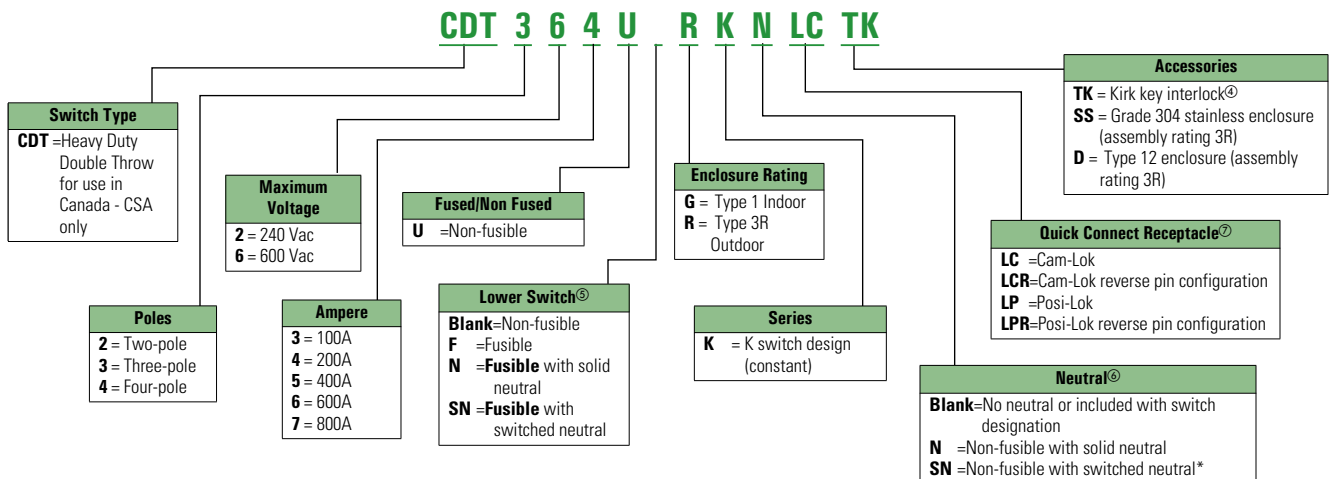


Notes

- ① This field is only used when the switch is non-fusible.
- ② Cam-Lok devices have male ground and neutral and female phase receptacles as standard on single throw
Posi-Lok devices have all female receptacles as standard on single throw
Should a reverse gender configuration be required add suffix "R" to the receptacle designation
An easy way to determine receptacle type: for generator applications male phase receptacles, for temporary load applications female phase receptacles
- ③ E1016 receptacle supplied as standard for all ratings, leave blank unless optional receptacle required
- ④ Provide key interlocking co-ordination as well as customer name, address and phone number for key registration when ordering

Catalogue Number Selection

Heavy Duty Double Throw with Cam or Posi-Lok Receptacles



Notes

- ③ When lower switch is unfused, the switch configuration is consolidated in one letter (ie: "U" not "UU")
A switch with a neutral will have either a solid neutral or a switched neutral, not both
For switched neutral application order 3 pole for single phase and 4 pole for three phase
- ④ This field is only used when the switch is non-fusible.
- ④ Cam-Lok devices have female ground and neutral and male phase receptacles as standard on double throw
Posi-Lok devices have all male receptacles as standard on double throw
Should a reverse gender configuration be required add suffix "R" to the receptacle designation
An easy way to determine receptacle type: for generator applications male phase receptacles, for temporary load applications female phase receptacles

Technical Data and Specifications

- 100A through 800Ampere
- 240V - 600Vac heavy duty
- Utilizes Crouse-Hinds "J" Power series E1015, E1016, E1017 Cam-Lok® connectors or Crouse-Hinds E200, E400 Posi-Lok® receptacles
- Fusible, Non-fusible switch design
- CDH – single throw switch design
- CDT – double throw switch design
- 100% load break and make rated
- For short circuit withstand ratings refer to page 30 for single throw and 40 for double throw
- Horsepower rated
- Single or Three phase, ground receptacle standard. Fourth pole, solid or switched neutral optional
- Type 1 or 3R enclosures standard optional type 12 or 4/4X (assembly rating 3R)
- **Single throw** design with Cam Lok® - male ground (standard) and male neutral (optional) receptacles, female phase receptacles (standard)
- Single throw design with Posi Lok® - all female receptacles
- Receptacles on single throw factory wired to load side of switch – standard
- Reverse pin (receptacle) and wiring configuration available – add "R" to catalogue suffix
- **Double throw** with Cam-Lok® - female ground and male phase receptacles (standard). Female neutral receptacles (optional)
- Double throw design with Posi Lok® - all male receptacles
- Reverse pin (receptacle) and wiring configuration available – add "R" to catalogue suffix
- Receptacles on double throw, non fusible, factory wired to lower switch line side
- Receptacles on double throw, lower switch fusible, factory wired to line side of fuse
- 100A and 200A receptacle compartment located at bottom of enclosure
- 400A – 800A receptacle compartment located beside enclosure
- 100A through 400A have a single row of receptacles, while 600A and 800A have parallel receptacles
- Additional options such as Key Interlocking, Windows, Type 12, 4/4X enclosures (3R rated assembly) available upon request

Lug Capacities - Quick Connect Double Throw Switch Assembly with Cam-Lok or Posi-Lok Receptacles

Double Throw Switch Size - Cam-Lok or Posi-Lok Receptacles	Line Terminal Per Phase	Load Terminal Per Phase	Switched Neutral Pole Load Terminals	Solid Neutral Terminals	Ground Terminals	Receptacle Bypass Terminals
100A	(1) 1/0 – 14 AWG Cu/Al	(1) 1/0 – 14 AWG Cu/Al	(1) 1/0 - 14 AWG Cu/Al	(2) 1/0 - 14 AWG, (1) 2 - 14 AWG Cu/Al	(3) 2 - 14 AWG Cu/Al	(1) 10 - 32 Screw Mounting
200A	(1) 300 kcmil 6 AWG Cu/Al	(1) 250 kcmil 6 AWG Cu/Al	(1) 250 kcmil - 6 AWG Cu/Al	(2) 250 kcmil - 6 AWG, (1) 1/0 - 14 AWG, (1) 2 - 14 AWG Cu/Al	(3) 2 - 14 AWG Cu/Al	(2) 1/4 Studs, 1.75 Inch Spacing
400A	(1) 750 kcmil - 1/0 or (2) 300 kcmil - 1/0 Cu/Al	(1) 750 kcmil - 1/0 or (2) 300 kcmil - 1/0 Cu/Al	(1) 750 kcmil - 1/0 or (2) 300 kcmil - 1/0 Cu/Al	(6) 500 - 250 kcmil, (6) 250 kcmil - 6 AWG Cu/Al	(4) 250 kcmil - 6 AWG Cu/Al	(2) 1/2 - 13 UNC Studs, 1.75 Inch Spacing
600A	(4) 750 kcmil - 3/0 Cu/Al	(4) 750 kcmil - 3/0 Cu/Al	(4) 750 kcmil - 3/0 Cu/Al	(6) 500 - 250 kcmil, (4) 250 kcmil - 6 AWG Cu/Al	(4) 250 kcmil - 6 AWG Cu/Al	(2) 1/2 - 13 UNC Studs, 1.75 Inch Spacing
800A	(4) 750 kcmil - 3/0 Cu/Al	(4) 750 kcmil - 3/0 Cu/Al	(4) 750 kcmil - 3/0 Cu/Al	(6) 500 - 250 kcmil, (4) 250 kcmil - 6 AWG	(4) 250 kcmil - 6 AWG Cu/Al	(2) 1/2 - 13 UNC Studs, 1.75 Inch Spacing

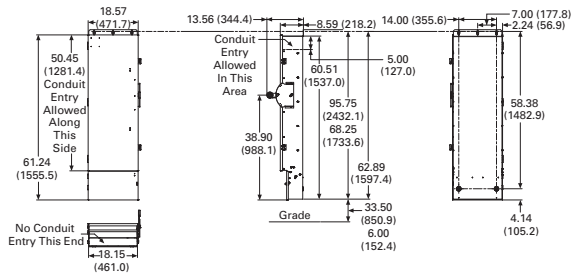
Lug Capacities - Quick Connect Single Throw with Cam-Lok or Posi-Lok Receptacles

Ampere	Line Terminals Per Phase	Load Terminals Per Phase	Solid Neutral Terminals	Ground Terminal
100A	1/0 - #14	1/0 - #14	(2) 1/0 - #14, (2) #2 - #14	#4 - 14AWG
200A	(1) #6 - 300mcm	(1) #6 - 300mcm	(2) #6 - 300mcm, (2) #4 - #14	#4 - 14AWG
400A	(1) 1/0 - 750mcm or (2) 1/0 - 300mcm	(1) 1/0 - 750mcm or (2) 2/0 - 300mcm	(1) 1/0 - 750mcm or (2) 1/0 - 300mcm, and (3) #6 - 250mcm	(2) #6 - 250mcm
600A	(1) #2-600mcm and (1) 1/0 - 750mcm	(1) #2-600mcm and (1) 1/0 - 750mcm	(1) 1/0 - 750mcm and (1) #2 - 600mcm, and (3) #6 - 250mcm	(2) #6 - 250mcm
800A	(4) 3/0 - 750mcm	(4) 3/0 - 750mcm	(3) #6 - 250mcm, (4) 3/0 - 750mcm	(2) #6 - 250mcm

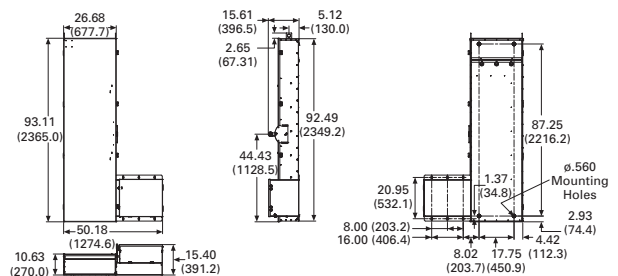
Dimensions

Approximate Dimensions in Inches (mm)

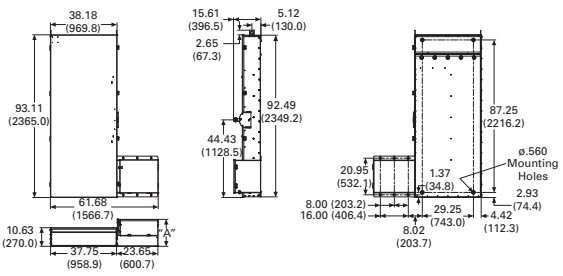
100/200 Amp CDT Dimensions



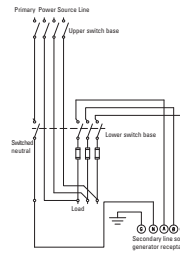
400 Amp CDT Dimensions



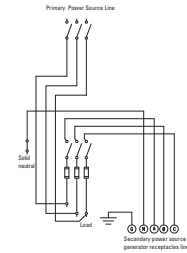
600-800 Amp CDT Dimensions



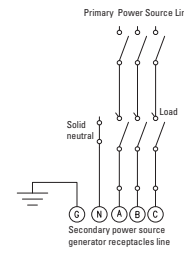
Wiring Diagrams



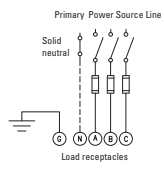
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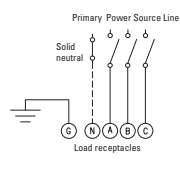
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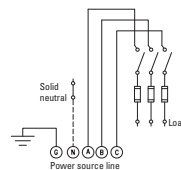
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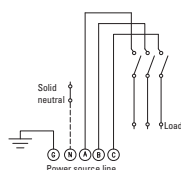
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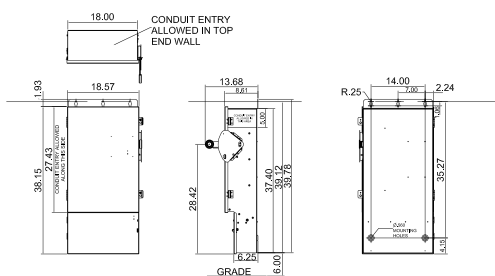


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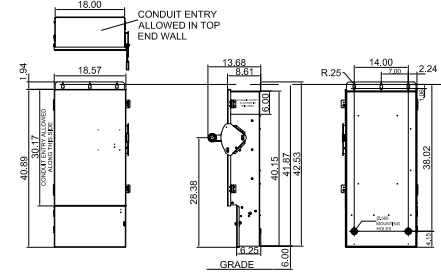


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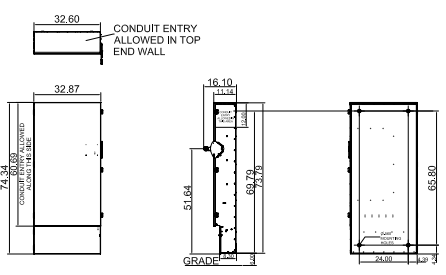
100 Amp CDH Dimensions



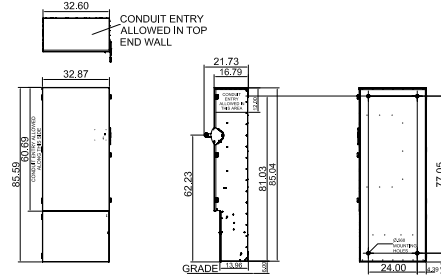
200 Amp CDH Dimensions



400/600 Amp CDH Dimensions



800 Amp CDH Dimensions



Solar Disconnect Switch



Solar Disconnect Switch

Application Description

Used in Photo Voltaic installations. A DC disconnect switch is required ahead of the inverter to isolate the load from the PV source.

The most common application is a **negative grounded PV system**, with the location of the bond usually found at the inverter (transformer type inverters). Per CEC 14-100 only the current carrying ungrounded conductors shall be switched. Thus in a negative-grounded PV system only the positive conductor is switched. The other conductor of the DC circuit must be grounded (like a neutral in an AC system).

Ungrounded DC floating systems would be applied with transformerless inverters. In an ungrounded DC floating system both positive and negative are switched in the disconnect.

Product Description for Negative Grounded Disconnects

- 30 – 600Ampere, 600Vdc single circuit
- Isolated negative ground and equipment ground lug standard
- Factory wired in series for DC, single circuit
- Fusible and Non-Fusible
- Class R fuse clips standard on fusible design
- Heavy Duty K switch design
- Type 3R, 12/3R and 4 painted steel ANSI 61 light grey electrocoat and 4X stainless steel enclosures available

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Features

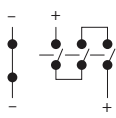
- Line / Load terminal warning labels on door
- Line / Load fuse isolated
- 100% load break rated
- Meets disconnect requirements of Section 50 CEC part 1
- Meets ESA requirements for PV applications
- For multi-circuit (2-6) and 1000Vdc refer to Eaton publication No. BR00802002E for product offering and technical specifications
- **“Out of the box solution”** no additional jumper bars or separate negative ground required
- **Enhanced safety** - fuse is completely de-energized on both line and load side when switch is in off position
- Isolated negative ground terminal included as standard, necessary for grounded PV systems per Section 50 CEC part 1
- Clear polycarbonate dead-front to guard against accidental contact with live parts
- Highly visible line and load warning label specific to PV on door front of switch
- Visibly marked positive and negative terminal connections
- Additional labels included with switch – “PV System Disconnect”

Product Description for Ungrounded DC Disconnects

- 30A – 400A, 600Vdc
- 30A - 400A @ 1000Vdc
- Multi-circuit offering
- Both positive (+) and negative (-) are switched
- UL listed to UL98b standard
- CSA/ESA accepted
- Refer to Eaton Publication No. BR00802002E for product offering and technical specifications

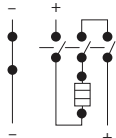
Product Selection

Non-Fusible 600Vdc Disconnect for Negative Grounded PV Systems



System	Ampere	Catalogue Number Type 3R	Catalogue Number Type 12/3R ^②	Catalogue Number Type 4X ^③	Lug Capacity Main & Isolated Negative Ground ^④	Equipment Ground Lug
	30	CDH161URKN	CDH161UDKN	CDH161UWKN	#2 - #14 Cu/Al	#4 - #14 Cu/Al
	60	CDH162URKN	CDH162UDKN	CDH162UWKN	#2 - #14 Cu/Al	#4 - #14 Cu/Al
	100	CDH163URKN	CDH163UDKN	CDH163UWKN	1/0 - #14 Cu/Al	#4 - #14 Cu/Al
	200	CDH164URKN	CDH164UDKN	CDH164UWKN	250kcmil - #6 Cu/Al	#2 - #14 Cu/Al
	400	CDH165URKN	CDH165UDKN	CDH165UWKN	(1) 750kcmil - 1/0 or (2) 300kcmil - 1/0 Cu/Al	250kcmil - #6 Cu/Al
	600	CDH166URKN	CDH166UDKN	CDH166UWKN	(1) 750kcmil - 1/0 or (1) 600kcmil - #2 Cu/Al	250kcmil - #6 Cu/Al

Fusible 600Vdc Disconnect for Negative Grounded PV Systems



System	Ampere	Catalogue Number Type 3R	Catalogue Number Type 12/3R ^②	Catalogue Number Type 4X ^③	Lug Capacity Main & Isolated Negative Ground ^④	Equipment Ground Lug
	30	CDH161NRK	CDH161NDK	CDH161NWK	#2 - #14 Cu/Al	#4 - #14 Cu/Al
	60	CDH162NRK	CDH162NDK	CDH162NWK	#2 - #14 Cu/Al	#4 - #14 Cu/Al
	100	CDH163NRK	CDH163NDK	CDH163NWK	1/0 - #14 Cu/Al	#4 - #14 Cu/Al
	200	CDH164NRK	CDH164NDK	CDH164NWK	250kcmil - #6 Cu/Al	#2 - #14 Cu/Al
	400	CDH165NRK	CDH165NDK	CDH165NWK	(1) 750kcmil - 1/0 or (2) 300kcmil - 1/0 Cu/Al	250kcmil - #6 Cu/Al
	600	CDH166NRK	CDH166NDK	CDH166NWK	(1) 750kcmil - 1/0 or (1) 600kcmil - #2 Cu/Al	250kcmil - #6 Cu/Al

Note: For negative grounded multi-circuit (2-6) and 1000Vdc offering, refer to Eaton publication BR00802002E

Non-Fusible 600Vdc 1000Vdc Disconnect for UNGROUNDED DC Floating Systems ^①

Fusible 600Vdc 1000Vdc Disconnect for UNGROUNDED DC Floating Systems ^①

Note: Refer to Eaton publication No. BR00802002E for offering and technical specifications.

Notes

- ① Available Q4 2012
- ② Type 12 enclosures can be field converted to 3R when drain screw removed from end wall of enclosure.
- ③ Enclosure Type 4X stainless steel 30A to 200A, Type 4 painted steel enclosure 400A and 600A. For stainless steel enclosures at 400 and 600A add SS to catalogue number suffix.
- ④ Field-wiring conductor size shall be determined by referring to CEC Table 2 and Table 4, or NFPA Table 310.16, 75C column for wire size (AWG). Use wire rated for 90C (194F) or higher.
- ⑤ Refer to CEC Part 1 Section 50 to calculate current rating of disconnect required.

Dimensions

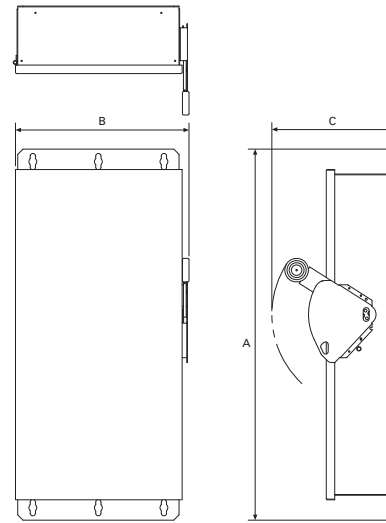
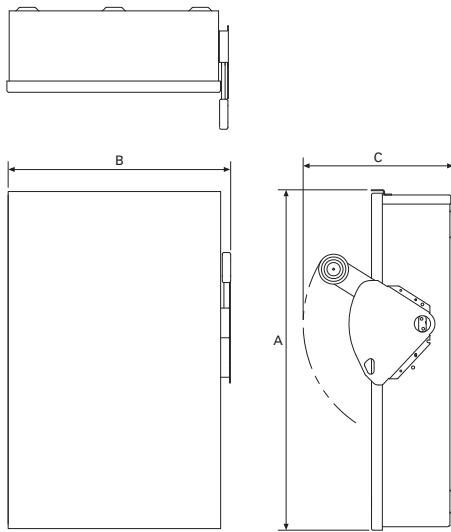
Approximate Dimensions in Inches (mm)

Type 3R Dimensions

Ampere	A	B	C
30 Non-Fusible	16.35 (415)	8.87 (225)	9.89 (251)
30 Fusible	16.35 (415)	8.87 (225)	9.89 (251)
60 Non-Fusible	16.35 (415)	8.87 (225)	9.89 (251)
60 Fusible	16.35 (415)	8.87 (225)	9.89 (251)
100	22.15 (563)	11.84 (301)	9.89 (251)
200	28.27 (718)	16.66 (423)	11.26 (286)
400	45 (1143)	24.12 (613)	12.39 (315)
600	52.5 (1334)	25.12 (638)	14.07 (357)

Type 12/3R and 4/4X Dimensions

Ampere	A	B	C
30 Non-Fusible	14.14 (359)	8.76 (223)	10.22 (260)
30 Fusible	19.8 (485)	8.76 (223)	10.22 (260)
60 Non-Fusible	14.14 (359)	8.76 (223)	10.22 (260)
60 Fusible	19.8 (485)	8.76 (223)	10.22 (260)
100	24.95 (634)	11.79 (299)	10.22 (260)
200	35.38 (899)	16.5 (431)	11.63 (295)
400	57.47 (1460)	24.12 (613)	12.43 (316)
600	63 (1600)	36.34 (923)	14.25 (362)



Note: Dimensions apply to disconnects for either negative grounded or ungrounded PV systems.

Zone Blasting Switch



Zone Blasting Switch

Application Description

Used as a means to safely initiate the blasting process found in mining, quarrying or roadway construction.

Product Description

- 30A – 100A
- 2 pole, 600V AC - 250Vdc maximum
- Non-fusible disconnect, Heavy Duty K switch design
- Highly visible RED Type 12/3R rated enclosure, or 4X stainless steel available
- Manually operated with three interlocked positions – PRIME, TEST, SHORT
 - PRIME – initiates the blast
 - TEST – neutral position, enables safe installation of detonator wires galvanometer testing
 - SHORT – provides a deadshort once blast complete

- Three lockable positions, each position accepts 3 x 3/8" shank locks
- 100% load break and make rated
- Optional auxiliary contacts available

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Features

Unsurpassed safety through a single point of control during the blasting process, along with a separate deadshort position safeguarding against premature blasts.

Reduced installation time, with an all in one mechanical connection to short-circuit the blasting leg wires.

A permanent galvanometer testing connection is a quick, simple and safe standard feature as opposed to the alternate methods of twisting and untwisting wires when performing short and test functions.

Easy identification with highly visible red enclosure and lamacoid nameplates.

Standards and Certifications

- CSA Certified LL45963
- Meets C22.2 No.4 for enclosed switches



Product Selection

12DT261NFREDB

Zone Blasting Switch, 600Vac max. Non-Fusible - Type 12/3R, 4X Enclosure



Maximum Horsepower Rating

Ampere	Fuse Type Provision	Single Phase AC		DC	Catalogue Number	
		480V	600V	250V	Type 12 Enclosure - Red [Ⓞ]	Type 4X Enclosure - Stainless Steel
30	—	7.5	10	5	12DT261NFREDB	4DT261NFB
60	—	20	25	10	12DT262NFREDB	4DT262NFB
100	—	40	50	20	12DT263NFREDB	4DT263NFB

Notes

- Ⓞ Type 12 enclosure can be field modified to 3R rating when drain screw from bottom of enclosure is removed.

Accessories

Auxiliary Contact

Circuit	Catalogue Number
1 N/O, 1 N/C (Qty 2 required)	DS200EK1

Technical Data and Specifications

Terminal Capacity

Disconnect Switch Size	Wire Size
30A	#14-2 Cu/Al
60A	#14-2 Cu/Al
100A	#14-1/0 Cu/Al

Functions

Prime: The position that initiates the blast or blast signal.

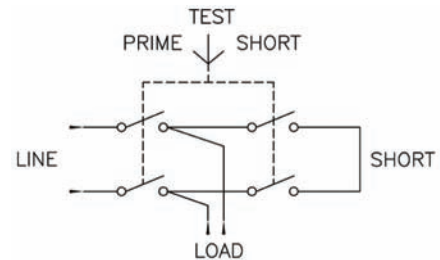
Test: An isolated position for operator to install detonator wires to load lugs, provides a permanent means for testing continuity of circuits with galvanometer.

Short: Position that mechanically short circuits the leg wires. Once the blast has been completed, operator must return to the short position to activate the dead short.

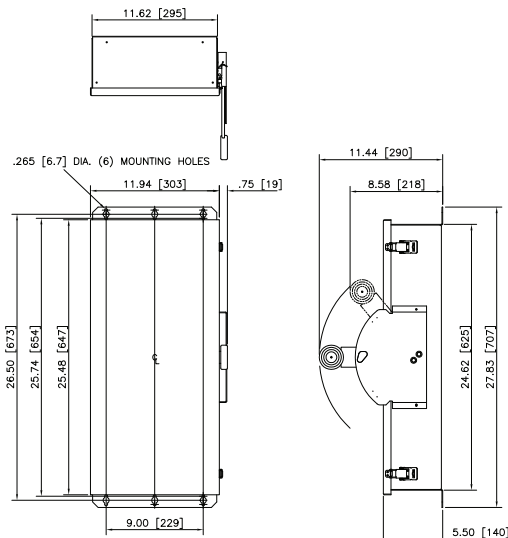
Note: Once installation of the leg wires and testing have been completed in the test position, the door of the enclosure must be closed to activate the prime position, as well to activate the short position.

Mechanism: Side operated handle, double break visible knife blades, quick make/break operation, 100% load break rated.

Short Circuit Rating: 100KA RMS with class R, J, or T upstream, otherwise 10KA.



Dimensions



Elevator Control Switch



Elevator Control Switch

Application

Typically used in elevator applications, allowing the AC power to be shut down to the elevator **prior to the application of water** in the elevator machine room or hoistway.

Product Description

This device is a fusible switch that is equipped with a shunt trip mechanism. The shunt trip is operated by a control relay (called a Fire Safety Interface Relay) in the unit that is wired to a normally open contact in the remote Fire Alarm Control Panel.

It is a single device that meets the national building code requirements (US) for sprinklers, elevators and electrical equipment.

Standard Features

- 30–400A, 600 Vac three-phase fused power switch NEMA 1 enclosure
- 200,000A rms short-circuit current rating
- Shunt trip 120V
- Control power terminal block
- Pilot light “ON”
- Class J Fuse mounting only (Class J Fuses not included)
- Key to test switch 120V
- Mechanically interlocked auxiliary contact for hydraulic elevators with battery backup (5A, 120 Vac rated) 1NO, 1NC

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Optional Features

- Control power transformer with fuses and blocks
- Fire safety interface relay
- Isolated neutral lug (oversized 200% rated neutral option available where required by excessive nonlinear loads)
- Fire alarm voltage monitoring relay (to monitor shunt trip voltage)
- NEMA 3R, 4 and 12 enclosures available through 200A
- Phase failure and undervoltage relay available, consult Eaton
- Contact closure ie: battery lowering/door opening system. The ‘B’ option prevents “nuisance” fire alarms, by allowing overriding of the “Control Power not Available” signal when the Eaton elevator control disconnect is

manually (intentionally) turned off, and distinctive signaling for ON-OFF-TRIPPED conditions.

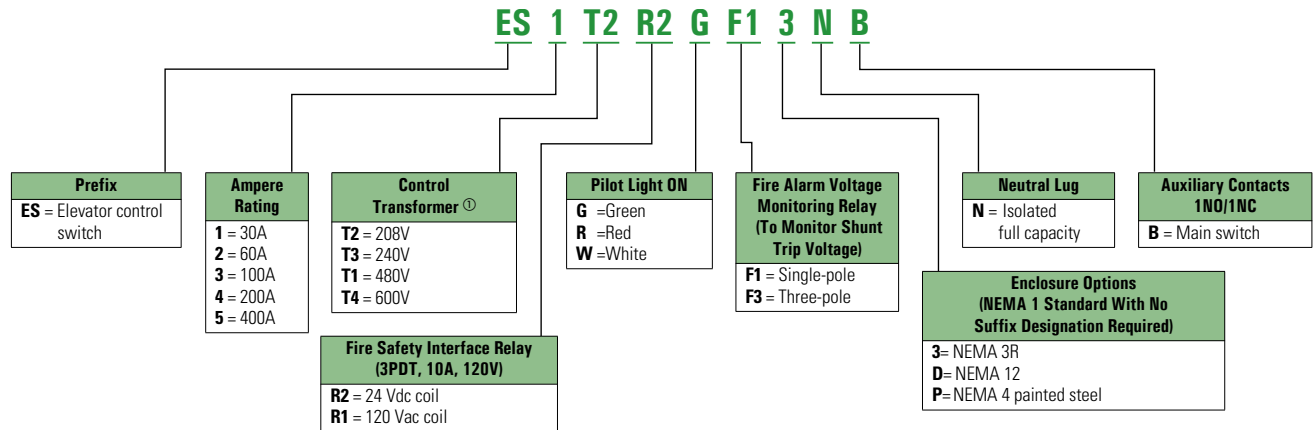
Standards and Certifications

- UL 98 Enclosed and Deadfront Switch Guide 96NK3917, File No. E182262
- cUL® per Canadian Standards C22.2, No. 0-M91-CAN/CSA® C22.2, No. 4-M89 Enclosed Switch



Catalogue Number Selection

Elevator Control Switch



Catalogue Number Example: ES3T1R1GF3

- 100A S.T. switch 480V-3P—ES3
- 480–120V CPT—T1
- 120 Vac coil fire safety interface relay—R1
- Pilot light—ON (Green)—G
- Fire alarm voltage monitoring relay (three-pole)—F3

Technical Data and Specifications

Elevator Control Switch Maximum hp Rating—Sizing Based on Motor Type

Voltage Rating (Vac Three-Phase)	30A, ES1			60A, ES2			100A, ES3			200A, ES4			400A, ES5		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
208	5	5	3	10	10	10	20	15	15	40	40	30	—	—	—
240	5	5	5	10	10	10	20	20	15	50	40	30	—	—	—
280	10	10	10	30	25	20	50	40	30	100	75	75	—	—	—
600	15	15	10	30	30	25	60	50	40	125	100	100	—	—	—

Dimensions

Approximate Dimensions in Inches (mm)

Elevator Control Switch Dimensions and Lug Data

Ampere Rating	NEMA 1 ①			NEMA 3R, 12 ②			Lug Size ③	Catalogue Number
	Height	Width	Depth	Height	Width	Depth		
30	20.00 (508.0)	16.00 (406.4)	8.63 (219.2)	20.00 (508.0)	20.00 (508.0)	8.00 (203.2)	#14–#8 Al or Cu	ES1
60	20.00 (508.0)	16.00 (406.4)	8.63 (219.2)	20.00 (508.0)	20.00 (508.0)	8.00 (203.2)	#14–#2 Al or Cu	ES2
100	20.00 (508.0)	16.00 (406.4)	8.63 (219.2)	20.00 (508.0)	20.00 (508.0)	8.00 (203.2)	#8–1/0 Al or Cu	ES3
200	30.00 (762.0)	20.00 (508.0)	8.63 (219.2)	30.00 (762.0)	24.00 (609.6)	8.00 (203.2)	#6–250 kcmil Al or Cu	ES4
400	52.00 (320.8)	25.00 (635.0)	8.00 (203.2)	52.00 (1320.8)	25.00 (635.0)	8.00 (203.2)	(2) 1/0–(1) 750	ES5

Notes

- ① Standard oversize enclosure to mount control power transformer fire safety interface relay and control terminal blocks.
- ② Contact Eaton for dimensions for NEMA 4 enclosure.
- ③ Optional neutral lug size same as line and load.

Grounding Switch



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Industrial Grounding Switch

Application Description

Used to isolate and ground 250Vdc/600Vac loads typically found but not limited to industrial DC applications such as door machines, rail cars and cranes. Grounding enables the current to be drained ie: drives, capacitors, discharging stray current on the machine doors, rails or cranes, increasing safety and people protection.

Product Description

- 30A - 600Ampere 250Vdc/600Vac
- Non-Fusible, double throw heavy duty switch design
- Grounded dead short
- Enclosures type 12 and 4 painted steel and 4X stainless steel grade 304. Type 12 enclosure can be field converted to 3R when drain screw removed.
- Optional grade 316 stainless available
- Two viewing windows standard for visible blade indication of both main switch and grounded dead short
- Highly visible lamacoid nameplates standard, warning source 250Vdc and grounded position
- Triple lockoff capability, all switch positions

Features & Benefits

- Safety - people protection - grounding enables the current to be drained discharging stray currents
- Cost and labour savings - eliminates the need for external hookstick ground clamps or ground bridles
- Reduces wear on existing breakers - eliminates the need to draw our breakers, lug out, tag out and apply ground bridle
- Increased uptime - all in one solution

Standards & Certifications

- CSA certified
- Meets C22.2 No.4 standard for enclosed switches



250Vdc/600Vac Heavy-Duty, Non-Fusible, Grounding Switch

Ampere Rating Main and Standby	Maximum Horsepower Ratings			Type 12 ^① Catalogue Number	Type 4X Stainless Steel Catalogue Number	Type 4 Painted Steel Catalogue Number
	Single-Phase AC	DC	DC			
	480V	600V	250V			
Two-Pole—600 Vac—250 Vdc						
30	7-1/2	10	5	12DT361NFWGB	4DT361NFWGB	—
60	20	25	10	12DT362NFWGB	4DT362NFWGB	—
100	40	50	20	12DT363NFWGB	4DT363NFWGB	—
200	50	50	40	12DT364NFWGB	4DT364NFWGB	—
400	—	—	50	12DT365NFWGB	4DT365NFWSSGB	4DT365NFWGB
600	—	—	50	12DT366NFWGB	4DT366NFWSSGB	4DT366NFWGB

Notes

① Type 12 enclosure can be field modified to 3R rating when drain screw from bottom of enclosure is removed.

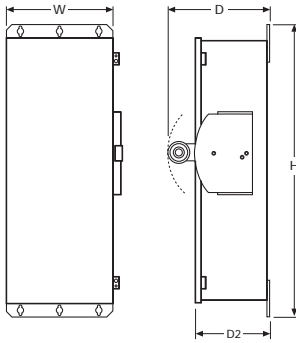
Dimensions

Approximate Dimensions in Inches (mm)

Heavy-Duty, Non-Fusible, 250Vdc and 600Vac, Two-Pole

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
Type 12, 4X Stainless Steel, 4 Painted Steel					
30	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27)
60	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27)
100	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27)
200	19.50 (495.3)	41.00 (1041.4)	11.63 (295.4)	6.48 (164.6)	105 (48)
400	23.05 (585)	57.48 (1460)	12.5 (317.5)	7.25 (184.2)	160 (73)
600	23.7 (602)	67.02 (1702)	14.1 (358)	8.88 (225.6)	175 (79)

Type 12-4X Double-Throw 30–1200A



Terminal Capacity for Grounding Switch

Ampere	Line/Load Terminal Capacity (per phase)	Ground terminal Capacity	Neutral Catalogue # ^①	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DT100NK	1x #14 - #2 AND 3x #14 - #2
60	#14 - #2	#14 - 4	DT100NK	1x #14 - #2 AND 3x #14 - #2
100	#14 - 1/0	#14 - 4	DT100NK	1x #14 - #2 AND 3x #14 - #2
200	#6 - 250mcm	#14 - 4	DT200NK	3x #6 - 250mcm AND 1x #14 - #2
400 (non fusible)	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 250mcm	DT400NK	7x #6 - 250mcm
600 (non fusible)	(2)250mcm - (2)500mcm	#6 - 250mcm	DT600NK	6x 250mcm - 500mcm AND 1x #6 - 250mcm

Notes

① Order neutral catalogue number when neutral required and not included with switch.

All terminals are rating al/cu unless otherwise noted.

Short Circuit Rating

10ka rms rating applies @250Vdc

For 600Vac rms rating refer to page 39

NEMA 1 Motor Disconnect



B330AGD



B330AND

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NEMA 1 Motor Disconnect

Product Application

Suitable as a motor disconnect for indoor use when switching or isolating motor loads.

Product Description

- 30A 600AC, NEMA 1
- Compact size 3.2"W x 4.72"H x 3.09"D
- Lockable
- 10KA withstand rating @ 600V when protected by 60A max. class J fusing
- K/O's top, bottom, back

Features

- Labeled suitable for motor disconnect
- Compact, economical
- Snap action toggle design

Standards and Certifications

- UL listed
- CSA certified to C22.2, No. 14



Non-Fusible 2 and 3 Pole, 600Vac

Ampere	Maximum Horsepower								Catalogue Number
	1 Phase AC				3 Phase AC				
	120V	240V	480V	600V	120V	240V	480V	600V	
30	2	5	10	15					B230BGD Ⓢ
Non-Fusible, 3 Pole, 600Vac									
30					3	75	15	20	B330AGD Ⓢ

Notes

- Ⓢ Internal replacement switch B230BND
- Ⓢ Internal replacement switch B330AND

Enclosed Rotary Disconnect



NEMA 12/3R, 4X Enclosed Rotary Disconnects

Application

Suitable as a motor disconnect. A compact and economical choice for switching and isolating motor loads. Provides users with the ability to lock directly to wired motor loads in the OFF position.

Environments such as outdoor, corrosive, dust, hose down, all possible with the wide variety of enclosures available.

Product Overview

- Available in 16–80A ratings
- 600 Vac, three- and four-pole non-fusible device
- Up to 65KA RMS short circuit withstand rating
- Padlockable in the OFF position (up to three padlocks)
- Load break rated
- Accepts auxiliary contacts; capability to signal PLC controllers
- Ground lug connection provided as standard
- Possibility of adding one power pole and one auxiliary contact
- NEMA® Type 12/3R painted steel, 4X stainless steel, 4X non metallic, polycarbonate and thermoset polyester (krydon®)
- Labeled “Suitable for motor disconnect”

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Standards and Certifications

- CSA Certified, File 162136
- C22.2 No.14/UL 508
- Meets CEC rule 28-602(3)(b) suitable for motor disconnect



Product Selection

Enclosed Rotary Non-Fusible

Ampere Rating	Maximum Horsepower Ratings				Type 12 ^① Enclosure Dust-Tight/ Rainproof	Type 4X Enclosure Corrosion-Resistant, Stainless Steel	Type 4X Enclosure Corrosion-Resistant, Non-Metallic Krydon [®]	Type 4X Enclosure Polycarbonate- Non-Metallic
	Three-Phase AC		480V	600V	Catalogue Number	Catalogue Number	Catalogue Number	Catalogue Number
	208V	240V						
Three-Pole, 600 Vac								
16	3	5	10	10	CER53016UD	CER53016UW	CER53016UX	—
25	7-1/2	7-1/2	15	20	CER53025UD	CER53025UW	CER53025UX	—
30	7-1/2	7-1/2	15	20	CER53030UD	CER53030UW	CER53030UX	ER53030UPGB ^{②③}
40	7-1/2	7-1/2	20	25	CER53040UD	CER53040UW	CER53040UX	—
60	15	15	30	30	CER53060UD	CER53060UW	CER53060UX	ER53060UPGB ^{②③}
80	15	20	40	40	CER53080UD	CER53080UW	CER53080UX	—

Accessories for Enclosed Rotary Disconnects ^{④⑤}

Disconnect Ampere Rating	Switched Fourth Pole	Auxiliary Contacts (Choose one)	Terminal Shrouds
16	S4PR516	1NO + 1NC AC1NONC	Single-pole TS1R5A
25	S4PR525		
30	S4PR530	2NC AC2NC	Three-pole TS3R5A
40	S4PR540		
60	—		Single-pole TS1R5B
80	—		Three-pole TS3R5B

Notes

① NEMA Type 12 enclosures (16–80A) can be field modified to meet Type 3R rainproof requirements when a factory-provided drain hole is opened.

② **GB** suffix = gray cover and black handle, **YR** suffix = yellow cover and red handle, **GR** suffix = gray cover and red handle.

③ cULus.

④ Ordered and shipped as separate components—not integral to enclosed device.

⑤ Enclosed disconnects can accept one power pole, neutral or up to two auxiliary contacts (one mounted on either side of switch).

Contact Customer Support (1-800-268-3578) for factory-installed accessories, UL labelled product, or other special modifications.

Technical Data and Specifications

CSA 22.2 No.14/UL508 Manual Motor Controller “Suitable as Motor Disconnect” from 16-80A

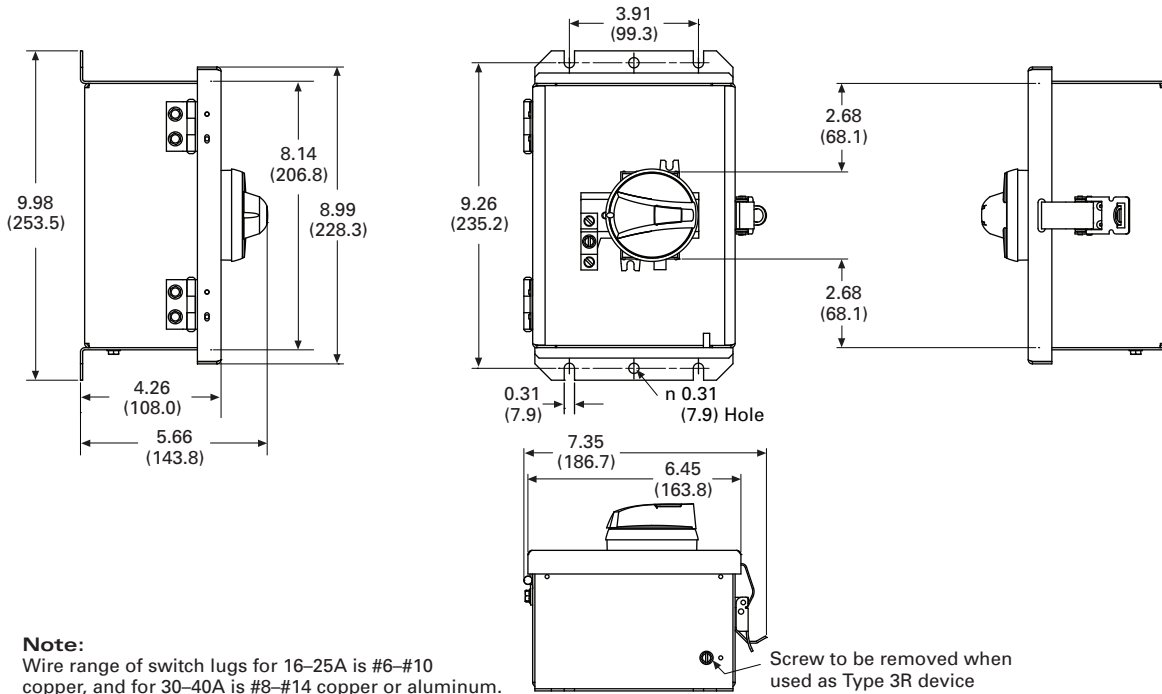
Technical Characteristics	16A	25A	30A	40A	60A	80A
Approvals	UL 508/CSA 22.2 No. 14	UL 508/CSA 22.2 No. 14	UL 508/CSA 22.2 No. 14	UL 508/CSA 22.2 No. 14	UL 508/CSA 22.2 No. 14	UL 508/CSA 22.2 No. 14
Short-circuit rating at 600Vac (kA)	10/65	10/65	10/65	10/65	50/65	50/65
Branch circuit fuse type	J	J	J	J	J	J
Maximum fuse rating	60/30A	60/30A	60/30A	60/30A	100/60A	100/60A
Maximum CSA/UL Horsepower Ratings/Maximum Motor FLA Current, Three-Phase						
208Vac	3/10.6	7.5/24.2	7.5/24.2	7.5/24.2	15/46.2	15/46.2
220-240 Vac	5/15	7.5/22	7.5/22	7.5/22	15/42	20/54
440-480 Vac	10/14	15/21	15/21	20/27	30/40	40/52
600 Vac	10/11	20/22	20/22	25/27	30/32	40/41
Connection						
Wire range (AWG), solid, single cable	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10
Wire range (AWG), solid, two cables	2x #12	2x #12	2x #12	2x #12	2x #12	2x #12
Wire range (AWG), stranded, single cable	#14 - #4	#14 - #4	#14 - #4	#14 - #4	#14 - #1	#14 - #1
Wire range (AWG), stranded, two cables	2x (#14-#12)	2x (#14-#12)	2x (#14-#12)	2x (#14-#12)	2x (#10-#6)	2x (#10-#6)
Mechanical Characteristics						
Endurance, number of mechanical cycles	10,000	10,000	10,000	10,000	10,000	10,000
Auxiliary Contacts						
Electrical characteristics	A300	A300	A300	A300	A300	A300

Switching Devices

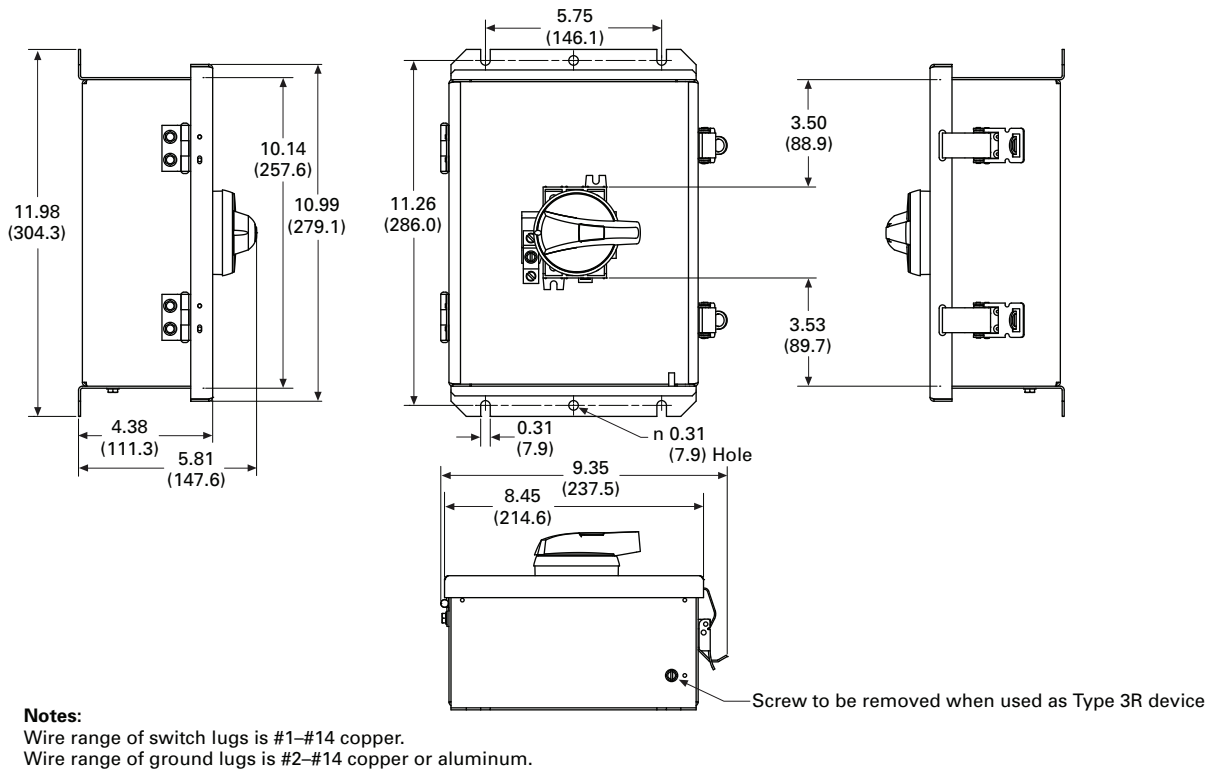
Motor Disconnects

Approximate Dimensions in Inches (mm)

NEMA Type 12/3R (16–40A)

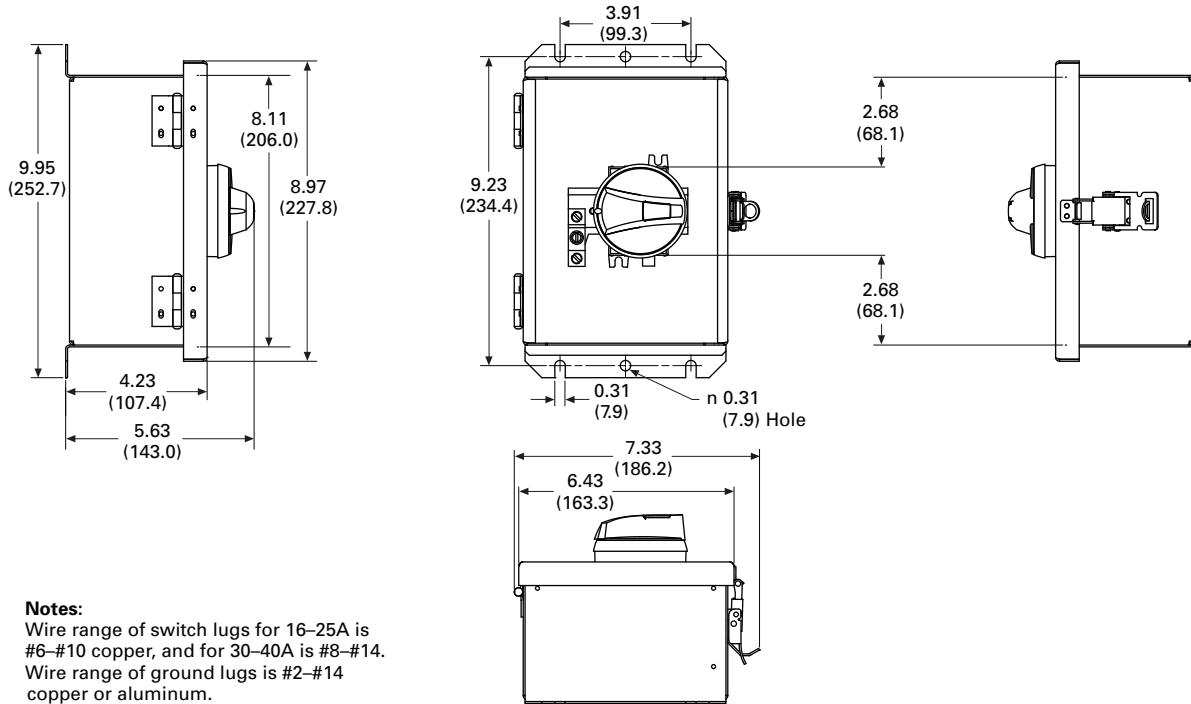


NEMA Type 12/3R (60–80A)



Approximate Dimensions in Inches (mm)

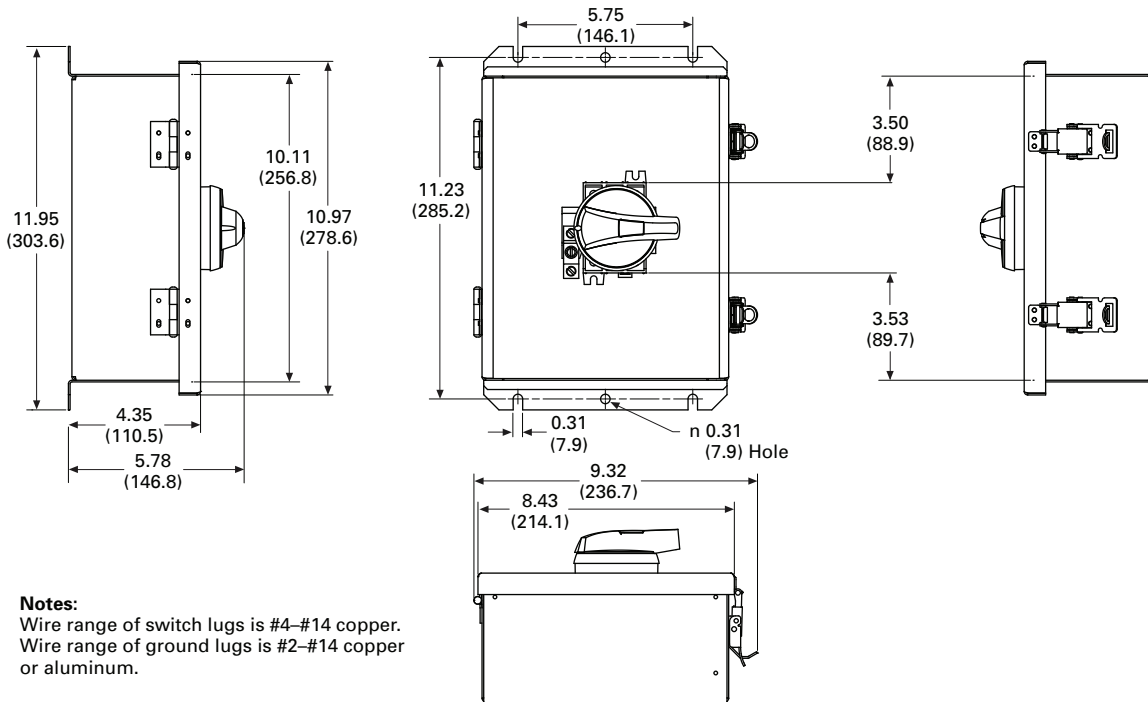
NEMA Type 4X Stainless (16–40A)



Notes:

Wire range of switch lugs for 16–25A is #6–#10 copper, and for 30–40A is #8–#14. Wire range of ground lugs is #2–#14 copper or aluminum.

NEMA Type 4X Stainless (60–80A)



Notes:

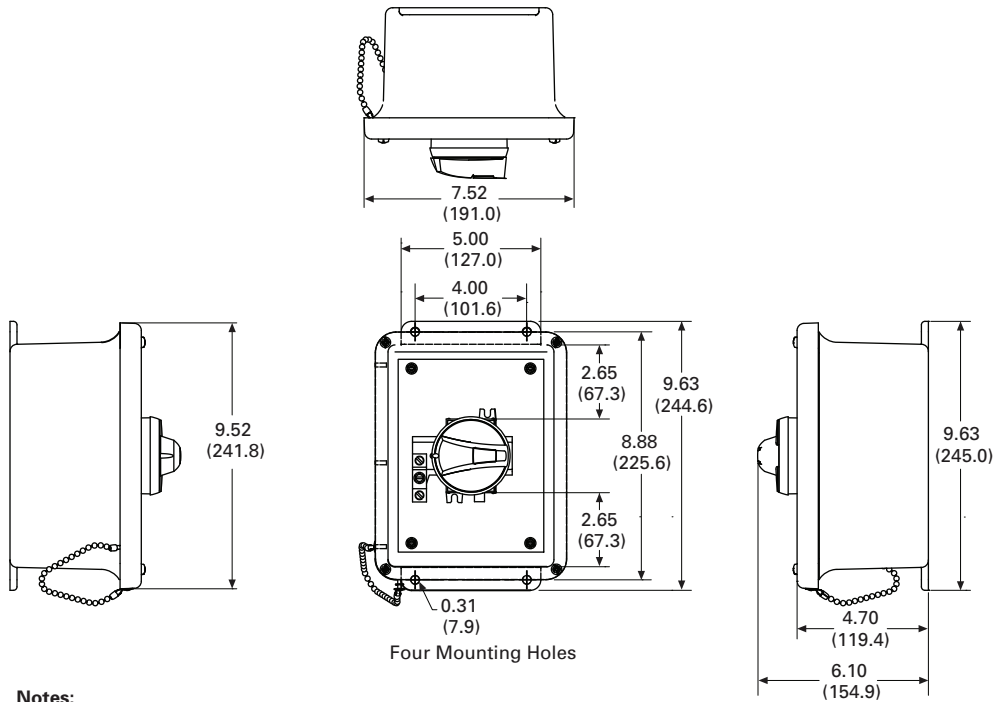
Wire range of switch lugs is #4–#14 copper. Wire range of ground lugs is #2–#14 copper or aluminum.

Switching Devices

Motor Disconnects

Approximate Dimensions in Inches (mm)

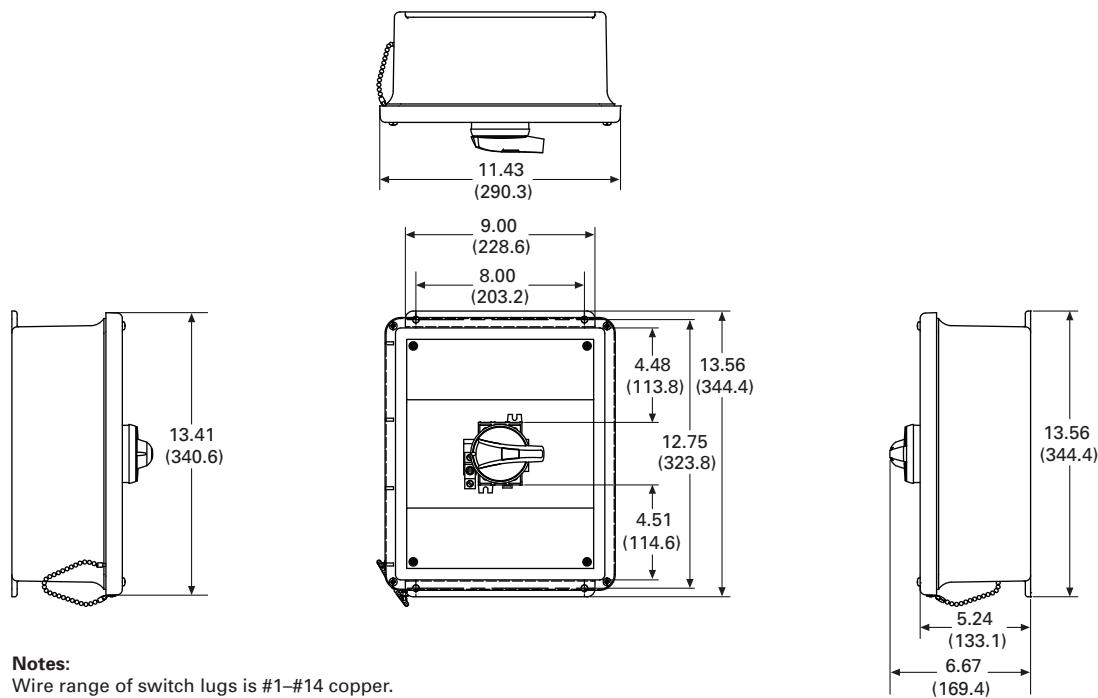
NEMA Type 4X Thermoset Polyester Krydon® (16–40A)



Notes:

Wire range of switch lugs for 16–25A is #6–#10 copper, and for 30–40A is #8–#14.
Wire range of ground lugs is #2–#14 copper or aluminum.

NEMA Type 4X Thermoset Polyester Krydon® (60–80A)

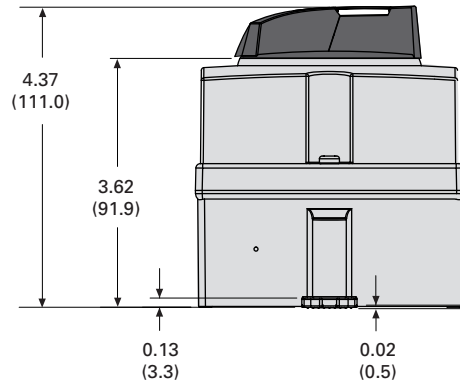
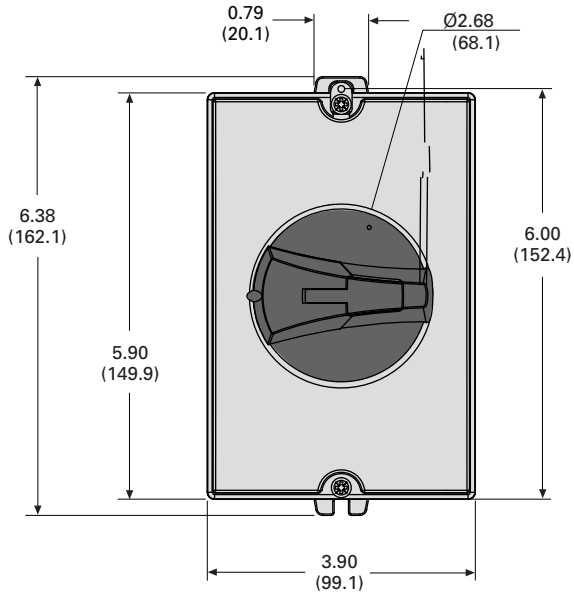


Notes:

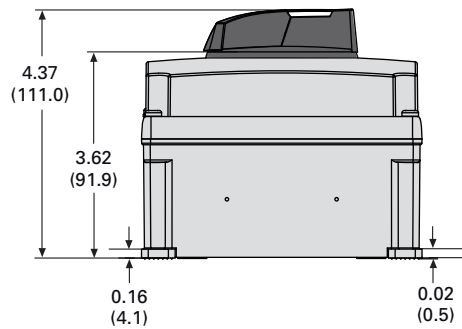
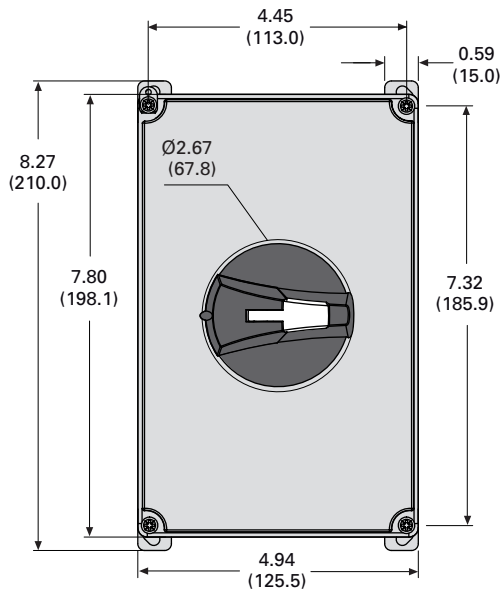
Wire range of switch lugs is #1–#14 copper.
Wire range of ground lugs is #2–#14 copper or aluminum.

Approximate Dimensions in Inches (mm)

NEMA Type 4X—Polycarbonate (30A)



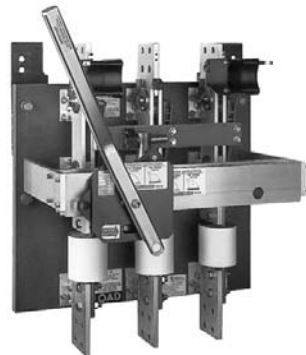
NEMA Type 4X—Polycarbonate (60A)



Pringle Bolted Pressure Switches



CBC Type Switch



QA Type Switch



Mill Switch (PMS)

Pringle Bolted Pressure Switch

Product Application

Typically sold as an open device to OEM's. **QA** and **CBC** type Pringle switches are typically used as the low voltage 600Vac max. fusible main service entrance device installed in a switchboard or an enclosure for commercial installations.

PMS designs are used for 250Vdc or 600Vac applications typically found in steel mills, foundries, shipyards, heavy equipment warehouses, mining, utilities.

Along with standard 600Vac low voltage and 250Vdc Pringle switches, custom Pringle switches are available for various, commercial, industrial, utility, port electrification, transit, applications. Medium voltage up to 15kV @ 6 to 60kA. For DC applications (non load break rated) @ 600, 750,

1000, 1200, 1600Vdc custom Pringle switches are available.

Features

Bolted Pressure Contacts

All Pringle switches feature bolted pressure contacts. The result: blade contact surfaces are bolted closed at a pressure of 600 PSI - at both the hinge and jaw ends. The benefit: current conducting efficiency is the equivalent of a bolted bus bar connection.

Spring Mechanism

All quick action switches use a unique spring mechanism for improved reliability over traditional coil springs. The unique spring design is created by a series of concave-convex washers. The paired-washer spring design provides a higher force/distance ratio, making it easier to operate the mechanism.

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Should an pair of washers become inoperable for any reason, the entire spring assembly will still be operable by means of the remaining pairs. This is unlike the situation if a coil spring were to fracture or fatigue.

- 200kAIC and 100% rated with Class "L" fuses.

Standards and Certifications

- 600Vac
- CSA Certified "QA" & "CBC" type
- UL Listed switches available upon request



Sample Spring Configuration

- Bottom feed configurations simplify connections from underground services resulting in considerable savings by eliminating up-and-around bus and extra cubicle space required by conventional top feed devices.



Product Selection

“QA” – Manually operated contact switch with quick positive switching action

“CBC” – Electric trip contact switch with charge-before-close mechanism. Can be manually or electrically tripped. Optional blown fuse detector and phase failure relay with capacitor trip

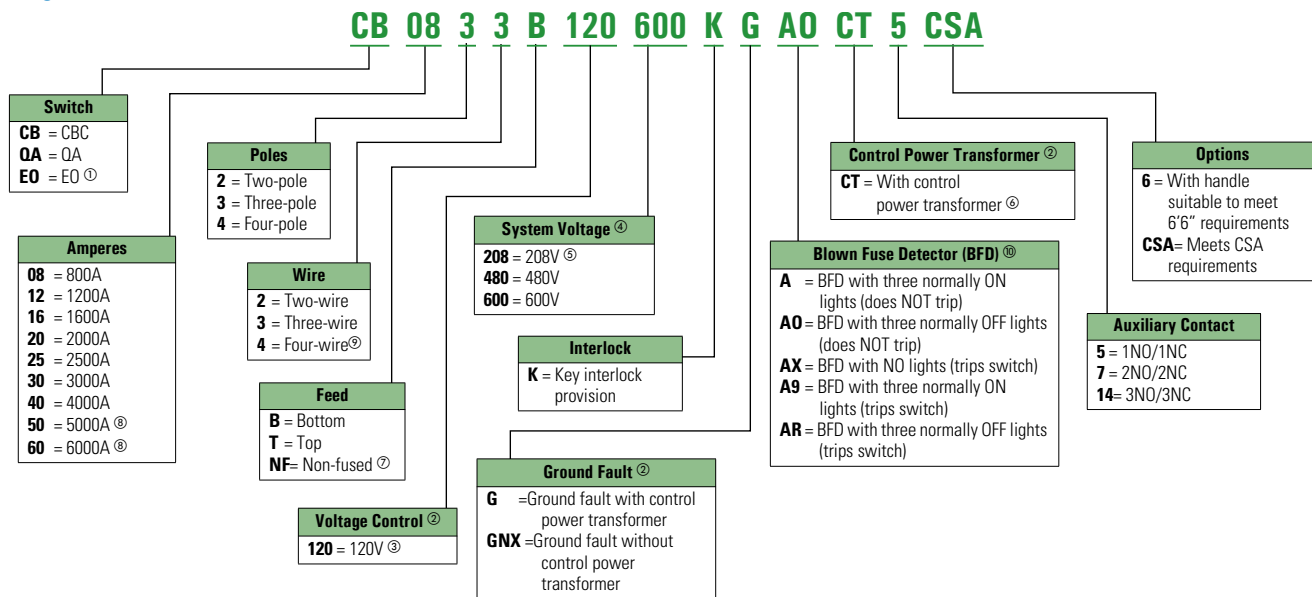
available.

“EO” – (Not UL or CSA)
Similar to “CBC” design except pushbutton operated vs handle, also enables remote access to energize or shut down power to the switch

- 600Vac maximum
- 800 – 6000Ampere
- 800 – 4000Ampere - CSA certified @ 600Vac
- Fusible
- Optional non-fusible “QA”
- Top or bottom fed
- Manually operated “QA” design
- Electric Trip “CBC” design
- 200kAIC and 100% load break rated with Class “L” fuses
- Top or bottom feed
- Two, three, or four pole
- Silver tipped contacts
- Various options available see page 84

Catalogue Number Selection

Pringle Bolted Pressure Switch



Notes

- ① Not CSA certified. A separate control box may be required when adding accessories.
- ② Not an option with QA type switches. GF option includes control power transformer.
- ③ 110 Vdc and 125 Vdc also available. Please contact Customer Service (1800-268-3578).
- ④ For different system voltage requirements, please contact Customer Service (1800-268-3578).
- ⑤ For QA switches, use 600V system catalogue number when referencing a 208V system.
- ⑥ Only applicable if ordering a CPT only, without ground fault.
- ⑦ Only available with QA switches and in a top-feed configuration.
- ⑧ Does not carry CSA marking.
- ⑨ Three pole four wire not available, if neutral required, customer to supply neutral or four pole four wire available.
- ⑩ For BFD that does not trip the switch, use QA switch design.
For BFD that does trip the switch, use CB switch design.

Switching Devices

Bolted Pressure Switches

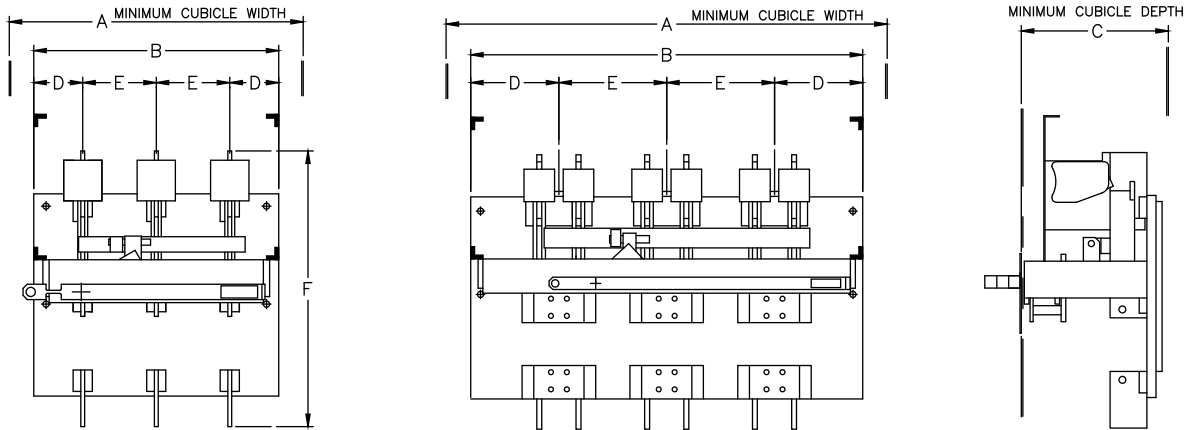
Dimensions

Approximate Dimensions in Inches (mm)

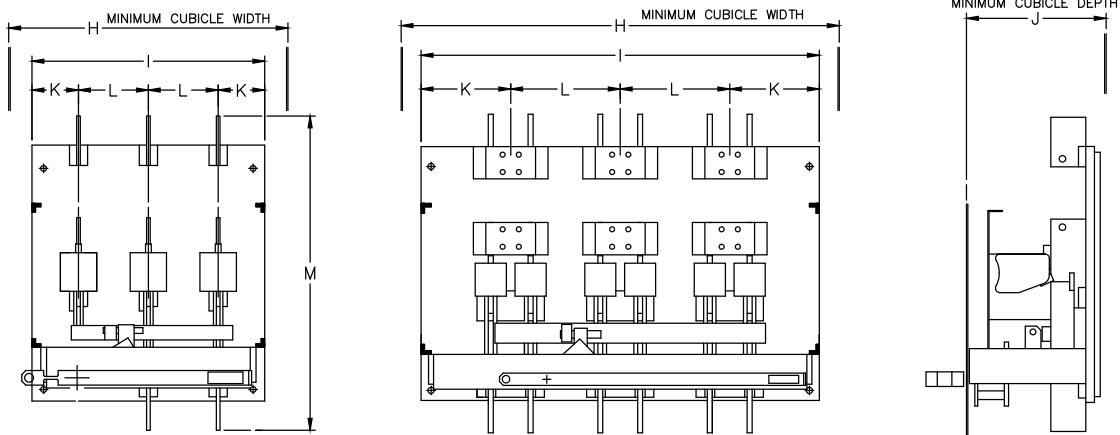
Manually Operated Bolted Contact Switches "QA" Design

Type	Feed	Ampere	Standard Catalogue Number	Dimensions						Weight (lb/kg)
				A	B	C	D	E	F	
QA	T	800	QA0833T600CSA	24 (610)	20 (508)	12 (305)	4 (102)	6 (152)	22.5 (572)	95 (43)
QA	T	1200	QA1233T600CSA	28 (711)	20 (508)	14 (356)	5.5 (140)	6.5 (165)	28 (711)	160 (73)
QA	T	1600	QA1633T600CSA	28 (711)	20 (508)	14 (356)	5.5 (140)	6.5 (165)	28 (711)	160 (73)
QA	T	2000	QA2033T600CSA	28 (711)	20 (508)	14 (356)	5.5 (140)	6.5 (165)	28 (711)	160 (73)
QA	T	2500	QA2533T600CSA	32 (813)	28 (711)	15 (381)	6 (152)	8 (203)	28 (711)	190 (86)
QA	T	3000	QA3033T600CSA	44 (1118)	40 (1016)	20 (508)	9 (229)	11 (279)	28 (711)	350 (159)
QA	T	4000	QA4033T600CSA	44 (1118)	40 (1016)	20 (508)	9 (229)	11 (279)	28 (711)	350 (159)
	Bottom			H	I	J	K	L	M	
QA	B	800	QA0833B600CSA	24 (610)	20 (508)	12 (305)	4 (102)	6 (152)	27 (686)	110 (50)
QA	B	1200	QA1233B600CSA	28 (711)	24 (610)	14 (356)	5.5 (140)	6.5 (165)	32 (813)	180 (82)
QA	B	1600	QA1633B600CSA	28 (711)	24 (610)	14 (356)	5.5 (140)	6.5 (165)	32 (813)	180 (82)
QA	B	2000	QA2033B600CSA	28 (711)	24 (610)	14 (356)	5.5 (140)	6.5 (165)	32 (813)	180 (82)
QA	B	2500	QA2533B600CSA	32 (813)	28 (711)	15 (381)	6 (152)	8 (203)	32 (813)	215 (98)
QA	B	3000	QA3033B600CSA	44 (1118)	40 (1016)	20 (508)	9 (229)	11 (279)	32 (813)	400 (182)
QA	B	4000	QA4033B600CSA	44 (1118)	40 (1016)	20 (508)	9 (229)	11 (279)	32 (813)	400 (182)

800A - 4000A QA Top Feed



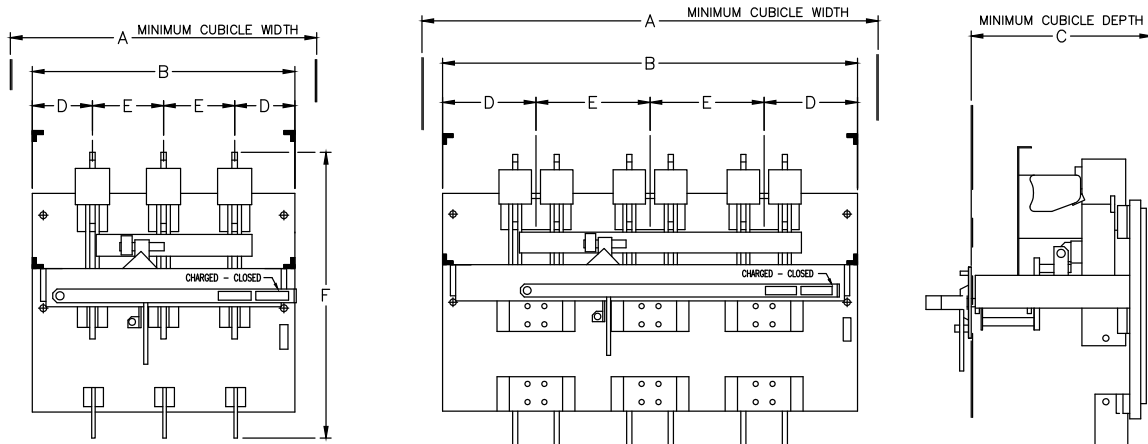
800A - 4000A QA Bottom Feed



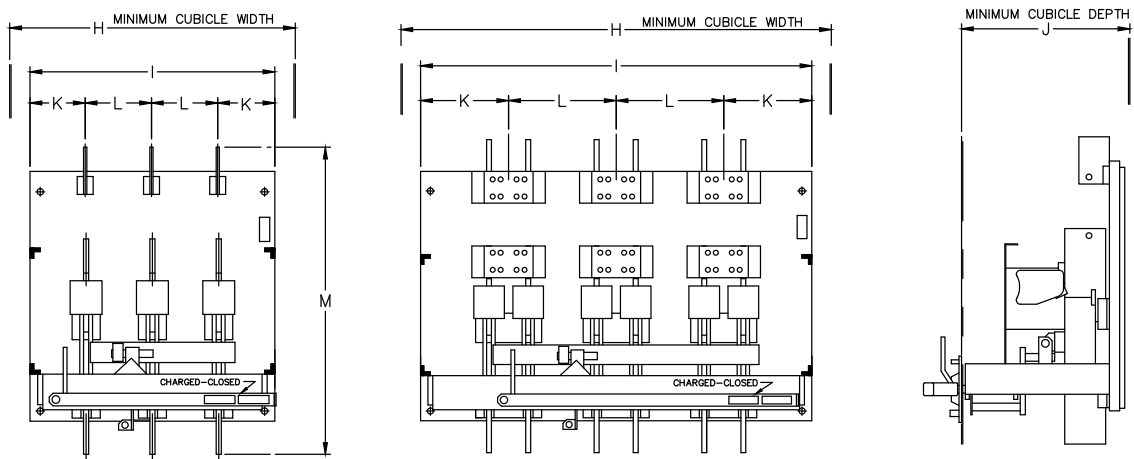
Electrically Operated Bolted Contact Switches "CBC" Design

Type	Feed	Ampere	Standard Catalogue Number	Dimensions							Weight (lb/kg)
				A	B	C	D	E	F		
CBC	T	800	CB0833T120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	26.1 (663)	140 (64)	
CBC	T	1200	CB1233T120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	28 (711)	180 (82)	
CBC	T	1600	CB1633T120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	28 (711)	180 (82)	
CBC	T	2000	CB2033T120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	28 (711)	180 (82)	
CBC	T	2500	CB2533T120600CSA	32 (813)	28 (711)	17.5 (445)	6 (152)	8 (203)	28 (711)	215 (98)	
CBC	T	3000	CB3033T120600CSA	44 (1118)	40 (1016)	22.5 (572)	9 (229)	11 (279)	28 (711)	390 (177)	
CBC	T	4000	CB4033T120600CSA	44 (1118)	40 (1016)	22.5 (572)	9 (229)	11 (279)	28 (711)	390 (177)	
	Bottom			H	I	J	K	L	M		
CBC	B	800	CB0833B120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	30.3 (765)	155 (70)	
CBC	B	1200	CB1233B120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	32 (813)	200 (91)	
CBC	B	1600	CB1633B120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	32 (813)	200 (91)	
CBC	B	2000	CB2033B120600CSA	28 (711)	24 (610)	16.5 (419)	5.5 (140)	6.5 (165)	32 (813)	200 (91)	
CBC	B	2500	CB2533B120600CSA	32 (813)	28 (711)	17.5 (445)	6 (152)	8 (203)	32 (813)	240 (109)	
CBC	B	3000	CB3033B120600CSA	44 (1118)	40 (1016)	22.5 (572)	9 (229)	11 (279)	32 (813)	430 (195)	
CBC	B	4000	CB4033B120600CSA	44 (1118)	40 (1016)	22.5 (572)	9 (229)	11 (279)	32 (813)	430 (195)	

800A - 4000A CBC Top Feed



800A - 4000A CBC Bottom Feed



Switching Devices

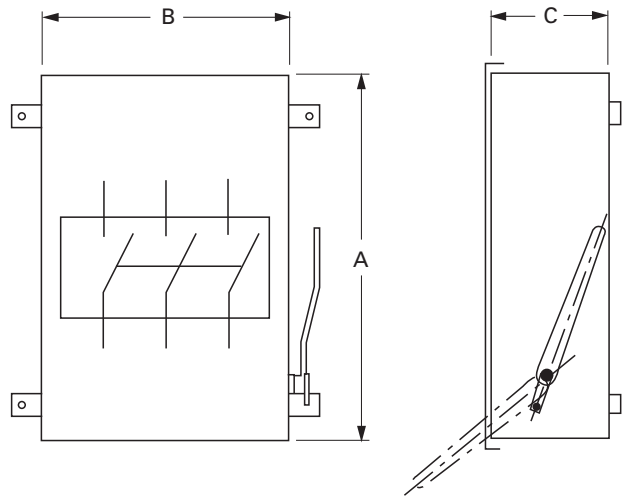
Bolted Pressure Switches

Product Selection

“PMS” – Pringle Mill switches are opened or closed by means of a side mounted operating handle, which compresses disc springs (Eaton Pringle exclusive) in the drive mechanism. The mechanism, in turn, quickly opens or closes the switch blades at a speed independent of the speed of handle movement. Additionally, the handle can override the springs for positive connection with the switch blades.

- PMS design is typically sold as an enclosed device
- 800 – 4000Ampere
- 250Vdc (does not carry UL or CSA)
- 600Vac maximum (does not carry UL or CSA)
- Fusible or non fusible
- Two or three pole
- Load break rated
- Multiple entry and exit configurations

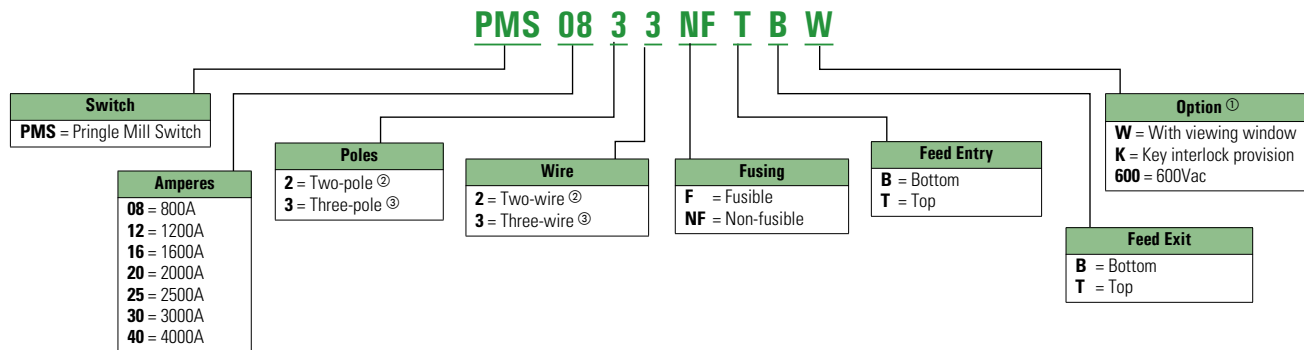
- Cable entry in the top and exit out the bottom (TB)
- Top entry and top exit (TT)
- Bottom entry and top exit (BT)
- Bottom entry and bottom exit (BB)
- NEMA 12 enclosure rating, 11 – gauge steel, suitable for wall or column mounting
- Side operating handle
- Interlocking switch mechanism, prevents door from being opened when switch energized
- Defeatable door interlock (for use by trained personnel).
- Padlockable in open position – up to 3 padlocks.
- Window option available
- Provision for Key Interlocking option available



Catalogue Number Selection

Pringle Mill Switch

(NEMA 1/3R/12 Enclosed)



Notes

- ① Additional accessories/options available—door interlock, special nameplates, custom dimensions, special paint and auxiliary contacts. Please contact Customer Service (1-800-268-3578).
- ② 250 Vdc.
- ③ 480 Vac, note for 600Vac must add '600' to suffix of cat#.

Dimensions

Approximate Dimensions in Inches (mm)

2-Pole, 250Vdc Mill Switches - Non-Fusible

Amperes	Catalogue Number	A	B	C
800	PMS0822NFTB	36.00 (914.4)	18.00 (457.2)	12.50 (317.5)
	PMS0822NFTT	36.00 (914.4)	28.00 (711.2)	15.50 (393.7)
	PMS0822NFBB	36.00 (914.4)	28.00 (711.2)	15.50 (393.7)
	PMS0822NFBT	36.00 (914.4)	28.00 (711.2)	15.50 (393.7)
1200	PMS1222NFTB	42.00 (1066.8)	19.00 (482.6)	14.00 (355.6)
	PMS1222NFTT	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
	PMS1222NFBB	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
	PMS1222NFBT	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
1600	PMS1622NFTB	42.00 (1066.8)	19.00 (482.6)	14.00 (355.6)
	PMS1622NFTT	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
	PMS1622NFBB	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
	PMS1622NFBT	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
2000	PMS2022NFTB	42.00 (1066.8)	19.00 (482.6)	14.00 (355.6)
	PMS2022NFTT	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
	PMS2022NFBB	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
	PMS2022NFBT	42.00 (1066.8)	31.50 (800.1)	17.00 (431.8)
2500	PMS2522NFTB	50.00 (1270.0)	27.00 (685.8)	14.00 (355.6)
	PMS2522NFTT	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
	PMS2522NFBB	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
	PMS2522NFBT	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
3000	PMS3022NFTB	50.00 (1270.0)	27.00 (685.8)	14.00 (355.6)
	PMS3022NFTT	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
	PMS3022NFBB	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
	PMS3022NFBT	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
4000	PMS4022NFTB	50.00 (1270.0)	27.00 (685.8)	14.00 (355.6)
	PMS4022NFTT	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
	PMS4022NFBB	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)
	PMS4022NFBT	50.00 (1270.0)	42.50 (1079.5)	17.00 (431.8)

2-Pole, 250Vdc Mill Switches - Fusible

Amperes	Catalogue Number	A	B	C
800	PMS0822FTB	45.00 (1143.0)	19.00 (482.6)	12.50 (317.5)
	PMS0822FTT	45.00 (1143.0)	32.00 (812.8)	15.50 (393.7)
	PMS0822FBB	45.00 (1143.0)	32.00 (812.8)	15.50 (393.7)
	PMS0822FBT	45.00 (1143.0)	32.00 (812.8)	15.50 (393.7)
1200	PMS1222FTB	58.00 (1473.2)	21.00 (533.4)	14.00 (355.6)
	PMS1222FTT	58.00 (1473.2)	35.00 (889.0)	17.00 (431.8)
	PMS1222FBB	58.00 (1473.2)	35.00 (889.0)	17.00 (431.8)
	PMS1222FBT	58.00 (1473.2)	35.00 (889.0)	17.00 (431.8)
1600	PMS1622FTB	58.00 (1473.2)	21.00 (533.4)	14.00 (355.6)
	PMS1622FTT	58.00 (1473.2)	35.00 (889.0)	17.00 (431.8)
	PMS1622FBB	58.00 (1473.2)	35.00 (889.0)	17.00 (431.8)
	PMS1622FBT	58.00 (1473.2)	35.00 (889.0)	17.00 (431.8)
2000	PMS2022FTB	58.00 (1473.2)	21.00 (533.4)	15.00 (381.0)
	PMS2022FTT	58.00 (1473.2)	35.00 (889.0)	18.00 (457.2)
	PMS2022FBB	58.00 (1473.2)	35.00 (889.0)	18.00 (457.2)
	PMS2022FBT	58.00 (1473.2)	35.00 (889.0)	18.00 (457.2)
2500	PMS2522FTB	70.00 (1778.0)	29.00 (736.6)	15.00 (381.0)
	PMS2522FTT	70.00 (1778.0)	42.50 (1079.5)	17.50 (444.5)
	PMS2522FBB	70.00 (1778.0)	42.50 (1079.5)	17.50 (444.5)
	PMS2522FBT	70.00 (1778.0)	50.00 (1270.0)	17.50 (444.5)
3000	PMS3022FTB	70.00 (1778.0)	29.00 (736.6)	15.00 (381.0)
	PMS3022FTT	70.00 (1778.0)	42.50 (1079.5)	17.50 (444.5)
	PMS3022FBB	70.00 (1778.0)	42.50 (1079.5)	17.50 (444.5)
	PMS3022FBT	70.00 (1778.0)	50.00 (1270.0)	17.50 (444.5)
4000	PMS4022FTB	70.00 (1778.0)	29.00 (736.6)	15.00 (381.0)
	PMS4022FTT	70.00 (1778.0)	42.50 (1079.5)	17.50 (444.5)
	PMS4022FBB	70.00 (1778.0)	42.50 (1079.5)	17.50 (444.5)
	PMS4022FBT	70.00 (1778.0)	50.00 (1270.0)	17.50 (444.5)

Note: ① For 600 Vac add "600" to suffix of catalogue number, same dimensions apply**3-Pole, 480Vac Mill Switches - Non-Fusible^①**

Amperes	Catalogue Number	A	B	C
800	PMS0833NFTB	36.00 (914.4)	26.00 (660.4)	12.50 (317.5)
	PMS0833NFTT	36.00 (914.4)	26.00 (660.4)	23.00 (584.2)
	PMS0833NFBB	36.00 (914.4)	26.00 (660.4)	23.00 (584.2)
	PMS0833NFBT	36.00 (914.4)	26.00 (660.4)	23.00 (584.2)
1200	PMS1233NFTB	42.00 (1066.8)	28.00 (711.2)	14.00 (355.6)
	PMS1233NFTT	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
	PMS1233NFBB	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
	PMS1233NFBT	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
1600	PMS1633NFTB	42.00 (1066.8)	28.00 (711.2)	14.00 (355.6)
	PMS1633NFTT	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
	PMS1633NFBB	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
	PMS1633NFBT	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
2000	PMS2033NFTB	42.00 (1066.8)	28.00 (711.2)	14.00 (355.6)
	PMS2033NFTT	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
	PMS2033NFBB	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
	PMS2033NFBT	42.00 (1066.8)	28.00 (711.2)	24.00 (609.6)
2500	PMS2533NFTB	50.00 (1270.0)	44.00 (1117.6)	20.00 (508.0)
	PMS2533NFTT	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
	PMS2533NFBB	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
	PMS2533NFBT	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
3000	PMS3033NFTB	50.00 (1270.0)	44.00 (1117.6)	20.00 (508.0)
	PMS3033NFTT	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
	PMS3033NFBB	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
	PMS3033NFBT	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
4000	PMS4033NFTB	50.00 (1270.0)	44.00 (1117.6)	20.00 (508.0)
	PMS4033NFTT	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
	PMS4033NFBB	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)
	PMS4033NFBT	50.00 (1270.0)	44.00 (1117.6)	30.00 (762.0)

3-Pole, 480Vac Mill Switches - Fusible^①

Amperes	Catalogue Number	A	B	C
800	PMS0833FTB	45.00 (1143.0)	26.00 (660.4)	12.50 (317.5)
	PMS0833FTT	45.00 (1143.0)	26.00 (660.4)	23.00 (584.2)
	PMS0833FBB	45.00 (1143.0)	26.00 (660.4)	23.00 (584.2)
	PMS0833FBT	45.00 (1143.0)	26.00 (660.4)	23.00 (584.2)
1200	PMS1233FTB	58.00 (1473.2)	30.00 (762.0)	14.00 (355.6)
	PMS1233FTT	58.00 (1473.2)	30.00 (762.0)	24.00 (609.6)
	PMS1233FBB	58.00 (1473.2)	30.00 (762.0)	24.00 (609.6)
	PMS1233FBT	58.00 (1473.2)	30.00 (762.0)	24.00 (609.6)
1600	PMS1633FTB	58.00 (1473.2)	30.00 (762.0)	14.00 (355.6)
	PMS1633FTT	58.00 (1473.2)	30.00 (762.0)	24.00 (609.6)
	PMS1633FBB	58.00 (1473.2)	30.00 (762.0)	24.00 (609.6)
	PMS1633FBT	58.00 (1473.2)	30.00 (762.0)	24.00 (609.6)
2000	PMS2033FTB	58.00 (1473.2)	30.00 (762.0)	15.00 (381.0)
	PMS2033FTT	58.00 (1473.2)	30.00 (762.0)	25.00 (635.0)
	PMS2033FBB	58.00 (1473.2)	30.00 (762.0)	25.00 (635.0)
	PMS2033FBT	58.00 (1473.2)	30.00 (762.0)	25.00 (635.0)
2500	PMS2533FTB	85.00 (2159.0)	46.00 (1168.4)	20.00 (508.0)
	PMS2533FTT	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
	PMS2533FBB	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
	PMS2533FBT	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
3000	PMS3033FTB	85.00 (2159.0)	46.00 (1168.4)	20.00 (508.0)
	PMS3033FTT	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
	PMS3033FBB	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
	PMS3033FBT	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
4000	PMS4033FTB	85.00 (2159.0)	46.00 (1168.4)	20.00 (508.0)
	PMS4033FTT	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
	PMS4033FBB	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)
	PMS4033FBT	85.00 (2159.0)	46.00 (1168.4)	30.00 (762.0)

Switching Devices

Bolted Pressure Switches

Pringle Switch Custom Capabilities

For engineered to order, or non-load break switch solutions with bolted pressure contact technology, contact Customer Service (1-800-268-3578).

- Enclosed “QA” or “CBC” design
- Non Load break rated
- Motor operated 800-6000A
- High current 6000A to 35,000A +
- Medium voltage 5kV, 15kV +
- DC voltages 250Vdc to 3000Vdc +
- Transit applications - single, two or three pole DC rated
- Manual transfer switches
- Live front switches
- Viewing windows
- Utility ground
- Special paint
- Provision for key interlocking
- Nameplates
- Custom dimensions
- Auxiliary contacts



Service

Eaton’s Pringle switches have always been manufactured with precision-made parts, and, like any mechanical device, they do require routine maintenance in order to operate at the optimal level. Over time, contact surfaces may be exposed to dirt and other contaminants, which could result in improper mechanical and/or electrical operation of the switch.

Eaton maintains a dedicated service team that has over 100 years of combined experience in the exclusive service and repair of Pringle switches. A service call performed by a certified technician ensures that your equipment is cleaned, lubed, adjusted and repaired, and a one-year extended warranty is granted. General maintenance, repair/ refurbishment and troubleshooting are just some of the services provided.

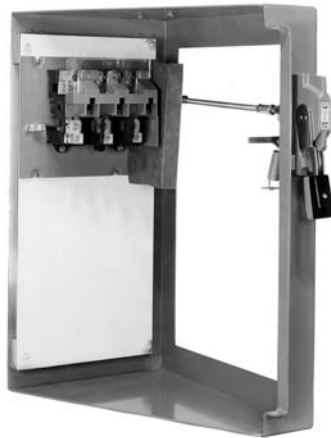
In-House Service

Eaton also offers in-house inspection, service and repair at our manufacturing facility in Cleveland, TN.

Aftermarket Parts

Eaton has a full line of factory-specified aftermarket parts for Pringle switches, as well as complete, form, fit, function, replacement switches. Contact customer support 1-800-268-3578 or Eaton Sales for aftermarket parts information.

Complete Operating Mechanism—C361NE1



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Flange Mounted—Operating Mechanisms with Disconnect and Breakers

Product Application

Suitable for OEM's and panelbuilders where main or branch circuit protection devices are required in enclosures having a right hand flange. These devices can be mounted in any commercially available enclosure. Before installing the device, obtain detailed mounting and other important information from the enclosure manufacturer.

Product Description

There are three types of flange mount operating mechanisms to select from:

- Variable Depth complete with non fusible or fusible disconnect
- Fixed Depth complete with non fusible or fusible disconnect
- Variable Depth for use with MCCB (moulded case

circuit breaker, or moulded case switch)

- Optional channel support, connecting rods, safety interlocks and door hardware
- Optional connecting rod to increase depth by five inches

Variable Depth complete with disconnect

- 250Vdc / 600Vac maximum
- 30 – 200Ampere, 3 phase
- Variable depth mounting range 7 to 16 inches
- For right hand flange enclosures
- Disconnect is Heavy Duty K switch design
- Fusible or Non-Fusible
- Fusible will accept R fuse as standard
- Field installable rejection kits supplied as standard for 100A and 200A

- UL/CSA recognized for use on systems up to 200kA RMS
- Handles rated for type 1, 3R, 12, or 4 (non plastic) enclosures
- Padlockable – up to three padlocks in OFF position
- Optional field installable auxiliary contacts

Fixed Depth complete with disconnect

- Same as above except
- 30 – 100Ampere, 3phase
- Fixed depth
 - 30-60A = 6.5 inches
 - 100A = 7 inches

Variable Depth for use with MCCB's

- 150 – 1200Ampere
- Three phase
- Breaker must be ordered separately

- Variable depth ranges from 6.5 inches to 22 inches (rating dependent)
- Handles rated for type 1, 3R, 12, or 4 (non plastic) enclosures
- Padlockable – up to three padlocks in OFF position

Standards and Certifications

- UL—Component File E55492
- CSA—LR353-439



Product Selection

C361NE1



Operating Mechanism Variable Depth with Disconnect Switch—Right-Hand Mounting

Disconnect Switch Size (Amperes)	Variable Depth Mtg. Range Min./Max. (Inches) ①	Maximum Horsepower Ratings ②						Fuse Clip Rating (Amperes) Non-interchangeable Type for Class H, J, K or R Type Fuses Only		Switch and Operating Mechanism Only DOES NOT Include Handle Catalogue Number	Switch and Operating Mechanism with 4-Inch Handle ③	
		AC System Volts (Motor Volts)				DC Using Two Poles 250V Max.		250V	600V		For Type 1 or 12 Enclosure Catalogue Number	For Type 4 Enclosure Catalogue Number
		208 (200)	240 (230)	480 (460)	600 (575)							
30	7 to 16	7-1/2	7-1/2	15	20	5	Non-fusible		C361NC	C361NC1	C361NC2	
							30 —		C361SC21	C361SC121 ④	C361SC221 ④	
							60 30		C361SC61	C361SC161 ④	C361SC261 ④	
60	7 to 16	15	15	30	50	10	Non-fusible		C361ND	C361ND1	C361ND2	
							60 30		C361SD22	C361SD122 ④	C361SD222 ④	
							— 60		C361SD62	C361SD162 ④	C361SD262 ④	
100	7 to 16	25	30	60	75	20	Non-fusible		C361NE	C361NE1	C361NE2	
							100 100		C361SE263	C361SE1263	C361SE2263	
200	7 to 16	40	60	125	150	40	Non-fusible		C361NF1	C361NF1	C361NF2	
							200 200		C361SF264	C361SF1264	C361SF2264	

C361H1



Handle Only

Application	Operating Handle Length in Inches (mm)	NEMA Type Enclosure	Catalogue Number
For use with 30, 60, 100 and 200A disconnect switches	4.00 (101.6)	1-12	C361H1
	4.00 (101.6)	4	C361H2
	6.00 (152.4)	1-12	C361H3
	6.00 (152.4)	4	C361H4

Notes

- ① Dimension shown is from panel to flange surface.
- ② Refers to rating of switch only.
- ③ Components individually boxed and shipped in overpack carton.
- ④ For rejection clips, add Suffix Letter **R** to listed Catalogue Number. Example: C361SC121**R**.

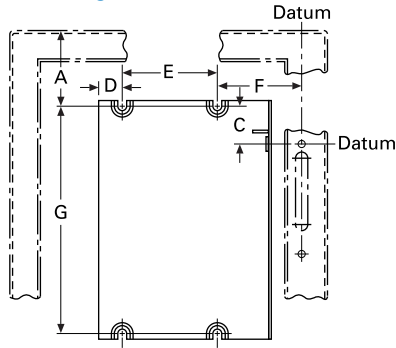
Dimensions for Variable Depth Design

Approximate Dimensions in Inches (mm)

Mounting Dimension Requirements in Inches (mm)

Disconnect Switch Type	A	B	C	D	E	F	G
30A and 60A non-fusible	See dimensions below	See dimensions below	1.56 (39.6)	0.96 (24.4)	4.00 (101.6)	3.50 (88.9)	7.12 (180.8)
30A and 60A fusible			1.56 (39.6)	0.96 (24.4)	4.00 (101.6)	3.50 (88.9)	9.75 (247.7)
100A non-fusible			1.75 (44.5)	1.10 (27.9)	5.50 (139.7)	3.38 (85.9)	7.12 (180.8)
100A fusible			1.75 (44.5)	1.10 (27.9)	5.50 (139.7)	3.38 (85.9)	11.88 (301.8)
200A non-fusible and fusible			3.34 (84.8)	0.63 (16.0)	8.50 (215.9)	1.84 (46.7)	15.50 (393.7)

Mounting Dimension Requirements



Terminal Capacity

Disconnect Switch Size	Wire Size
30A	#14-#2 Cu/Al
60A	#14-#2 Cu/Al
100A	#14-1/0 Cu/Al
200A	#6-250 Cu/Al

Dimension A = The required wire bending spacing selected per CSA C22.2 No.12.

Dimension B = Minimum or maximum depth from inside of flange holding operating handle to panel where disconnect switch is mounted (variable 7 to 16 inches).

Product Selection

Fixed Depth Application

Operating Mechanism Fixed Depth with Disconnect Switch—Right-Hand Mounting

Maximum Horsepower Ratings ^①



Disconnect Switch Size (Amperes)	AC System Volts (Motor Volts)				DC Using Two Poles 250V Maximum	Fuse Clip Rating (Amperes) Non-Interchangeable Type for Class H, J, K or R Type Fuses Only		Switch and Operating Mechanism with 4-Inch Handle For Type 1 or 12 Enclosure Catalogue Number
	208 (200)	240 (230)	480 (460)	600 (575)		250V	600V	
30	7-1/2	7-1/2	15	20	5	Non-fusible		C361FNC1
						30	—	C361FSC121 ^②
						60	30	C361FSC161 ^②
60	15	15	30	50	10	Non-fusible		C361FND1
						60	30	C361FSD122 ^②
						—	60	C361FSD162 ^②
100	25	30	60	75	20	Non-fusible		C361FNE1
						100	100	C361FSE1263

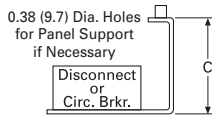
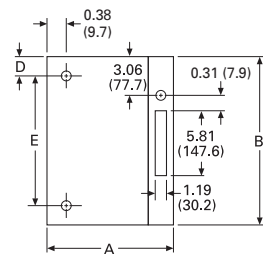
Dimensions

Approximate dimensions in Inches (mm)

Frame Size

Description	A	B	C	D	E
30–60A disconnect switch	8.63 (219.2)	11.38 (289.1)	6.50 (165.1)	1.50 (38.1)	9.50 (241.3)
150A circuit breaker	8.63 (219.2)	11.38 (289.1)	6.50 (165.1)	1.50 (38.1)	9.50 (241.3)
100A disconnect switch	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)
250A circuit breaker	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)
400A circuit breaker	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)

Approximate Dimensions



Notes

- ^① Refers to rating of switch only.
- ^② For Rejection Clips, add Suffix Letter **R** to listed Catalogue Number. Example: C361FSC121**R**.

Technical Data and Specifications

Terminal Capacity

Disconnect Switch Size	Wire Size
30A	#2–14 Cu/Al
60A	#2–14 Cu/Al
100A	1/0–14 Cu/Al
200A	250 kcmil—#6 Cu/Al

Accessories

Type C361 NEMA 12 Safety Door Hardware

Type C361 door hardware kits are designed to function with all C361 and C371 disconnect switches and circuit breaker operating mechanisms.

These kits are designed for use with small enclosures up to 40 inches (1016 mm), intermediate 40–60 inches (1016–1524 mm) or larger floor cases over 60 inches (1524 mm) to provide enclosure sealing and protection against unauthorized entry. These kits can be used on enclosure flanges with

material thickness ranging from 16 gauge through 3/16 inches with flanges on the right side only. Door hardware kits are to be installed in a commercially available enclosure. Consult the enclosure manufacturer application data for proper kit selection.

NEMA 12 Safety Door Hardware



Type C361 NEMA 12 Safety Door Hardware

Handle Length (Inches)	Catalogue Number ①
4	C361KJ4
6	C361KJ6
Roller Latch ②	C361KR

Notes

- ① The 1/4-inch x 1/2-inch standard mill rectangular locking bar is not supplied with these kits.
- ② Third roller latch for use with 4 or 6-inch handle when three-point latching is required.

Note: Consult enclosure manufacturer - Some enclosures have latch for handle to lock included, other enclosures have holes predrilled ready to mount this kit.

Electrical Interlocks

Circuit	Catalogue Number
1NO-1NC	DS200EK1
2NO-2NC	DS200EK2

Connecting Rods—Increase Maximum Allowable Depth by 5 Inches

Application	Catalogue Number
Disconnect switches 30, 60, 100 and 200A Circuit breakers 150, 250 and 400A	C371CS1
Circuit breakers 600, 800 and 1200A	C371CS2

Fuse Clips for Variable or Flange Mount Operating Mechanisms

Fuse Clip Selection for C361 Series Disconnects



Starter Size	Motor Voltage	Dual Element Fuses	Fuse Clip Rating		Fuse Clip Kit for Field Installation with Fusible Switches			
			Amperes	Volts	Catalogue Number For Non-rejection Type Fuses	Catalogue Number For use w/"R" Rejection Type Fuses	Catalogue Number For Form I Type "J" Fuses	Catalogue Number For Form II Type "C" Fuses
0	200/230	3	30	250	C351KC21	C351KC21R	—	—
	460/575	5	30	600	C351KD22-61	C351KD22-61R	C351KD71	C351KD81
1	200/230	7-1/2	30	250	C351KC21	C351KC21R	—	—
	460/575	10	30	600	C351KD22-61	C351KD22-61R	C351KD71	C351KD81
2	200	10	60	250	C351KD22-61	C351KD22-61R	—	—
	230	15	60	250	C351KD22-61	C351KD22-61R	—	—
	460/575	25	60	600	C351KD62	C351KD62R	C351KD72	C351KD82
3	200	25	100	250	C351KE23-63 ^①	C351KE23-63 ^①	—	—
	230	30	100	250	C351KE23-63 ^①	C351KE23-63 ^①	—	—
	460/575	50	100	600	C351KE23-63 ^①	C351KE23-63 ^①	C351KE73	C351KE83
4	200	40	200	250	C351KF24-64 ^①	C351KF24-64 ^①	—	—
	230	50	200	250	C351KF24-64 ^①	C351KF24-64 ^①	—	—
	460/575	100	200	600	C351KF24-64 ^①	C351KF24-64 ^①	C351KF74	C351KF84
5	200	75	400	250	Not available in kit form	Not available in kit form	Not available in kit form	Not available in kit form
	230	100	400	250	Not available in kit form	Not available in kit form	Not available in kit form	Not available in kit form
	460/575	200	400	600	Not available in kit form	Not available in kit form	Not available in kit form	Not available in kit form

Notes

- ① Fuse clip "R" rejection members for use with Class R fuses are supplied loose in the Fuse Clip Kits.

Type C371

Circuit Breaker or Motor Circuit Protector	Frame Size	Variable Depth Mounting Range Min/Max	Operating Mechanism Only	Operating Mechanism w/ 4-Inch Handle	
			Catalogue Number	For NEMA 1-12 Enclosure Catalogue Number	For NEMA 4/4X Enclosure Catalogue Number
HCMP and Series C EHD, FDB, FD, FDC, HFD, ED	150	6.50-16 (165.1-406.4)	C371E	C371E1	C371E2
HCMP and Series C HJD, JD, JDB, JDC	250	6.50-16.63 (165.1-422.4)	C371F	C371F5	C371F6
HCMP and Series C DK, HKD, KD, KDB	400	6.50-16.63 (165.1-422.4)	C371F	C371F5	C371F6
Series C HLD, LD, LDC	600	8.50-22 (215.9-558.8)	C371G	C371G5	C371G6
Series C MD, MDS (No MDL)	800	8.75-22 (222.3-558.8)	C371K	C371K5	C371K6
Series C HND, ND, NDC	1200	9.75-22 (247.7-558.8)	C371K	C371K5	C371K6

Note: Breaker not included in kit.

Handle Only

Circuit Breaker Frame Size (Amperes)	NEMA Enclosure Type	Operating Handle Length	Catalogue Number
150	1-3R-3-12	4.00 (101.6)	C371H1
	4	4.00 (101.6)	C371H2
	1-3R-3-12	6.00 (152.4)	C371H3
	4	6.00 (152.4)	C371H4
250-1200	1-3R-3-12	4.00 (101.6)	C371H5
	4	4.00 (101.6)	C371H6
	1-3R-3-12	6.00 (152.4)	C371H7
	4	6.00 (152.4)	C371H8



Channel Support Kit (Rod Not Supplied)

For use to prevent bending of the operating handle mounting surface. This is especially useful when the operating handle is mounted on a channel in a multi-door enclosure.

Amperes	Catalogue Number
600-1200	C371CS6

Connecting Rods

Application	Catalogue Number
Disconnect switches (30, 60, 100, 200A sizes)	C371CS1
Circuit breakers (150, 250, 400A sizes)	C371CS1
Circuit breakers (600, 800, 1200A sizes)	C371CS2

Notes

- ① For increased maximum allowable depth, see connecting rods left.
- ② Dimensions shown are from panel flange surface.
- ③ Does not include handle.
- ④ Increase maximum allowable depth by 5 inches (127 mm).

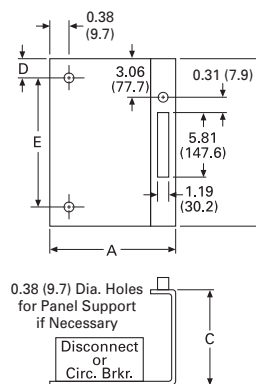
Dimensions

Approximate dimensions in Inches (mm)

Frame Size

Description	A	B	C	D	E
30-60A disconnect switch	8.63 (219.2)	11.38 (289.1)	6.50 (165.1)	1.50 (38.1)	9.50 (241.3)
150A circuit breaker	8.63 (219.2)	11.38 (289.1)	6.50 (165.1)	1.50 (38.1)	9.50 (241.3)
100A disconnect switch	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)
250A circuit breaker	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)
400A circuit breaker	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)

Approximate Dimensions



Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. For more information, visit www.eatoncanada.ca.

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