

Solutions for HVAC



DIXELL™


EMERSON™

**INNOVATION
& EFFICIENCY**
for a better
ENVIRONMENT





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THE COMPANY



Headquarters

Dixell, situated in Belluno, part of the Emerson Group, is a company that for years has positioned itself among world leaders of electronic regulation and control in refrigeration, conditioning and retail fields. The continuous Technologic Innovation and the constant focus on energy saving issues have always been a must in the development of our solutions. Consistent with this view is the creation of the Innovation Center, a completely new structure consisting of spacious open-space offices, of a cutting-edge application and testing laboratory and of several meeting and training rooms for the growth of interactions with customers and distributors.

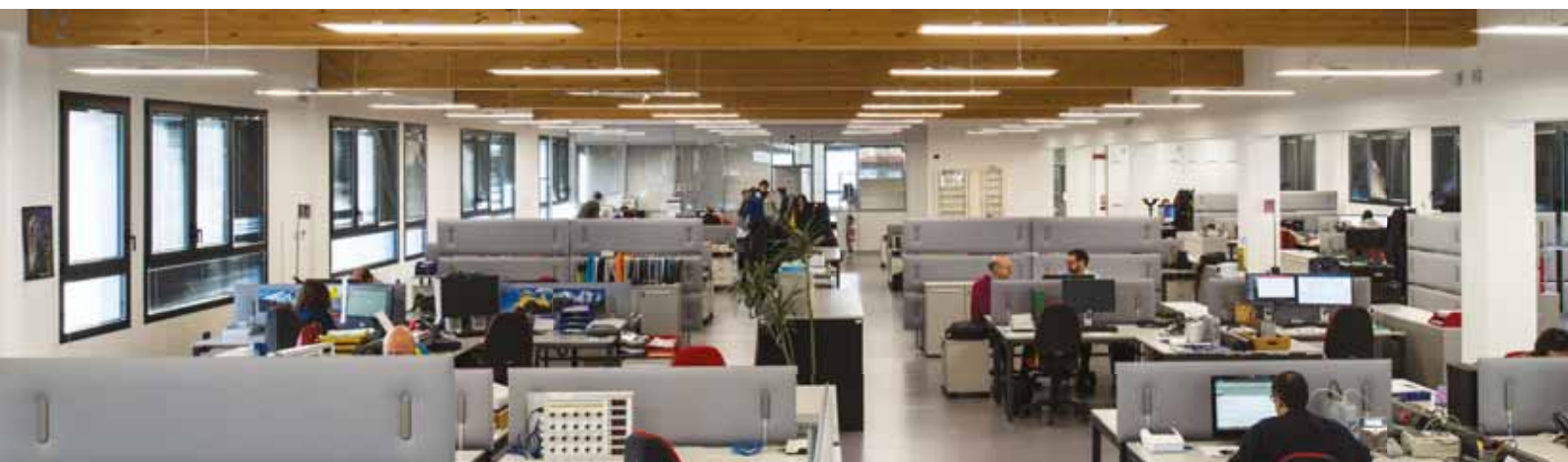
Sales

Our products are distributed and supported Worldwide by a sales network of experienced and qualified personnel, guaranteeing the correct selection of controllers and an efficient after-sales service. Competence, professionalism and courtesy distinguish our Customer Service Dept. that interfaces with all those who need to learn more about our solutions, granting them an immediate and precise response.



Production

Our "Continuous Research and Development" area makes use of the latest technologies on the market and is able to provide solutions always up with the times and that take into consideration the actual needs of users. The production process uses the most innovative systems of automation for assembly, visual control, programming and testing processes. The high flexibility of our departments allows, upon request, the realization of solutions according to customer's specifications.



Training

The constant expansion of our range of products must be continuously supported by training activities for both our commercial network and our customers. The trainings cover the whole range with particular attention to systems and programmable controllers and for this reason, in our new Innovation Center, large training rooms, equipped with the most advanced information technologies, have been set.



Certifications

Dixell has been awarded with ISO9001 certificate and it constantly commits itself to quality in everything it does, internally and externally. The quality system of Dixell conforms to the UNI EN ISO 9001.



Dixell achieved the European AEO Certification (Authorized Economic Operator) by the Italian Revenue Agency thus guaranteeing greater competitiveness and faster and simpler shipping processes, even to countries that do not belong to the European Community.

Environment

Dixell firmly believes in the respect and safeguard of the environment, with particular attention to all industrial processes and to the research and development of new products. The result is a range capable of ensuring high performances combined with high energy saving and use of environmentally friendly components in full respect of Italian and international laws.

For this purpose Dixell adheres to the Emerson Material Compliance Program in compliance with the RoHS directive (2011/65/EU) and the REACH regulation (CE n. 1907/2006), requiring, by its suppliers, accurate analysis for all the purchased components. Furthermore packing materials are in accordance with 2004/12/CE European Directive.





APPLICATIONS



Residential

Manage in the best way possible the environmental comfort and buildings' energy saving and improve living-quality inside the buildings is not a simple need but a real necessity.

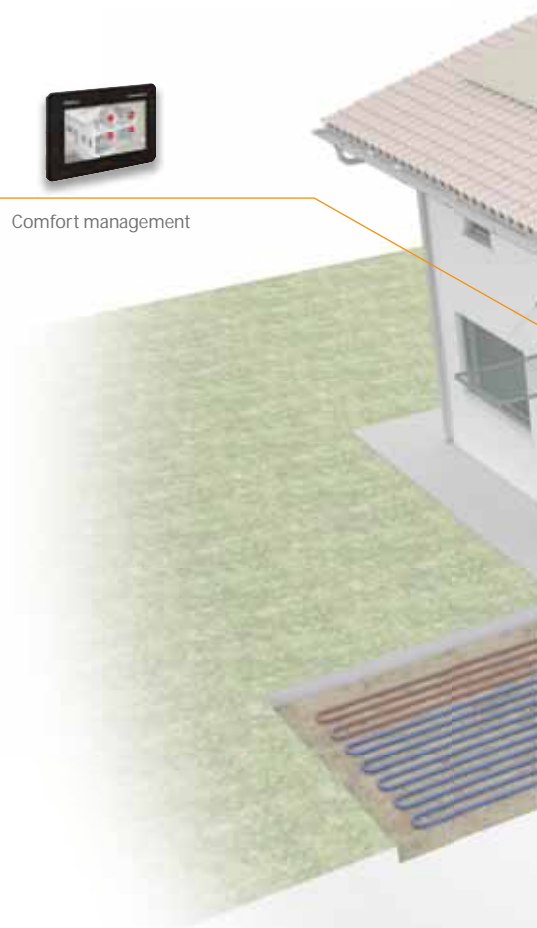
Dixell proposes a family of parametric and programmable controllers to manage residential heat pumps whose use has assumed an important role in heating, cooling, controlled mechanical ventilation and production of sanitary hot water plants. The use of advanced drivers for the management of electronic expansion valves ensures the optimal overheating control considering the different comfort needs and external weather conditions.

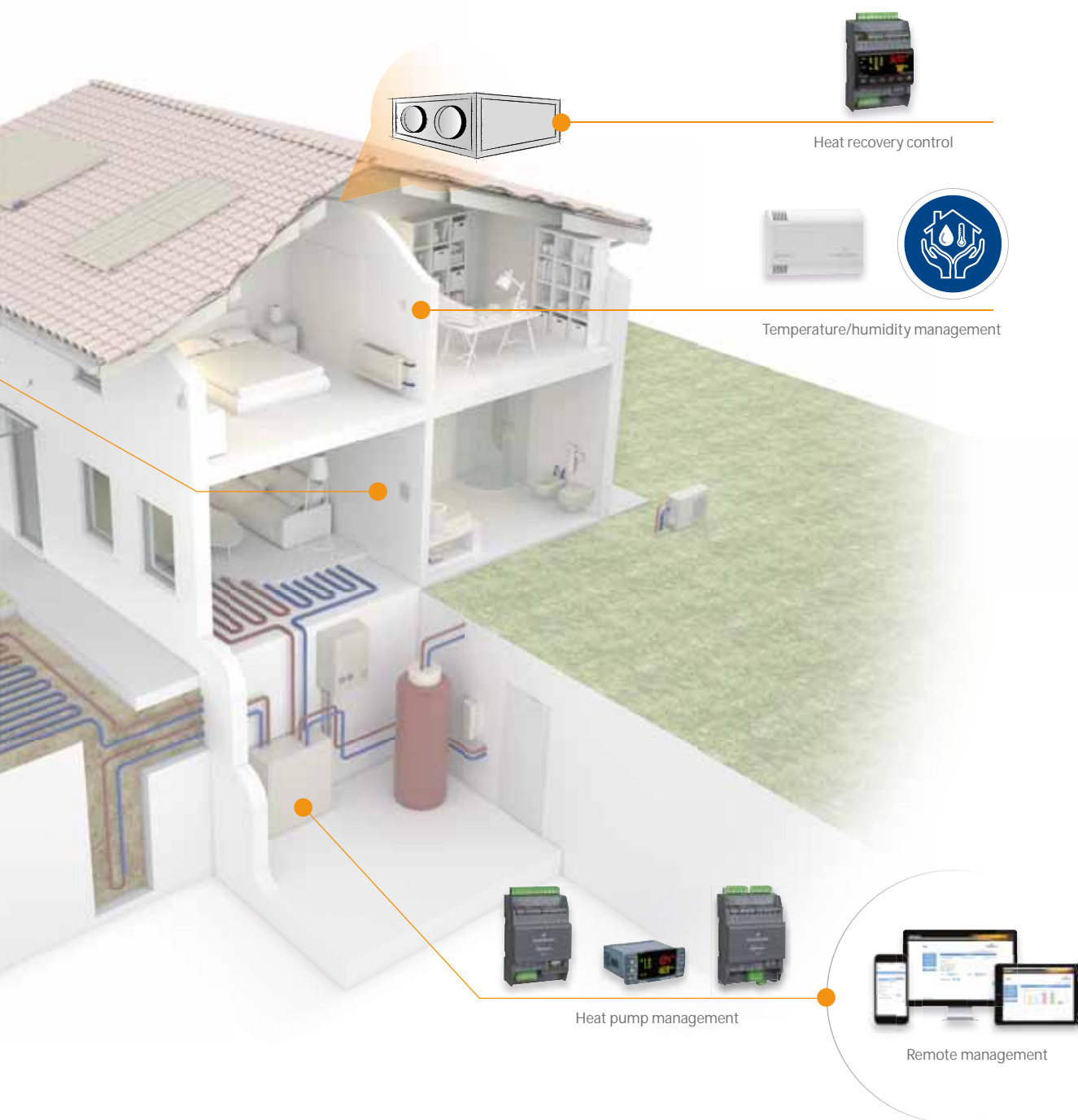
The LED graphic, LCD or TOUCH SCREEN interface of new generation is simple and intuitive and allows the end user to easily interact with the system, even in front of complex and sophisticated systems.

The high speed-connectivity allows to remotely verify the real time working conditions of the machines, register the different values (temperature, humidity, ...) as well as manage alarms, and much more.



Comfort management







APPLICATIONS



Commercial

To ensure comfort in commercial applications and the optimal functioning of all the units concerned, the control of many physical quantities is required; temperature, pressure and humidity must be regulated and monitored by reliable devices, simple to handle and easily programmable according to the specific application requirements. The wide range of Dixell controllers, thanks to the great flexibility that characterizes it, can be used in various ambients such as hotels, hospitals, museums, cinemas, theaters, office buildings, supermarkets and shopping malls. The controllers are designed to manage the entire system, from hot/cold production units to the supply in the different spaces up to energy monitoring.

The solutions proposed allow to give an optimal response to most of the market demands, both in reference to the hydronic systems (chiller, heat pumps) and to the air units (AHU, Roof-top, CRAC). Today the practice of using the latest generation components (Inverter compressors, Brushless and EC fans, Electronic Expansion valves, damper motors, etc.) ensures high system efficiency and a consequent reduction in energy consumption. In addition, the possibility to efficiently take advantage of the opportunities offered by free cooling, solar panels, heat recovery etc. minimizes the environmental impact of the plants that leads to their preservation.



AHU control



Dry cooler control



Heat recovery control



Comfort management







APPLICATIONS



Industrial

The management of industrial applications requires an appropriate control of all the thermoregulation processes. Dixell, thanks to its long-term experience offers a wide range of parametric and programmable controllers addressed to compressed air treatment, conditioning and processes' cooling.

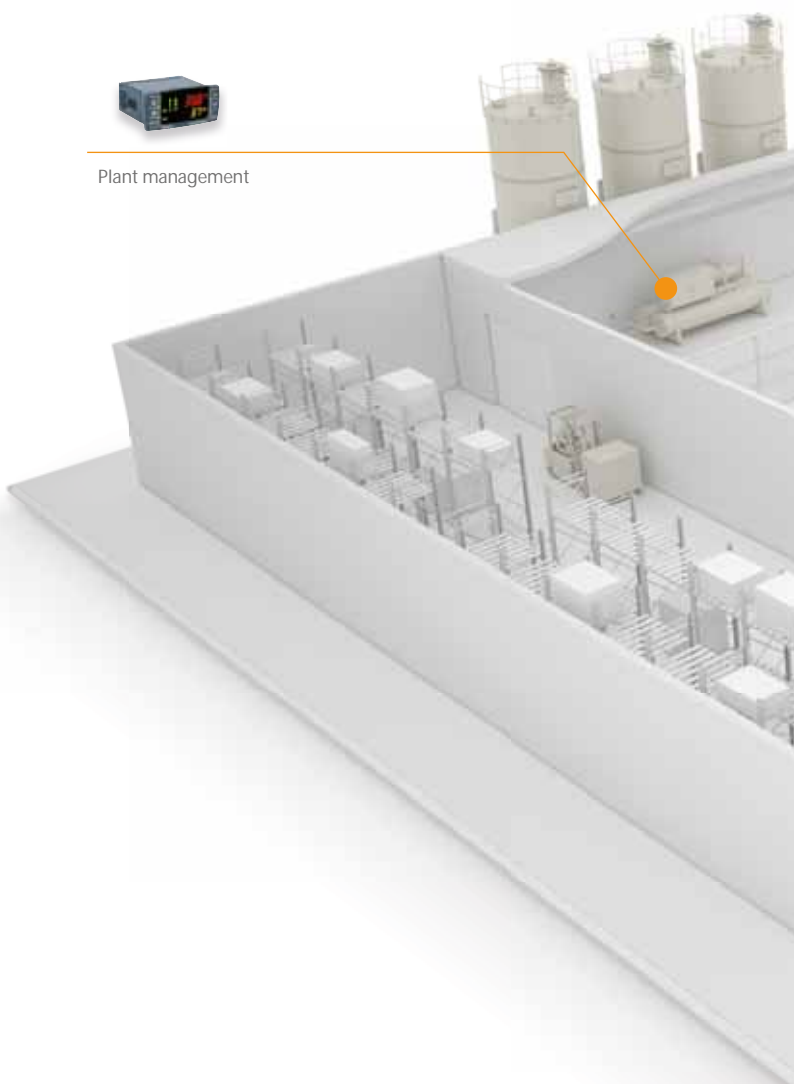
From specific controllers for air dryers you can also find simple chillers with a single circuit and compressor up to units with more circuits and with more than one compressor per circuit. There are several functioning modes: heat pump, free cooling, partial or full heat recovery, control of additional auxiliary functions on the process. The great flexibility that characterizes our product range allows its use even in working environments where the operating conditions are particularly difficult such as ships, repeaters/telephone antennas and chemical industries or where there are specific needs such as calculation centers. The touch screen graphic displays favor the interaction with the user which becomes more simple and complete, even in the presence of installations particularly complex. The high connectivity ensured by a powerful hardware platform and by the use of standard protocols (Modbus, LON, BACnet) is particularly appreciated in case of remote assistance or alarm management.

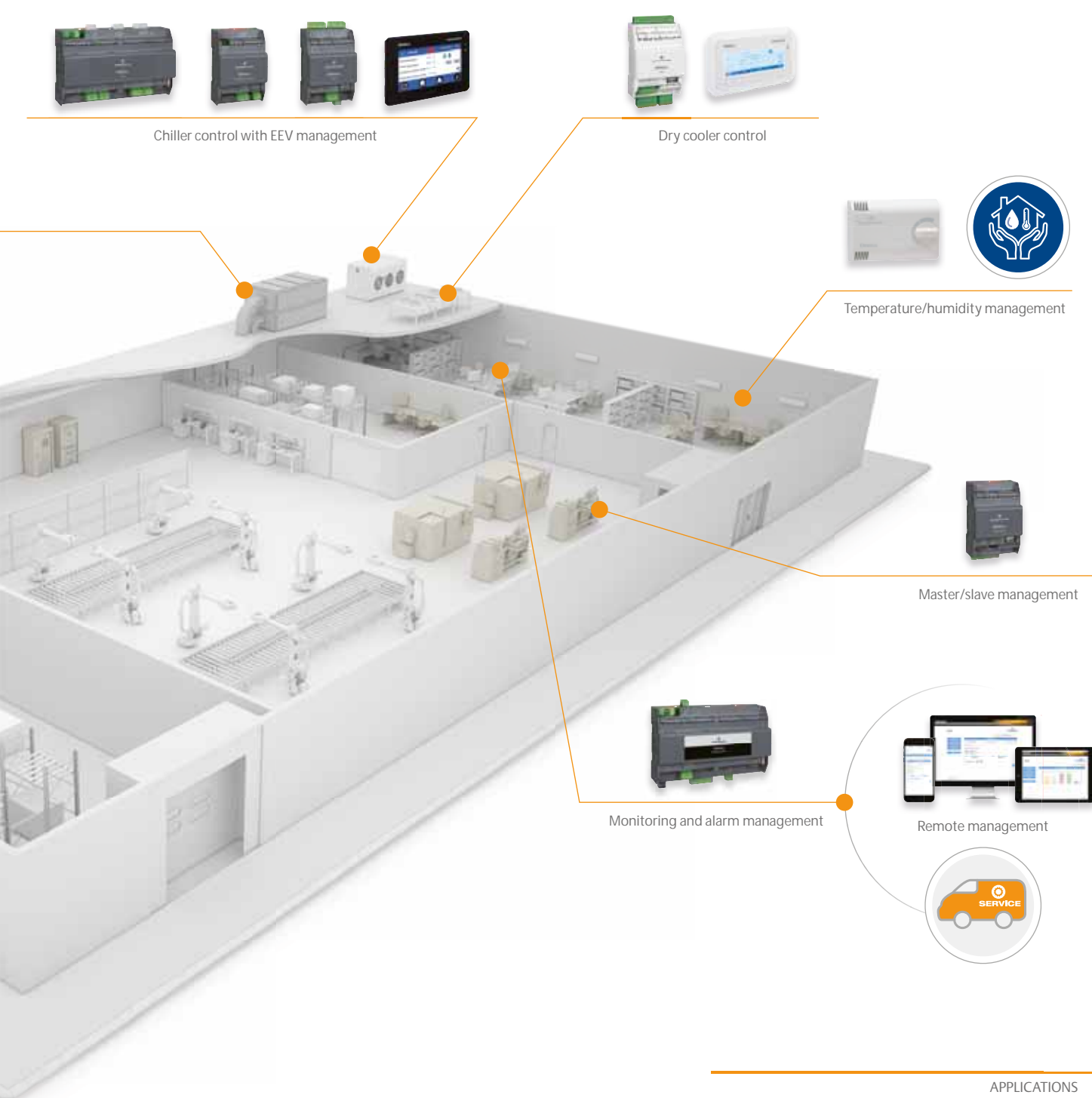
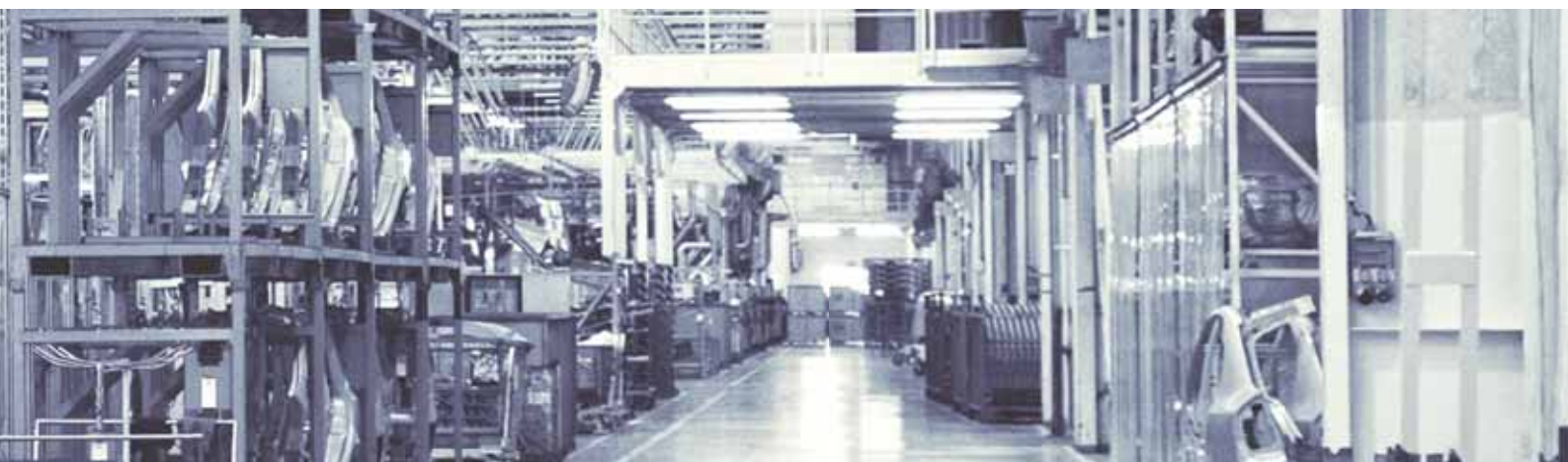


AHU control



Plant management







PRODUCTS



The many typical needs of a world as complex as that of air conditioning are supplied by a complete range of controllers and monitoring systems with innovative design, intuitive interfaces and the most advanced technology in the field of connectivity and processing speed. The state of operation of the system is 24/7 under control and at the same time, high energy savings are guaranteed thanks to intelligent algorithms and innovative features in all the products of the whole Dixell range. The offer is completed by a family of sensors/transducers for temperature, humidity and pressure, and a number of useful accessories such as modems, wires, serial interfaces, programming kits, caps etc...

Corporate and homologations

All the production conforms to CE norms with regards to low voltage and electromagnetic compatibility. For many models, Dixell has the voluntary mark at approval Authority ensuring a reliable international rules conformance.





AIR CONDITIONING CONTROLLERS

14 IC100 evo - up to 1-circuit and 3-compressor applications - EEV management

Up to 1-circuit and 3-compressor unit controllers	IC105D – IC106CX – IC107D – IC108CX
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18 IC200 evo - up to 2-circuit and 6-compressor applications - EEV management

Up to 2-circuit and 4-compressor unit controllers	IC206CX – IC208CX
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Up to 2-circuit and 6-compressor unit controllers	IC205D – IC207D
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Expansion module	ICX207D
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24 iProCHILL - up to 4-circuit and 16-compressor applications

Up to 2-circuit and 6-compressor unit controllers	IPC108D – IPC108E
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Up to 4-circuit and 16-compressor unit controllers	IPC115D – IPC315D
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Expansion modules	IPX106D – IPX306D
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29 iProAHU - air handling unit applications

Controllers for air handling units	IPG208D A01 – IPG215D A01
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Expansion modules	IPX206D – IPX215D
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34 iProDRY-COOLER - air coolers applications

Controllers for air coolers	IPG208D W01 – IPG215D W01
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Expansion module	IPX206D
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38 IPM500D - master/slave applications

Master/slave module	IPM500D
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42 Function blocks - modular and customizable applications

IC100 evo SERIES

1-CIRCUIT up to 3-COMPRESSOR UNIT CONTROLLERS with EEV MANAGEMENT



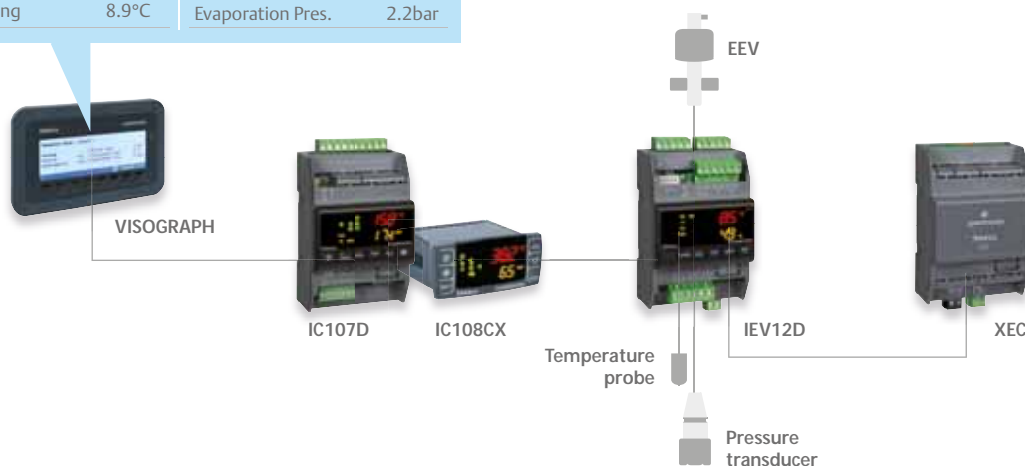
IC100 evo is the series of controllers dedicated to chiller and heat pump for cooling or heating of residential or commercial buildings, and for industrial applications. The controller's exceptional versatility allows its use in heat pumps for domestic water heating or in chillers also with the integration of geothermal free cooling. The IC100 evo family can manage up to 3 compressors and control single circuit units such as: **air/air, air/water, water/water, motor-condensing, geothermal heat pumps and dryers.**

- Management of scroll, screw and inverter compressors
- Plant water pump with variable speed control via inverter
- LAN output for EEV driver connection
- Sanitary hot water production
- Geothermal free cooling
- Power reduction via digital input
- Unloading function for power partialization in case of critical conditions
- "Night function" for condensing fans
- Double set point function with daily activation with 3 different time bands
- Memorize the latest 100 alarms (alarm type, date, hours, machine status)
- Master/Slave function in combination with IPM500D module

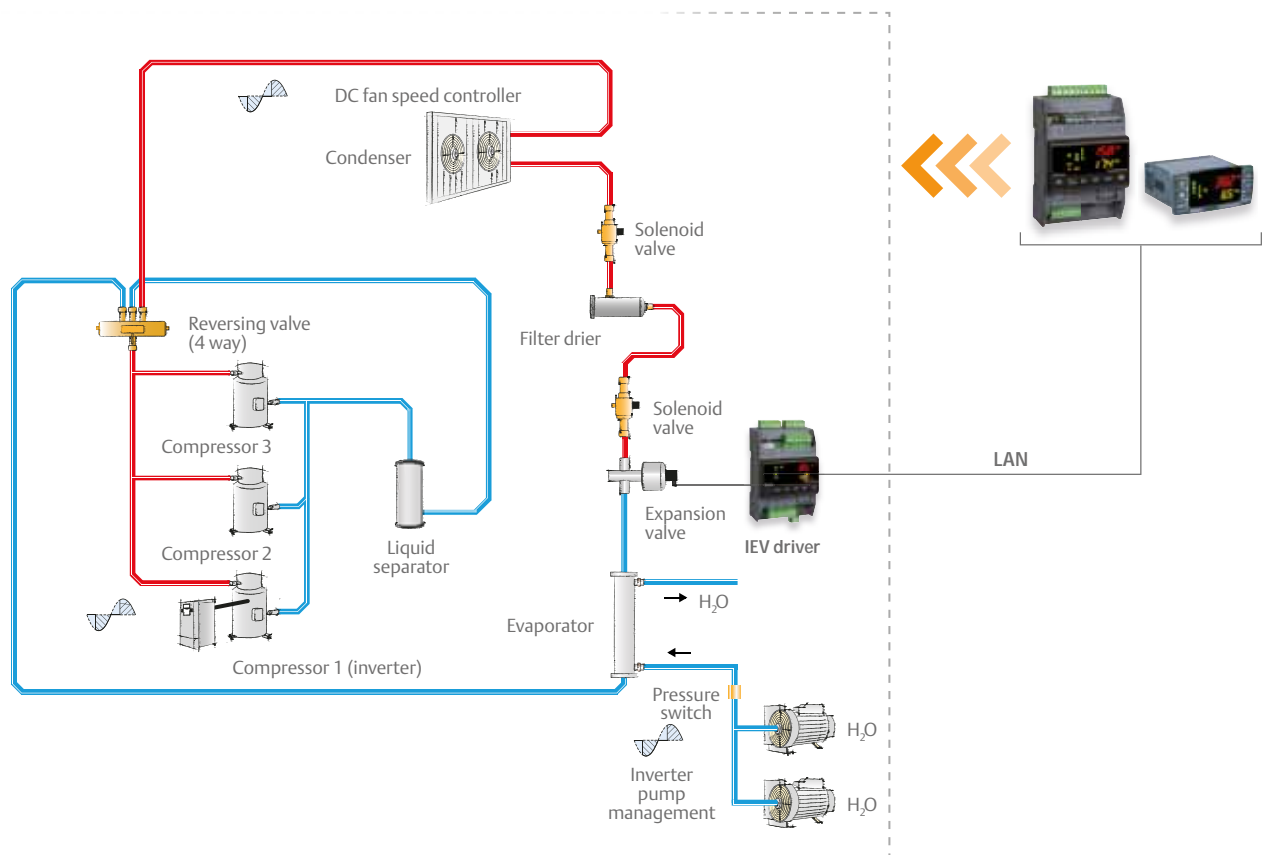
Expansion Valve - Circuit 1

Cooling		Suction Temp.	11.0°C
Opening	45%	Evaporation Temp.	2.1°C
Superheating	8.9°C	Evaporation Pres.	2.2bar

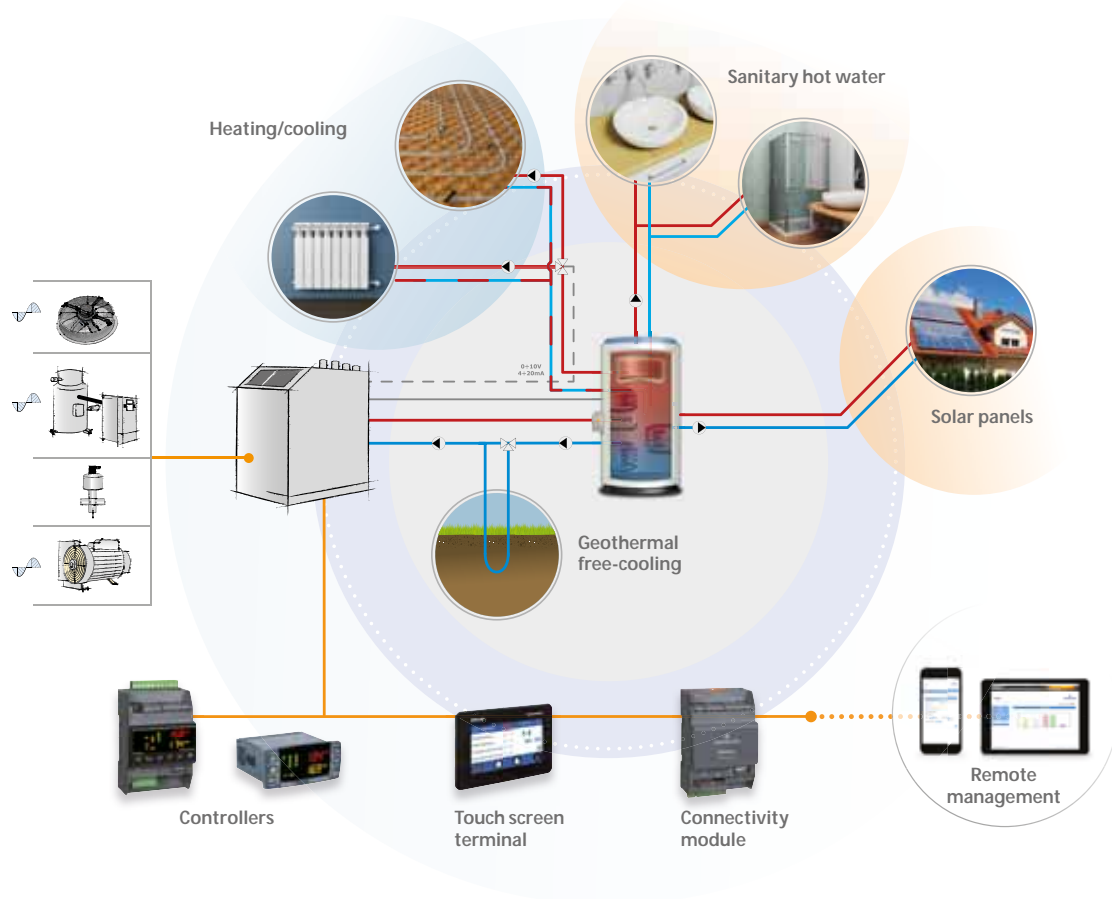
In case of connection to the IEV driver, information concerning driver functioning are displayed in detail on the VISOGRAPH interface.



1-CIRCUIT up to 3-COMPRESSOR MANAGEMENT

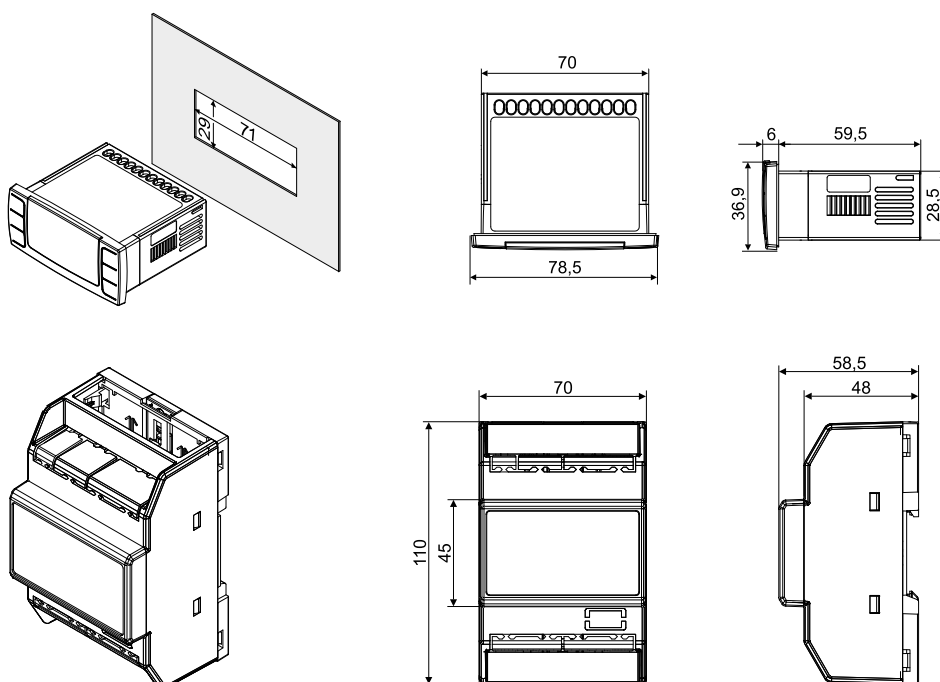


RESIDENTIAL SOLUTION





DIMENSIONS & CUT-OUT



UP to 1 CIRCUITS and 3 COMPRESSORS with EEV MANAGEMENT UNIT CONTROLLERS



IC105D

Controllers for chillers and heat pumps with 5 relay outputs (available also without display)

IC106CX

Controllers for chillers and heat pumps with 6 relay outputs

IC107D

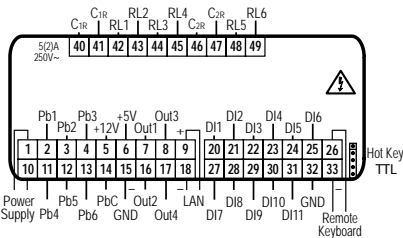
Controllers for chillers and heat pumps with 7 relay outputs (available also without display)

IC108CX

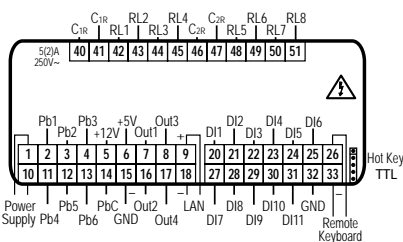
Controllers for chillers and heat pumps with 8 relay outputs

FEATURES	IC105D		IC106CX		IC107D		IC108CX
First display: n° digits	±4 d.p.	no display	±4 d.p.	±4 d.p.	no display	±4 d.p.	±4 d.p.
Second display: n° digits	±4 d.p.		±4 d.p.	±4 d.p.		±4 d.p.	±4 d.p.
Power supply	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc
Probe inputs							
NTC/PTC	5 config	5 config	4 config	5 config	5 config	4 config	4 config
NTC/PTC/4÷20mA/0÷5V	3 config	3 config	2 config	3 config	3 config	2 config	2 config
Digital inputs							
Free voltage	9 config	9 config	11 config	9 config	9 config	11 config	11 config
Relay outputs							
5A	5 config	5 config	6 config	7 config	7 config	8 config	8 config
Other outputs							
Analogs	2xPWM 0÷10V 4÷20mA 1x0÷10V	2xPWM 0÷10V 4÷20mA 1x0÷10V	2xPWM 0÷10V 2x0÷10V	2xPWM 0÷10V 4÷20mA 1x0÷10V	2xPWM 0÷10V 4÷20mA 1x0÷10V	2xPWM 0÷10V 4÷20mA 1x0÷10V	2xPWM 0÷10V 2x0÷10V
LAN	pres	pres	pres	pres	pres	pres	pres
RS485	pres	pres		pres	pres		
TTL/Hot Key 64/Prog Tool Kit	pres	pres	pres	pres	pres	pres	pres
Other							
Remote keyboard	2xVI613 1xV2I810 1xVTIC10	2xVI613 1xV2I810 1xVTIC10	2xVI613 1xV2I810 1xVTIC10	2xVI613 1xV2I810 1xVTIC10	2xVI613 1xV2I810 1xVTIC10	2xVI613 1xV2I810 1xVTIC10	2xVI613 1xV2I810 1xVTIC10
Buzzer	pres	pres	pres	pres	pres	pres	pres
Real time clock	opt	opt	opt	opt	opt	opt	opt
Connection kit	DWDE15-KIT DWDE30-KIT	DWDE15-KIT DWDE30-KIT	CWCXA15-KIT CWCXA30-KIT	DWDE15-KIT DWDE30-KIT	DWDE15-KIT DWDE30-KIT	CWCXB15-KIT CWCXB30-KIT	

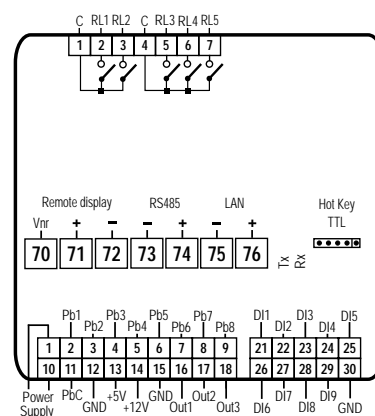
IC106CX



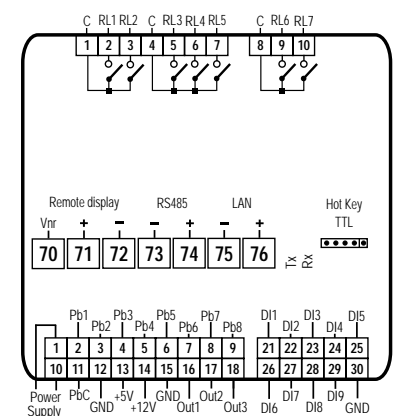
IC108CX



IC105D



IC107D



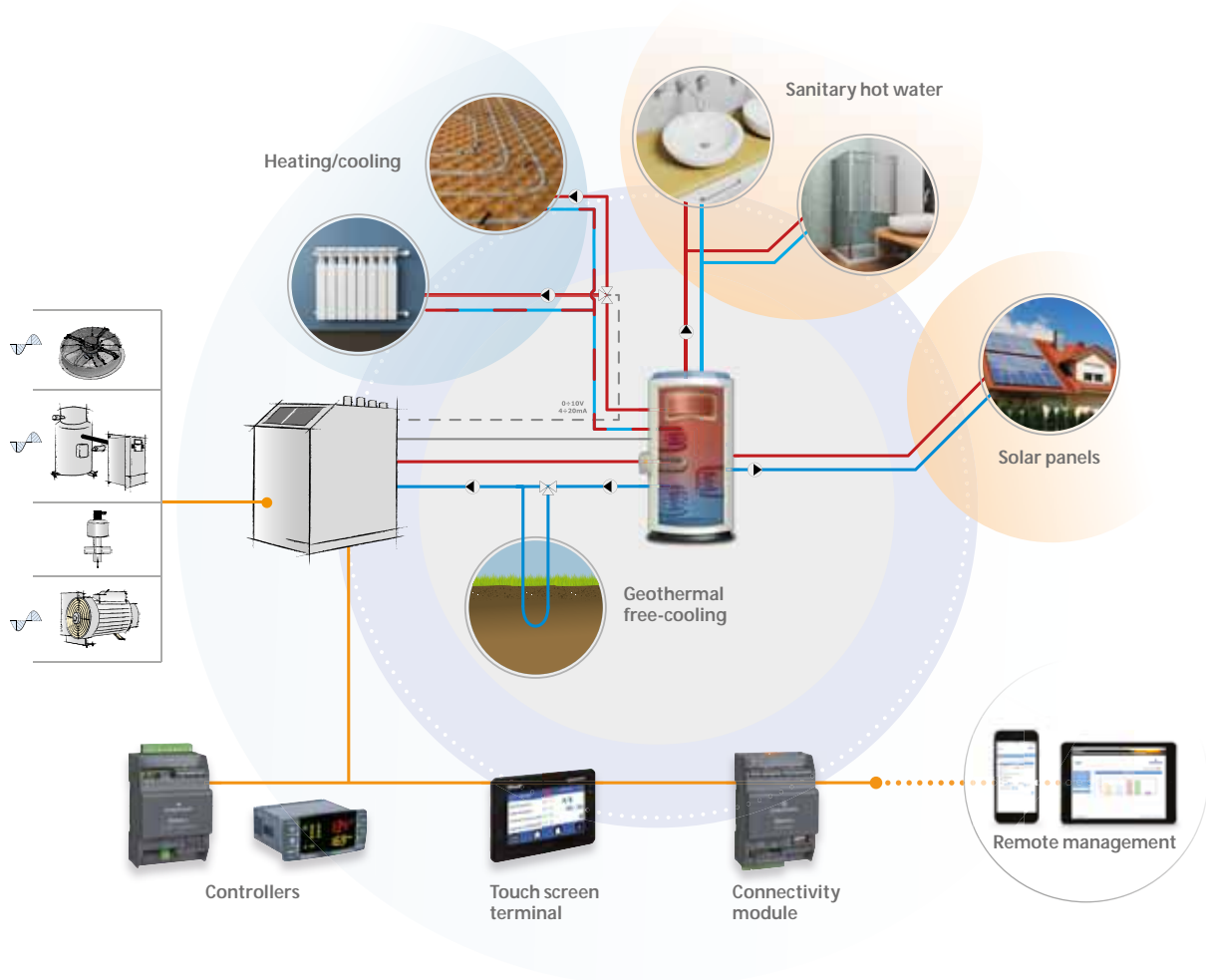
IC200 evo SERIES

2-CIRCUIT up to 6-COMPRESSOR UNIT CONTROLLERS with EEV MANAGEMENT

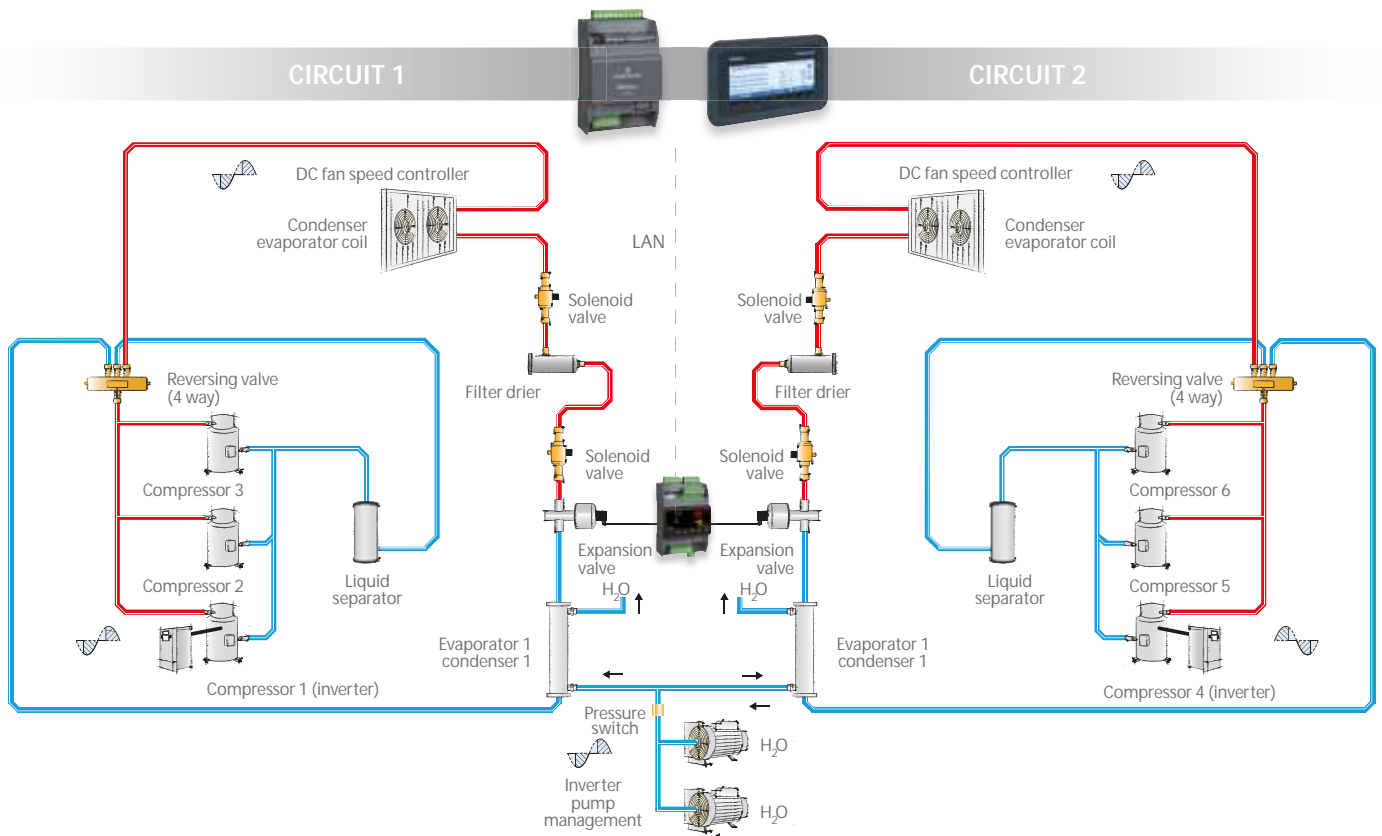


IC200 evo is the iCHILL evolution series of controllers, dedicated to **chiller and heat pump units**. Compactness, extreme flexibility, driver control for the electronic expansion valves and advanced functions such as free cooling and sanitary hot water production are only some of the main elements that make the series complete and suitable for the majority of plants. Controlled units can be **single or dual circuit with up to 6 compressors** such as: **air/air, air/water, water/water, motor-condensing, geothermal heat pumps and dryers**.

- Management of scroll, screw and inverter compressors
- Identification of the compressors to activate based on the n° of hours/start-ups
- Memorize the latest 100 alarms (alarm type, date, hours, machine status)
- Pump-down function (stop and start)
- Capacity function of machine power during critical functioning conditions
- Forced defrost during critical conditions
- Combined defrost temperature/pressure
- Sanitary hot water production
- Solar panel management
- Dynamic set point
- Start and stop by time bands
- Second set point (by time bands or digital input)
- PWM/4÷20mA/0÷10V output for condensing control
- Easy programming through HOT KEY or PC (WIZMATE PROG TOOL KIT)
- RS485 and/or TTL (convertible in RS485) serial output with ModBUS protocol
- Quick tab connectors on all models
- LAN output for I/O expansion modules or EEV driver connection
- Master/Slave function in combination with IPM500D module
- Heat recovery management
- Geothermal free-cooling



2-CIRCUIT up to 6-COMPRESSOR MANAGEMENT

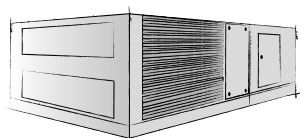


HIGH CONNECTIVITY

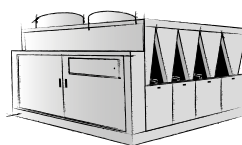
The high connectivity that marks these controllers ensures communication with the main devices of the HVAC world such as drivers for the electronic expansion valve management, modules for fans speed control and monitoring systems.



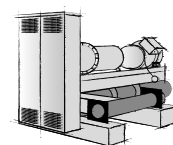
MACHINE TYPES



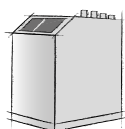
ROOF-TOP AIR/AIR



AIR/WATER



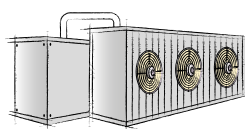
WATER/WATER



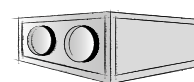
GEO THERMAL HEAT PUMP



DRYERS



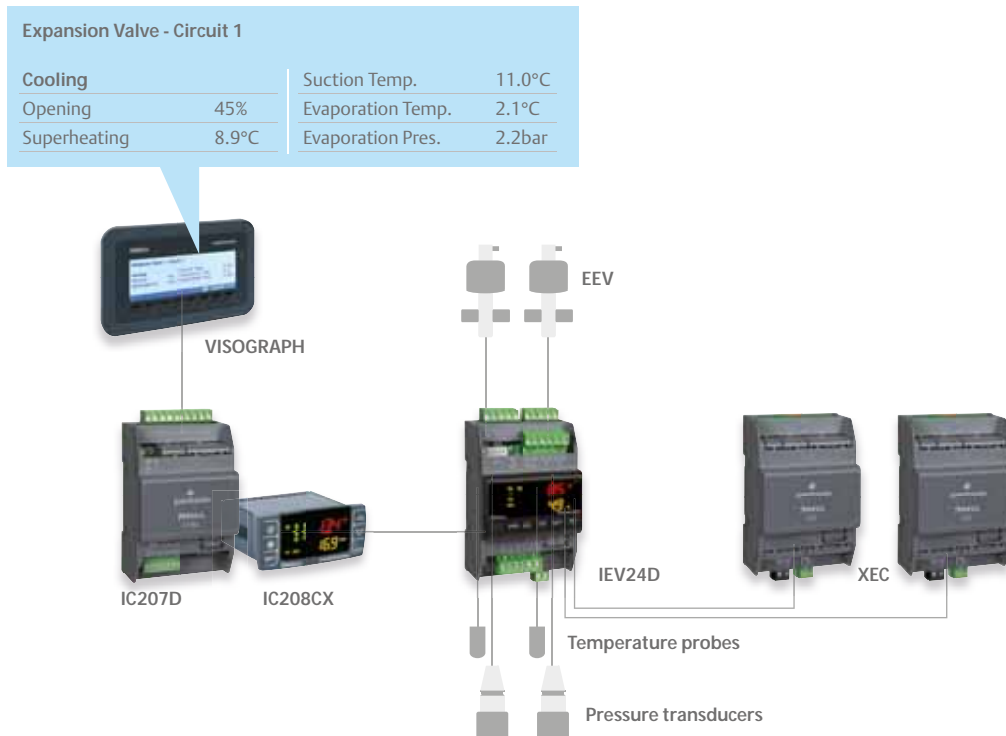
MOTOR-CONDENSING



HEAT RECOVERY UNIT

POSSIBLE COMBINATIONS

In plants which require the use of IC200 evo, connected both to IEV and VISOGRAPH terminal, information on the driver operation can be viewed in a full and detailed way directly on VISOGRAPH interface.



Here there are some of the possible combinations including IC200 evo controllers. ICX207D expansion module and IEV22/24D drivers for EEV management.

UNIT CONTROL with 2 CIRCUITS up to 4 COMPRESSORS



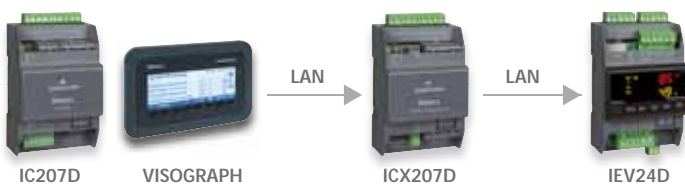
- 1 circuit - 4 compressors
- 2 circuits - 2 compressors per circuit
- 2 circuits - 1 screw compressor per circuit
- 2 circuits - 1 inverter compressor + 1 ON/OFF compressor per circuit

UNIT CONTROL with 2 CIRCUITS up to 6 COMPRESSORS

BUILT-IN DISPLAY VERSION



LCD DISPLAY VERSION



- 1 circuit - 6 compressors
- 2 circuits - 3 compressors per circuit
- 2 circuits - 1 screw compressor per circuit
- 2 circuits - 1 inverter compressor + 2 ON/OFF compressors per circuit

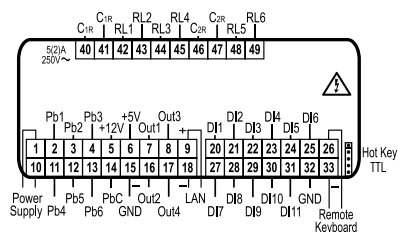
UP to 2 CIRCUITS and 6 COMPRESSORS with EEV MANAGEMENT UNIT CONTROLLERS



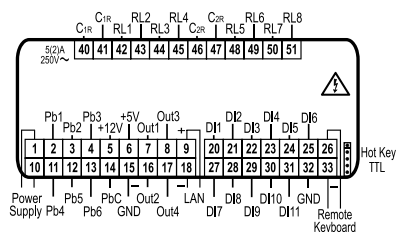
IC205D	Controllers for chillers and heat pumps with 5 relay outputs (available also without display)
IC206CX	Controllers for chillers and heat pumps (up to 4 compressors) with 6 relay outputs
IC207D	Controllers for chillers and heat pumps with 7 relay outputs (available also without display)
IC208CX	Controllers for chillers and heat pumps (up to 4 compressors) with 8 relay outputs
ICX207D	Expansion module with 7 relay outputs

FEATURES	IC205D		IC206CX	IC207D		IC208CX	ICX207D
<i>First display: n° digits</i>	±4 d.p.	no display	±4 d.p.	±4 d.p.	no display	±4 d.p.	no display
<i>Second display: n° digits</i>	±4 d.p.		±4 d.p.	±4 d.p.		±4 d.p.	
<i>Power supply</i>	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc
Probe inputs							
NTC/PTC	5 config	5 config	4 config	5 config	5 config	4 config	5 config
NTC/PTC/4÷20mA/0÷5V	3 config	3 config	2 config	3 config	3 config	2 config	3 config
Digital inputs							
Free voltage	9 config	9 config	11 config	9 config	9 config	11 config	9 config
Relay outputs							
5A	5 config	5 config	6 config	7 config	7 config	8 config	7 config
Other outputs							
Analogs	2xPWM 0÷10V 4÷20mA	2xPWM 0÷10V 4÷20mA	2xPWM 0÷10V	2xPWM 0÷10V 4÷20mA	2xPWM 0÷10V 4÷20mA	2xPWM 0÷10V	2xPWM 0÷10V 4÷20mA
	1x0÷10V	1x0÷10V	2x0÷10V	1x0÷10V	1x0÷10V	2x0÷10V	1x0÷10V
LAN	pres	pres	pres	pres	pres	pres	pres
RS485	pres	pres		pres	pres		
TTL/Hot Key 64/Prog Tool Kit	pres	pres	pres	pres	pres	pres	pres
Other							
Remote keyboard	2xVI622 1xV2I820 1xVTIC20	2xVI622 1xV2I820 1xVTIC20	2xVICX620 1xV2I820 1xVTIC20	2xVI622 1xV2I820 1xVTIC20	2xVI622 1xV2I820 1xVTIC20	2xVICX620 1xV2I820 1xVTIC20	
Buzzer	pres	pres	pres	pres	pres	pres	
Real time clock	opt	opt	opt	opt	opt	opt	
Connection kit	DWDE15-KIT DWDE30-KIT	DWDE15-KIT DWDE30-KIT	CWCXA15-KIT CWCXA30-KIT	DWDE15-KIT DWDE30-KIT	DWDE15-KIT DWDE30-KIT	CWCXB15-KIT CWCXB30-KIT	DWDEX15-KIT DWDEX30-KIT
Expansion module	ICX207D	ICX207D	ICX207D	ICX207D	ICX207D	ICX207D	

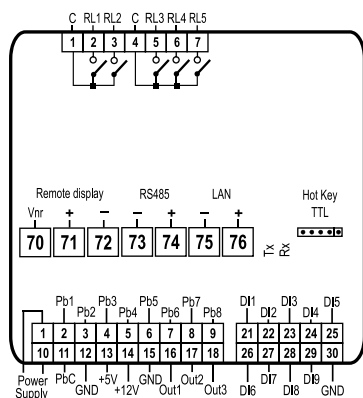
IC206CX



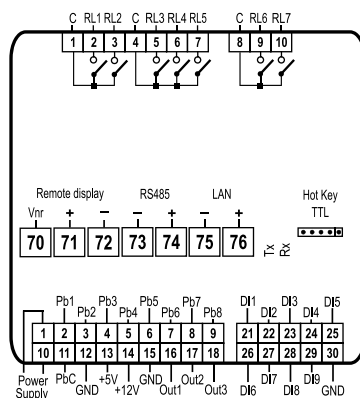
IC208CX



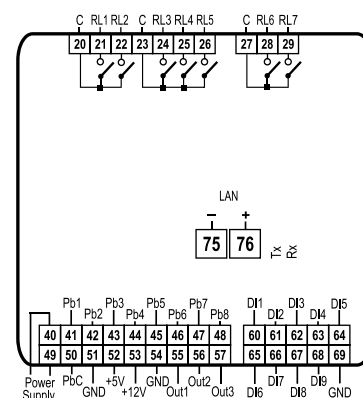
IC205D



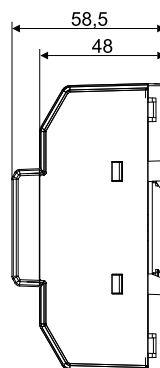
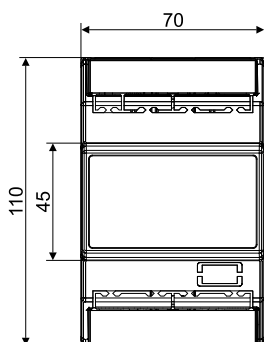
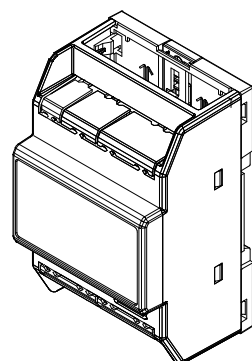
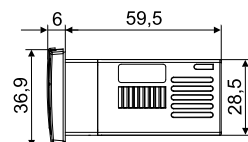
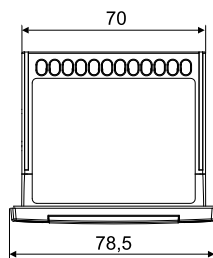
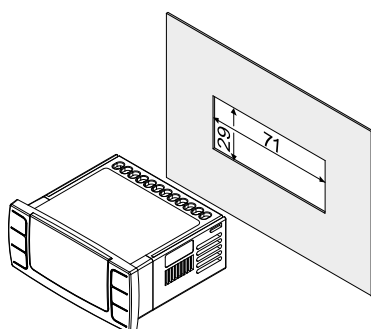
IC207D



ICX207D



DIMENSIONS & CUT-OUT



iProCHILL SERIES

UP to 4-CIRCUIT and 16-COMPRESSOR UNIT CONTROLLERS



The controllers of the iProCHILL family are Dixell's answer to the requirements of the HVAC world; they are suitable for all **chillers, heat pump units up to 4 circuits and 16 compressors**. These instruments are complete and easy to use; they are the correct solution for the majority of the chiller-machines, including the most complex units, and can manage systems such as: **air/air, air/water, water/water, motor-condensing**.

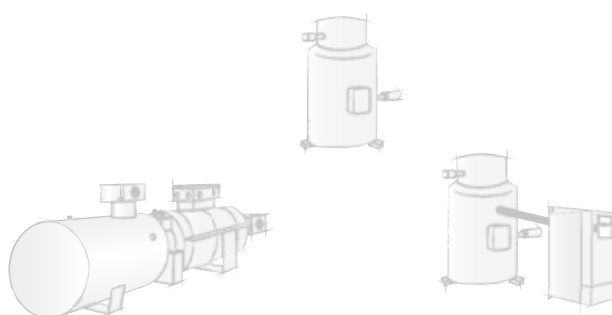
Thanks to a **high degree of connectivity**, they are indispensable for remote management of the plant's "service" centers.

- Heat pump management with sanitary hot water production
- Instant and complete visualization of the unit values thanks to the VISOGRAPH graphic display and of the plant by means of VISOTOUCH touch display
- Powerful platform based on LINUX operative system on ARM9 microprocessor (200MHz/32bit)
- Ethernet for connection to an intranet-internet network
- USB output for configuration update
- Master/Slave RS485 serial output for connection to XWEB supervising and systems control or to applications developed by third party systems
- BACnet and LON (with external gateway) communications allow the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- Connection to the expansion modules in order to increase system capacity
- Connection to the drivers for electronic expansion valve management and control

KIND of COMPRESSORS

The extensive iProCHILL range allows optimal management of air conditioning units, equipped with different types of compressors of the largest manufacturers, via ModBUS, TCP/IP or through a dedicated analog signal.

- Multiscroll up to 16 compressors per circuit
- Scroll with Brushless permanent magnet motor
- Screw with regulation up to 4 capacity steps
- Stepless (only for 10 DIN format)
- Screw with inverter (also integrated)
- Reciprocating



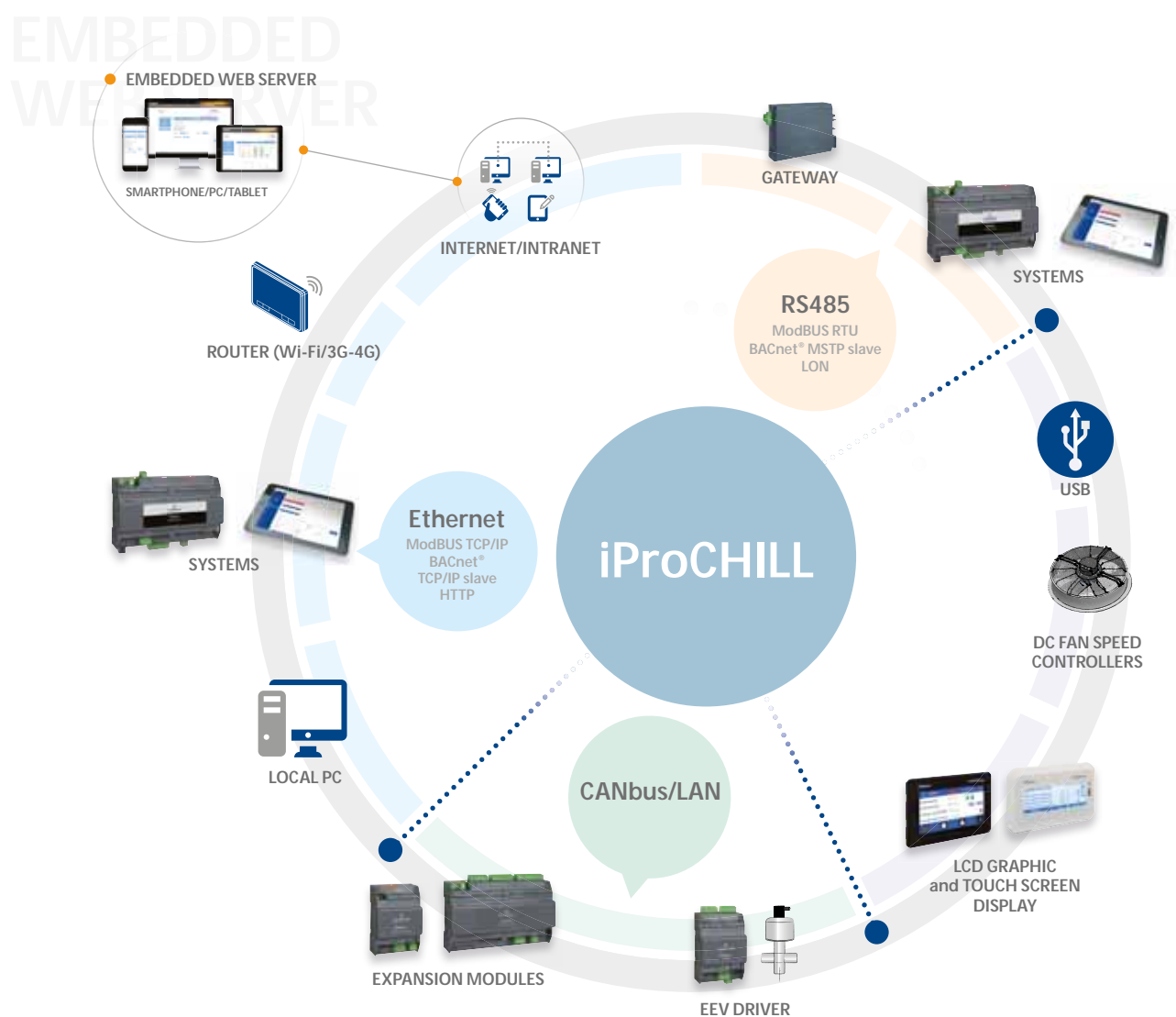
WEBSITE

A useful web server on-board of the iProCHILL allows the complete management of the units via dedicated web pages. You can publish the application, display graphics, handle variables and more.



CONNECTIVITY

The high degree of connectivity (Ethernet or RS485) of iProCHILL controllers enables local and remote management of units/plants. Some available functions are: machine status, alarms display, and commands that send modifications such as plant comfort settings and start/stop of unit/lights.



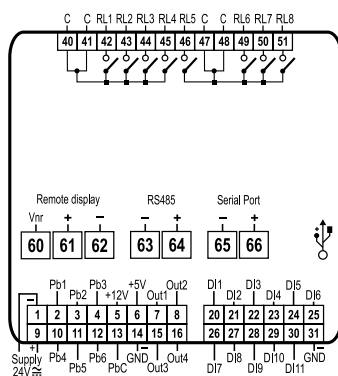
UP to 4-CIRCUIT and 16-COMPRESSOR UNIT CONTROLLERS



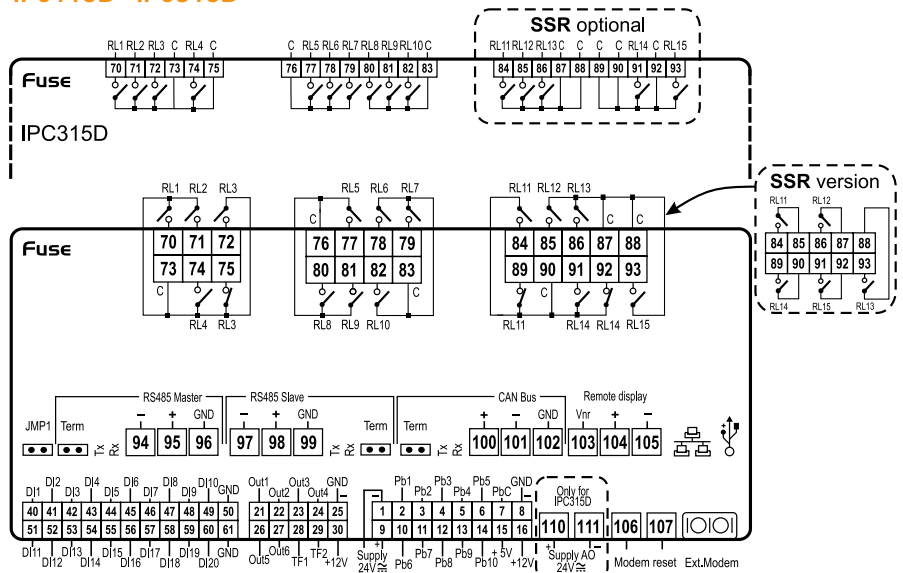
IPC108D	Controller in 4 DIN Rail format for up to 2-circuit and 6-compressor chiller and heat pumps
IPC108E	Controller in 4 DIN Rail format with LED display for up to 2-circuit and 6-compressor chiller and heat pumps
IPC115D	Controller in 10 DIN Rail format for up to 4-circuit and 16-compressor chiller and heat pumps
IPC315D	Controller in 10 DIN Rail format for up to 4-circuit and 16-compressor chiller and heat pumps

FEATURES	IPC108D	IPC108E	IPC115D	IPC315D
<i>First display: n° digits</i>		±4 d.p.		
<i>Second display: n° digits</i>		±4 d.p.		
Power supply	24Vac/dc from TF40D	24Vac/dc from TF40D	24Vac/dc from TF20D	24Vac/dc from TF20D
Probe inputs				
Configurable	6	6	10	10
Digital inputs				
Configurable optoinsulated	11	11	20	20
Relay outputs				
Configurable	8x5A	8x5A	12x5A + 3x8A 9x5A + 1x8A + 5xSSR opt	15x5A 10x5A + 5xSSR opt
Other outputs				
PWM for fan speed module				
0÷10V, 4÷20mA for fan speed module	4 config	4 config	2 config	2 config
0÷10V for external relay			4	4
RS485	slave	slave	master + slave	master + slave
USB	pres	pres	pres	pres
External modem			GSM, analog opt	GSM, analog opt
LAN/RS485 master	pres	pres		
CANBus			pres	pres
Ethernet	via USB-ETH-CONV	via USB-ETH-CONV	pres	pres
Other				
Remote keyboard	1xV2IPC/VTIPC	1xV2IPC/VTIPC	2xV2IPC/1xVTIPC	2xV2IPC/1xVTIPC
Real time clock	pres	pres	pres	pres
Flash memory	32MB	32MB	128MB	128MB
Connections	disconnectable + screw	disconnectable + screw	disconnectable + screw	disconnectable + screw
Connection kit	DWS30-KIT, IP-FC108	DWS30-KIT, IP-FC108	DWB30-KIT	DWB315-KIT, IP-FC315
BACnet protocol	opt	opt	opt	opt

IPC108D - IPC108E



IPC115D - IPC315D



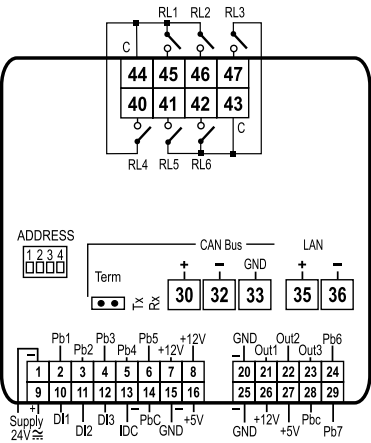
EXPANSION MODULES



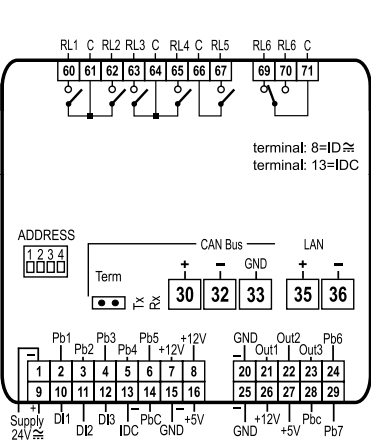
IPX106D	Expansion module in 4 DIN Rail format with disconnectable connectors and 6 relay outputs
IPX306D	Expansion module in 4 DIN Rail format with screw and disconnectable connectors and 6 relay outputs

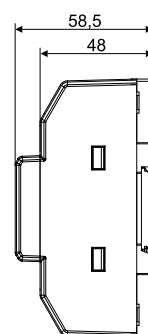
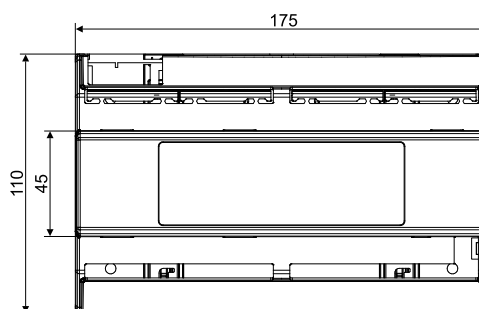
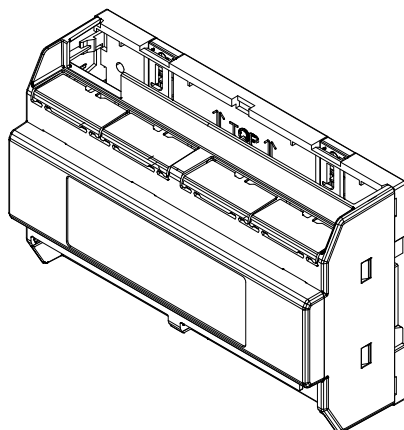
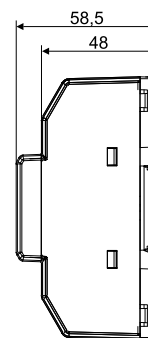
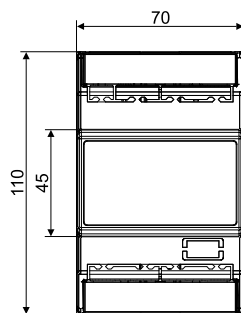
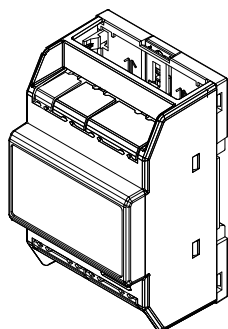
FEATURES	IPX106D	IPX306D
Power supply	24Vac/dc from TF10D	24Vac/dc from TF10D
Probe inputs		
Configurable	7	7
Digital inputs		
Configurable optoinsulated	3	3
Relay outputs		
Configurable	6x5A	5x5A + 1x8A 4x5A + 1x8A + 1xSSR opt
Other outputs		
0÷10V	3	3
LAN/CANBus	pres	pres
Other		
Dip switches for addresses set	pres	pres
Connections	disconnectable	disconnectable + screw
Connection kit	DWEX60-30KIT	DWEX306-30KIT

IPX106D



IPX306D





iProAHU SERIES

PROGRAMMABLE CONTROLLERS for AIR HANDLING UNITS



The Dixell series for complete management of **AHU** includes programmable controllers, LCD graphic terminals, accessories and sensors. A dedicated and easily configurable application allows users to handle regulations dedicated to thermos-hygrometric conditions, ventilation, filtration, air control and quality.

The solution ensures flexibility and provides many customization possibilities to suit the market's requirements.

- Control of the carbon dioxide, the VOC, the efficiency of filtration and the management of a smart air turnover thanks to advanced algorithms
- Efficient management of the fans (supply and return) keeping pressure, flow or speed constant
- Temperature and humidity regulation through advanced and optimized algorithms to ensure tangible energy saving
- Advanced functions dedicated to the humidification to increase the efficiency of the unit without the use of additional electronic regulators
- Instant and complete visualization of the unit values thanks to the VISOGRAPH graphic display and of the VISOTOUCH touch display
- Powerful platform based on LINUX operative system on ARM9 microprocessor (200MHz/32bit)
- Ethernet for connection to an intranet-internet network
- USB output for configuration update
- BACnet and LON (with external gateway) communications allow the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- Connection to the expansion modules in order to increase system capacity

WEBSITE

The website in the iPro controllers is characterized by an intuitive interactive graphical interface and allows you to quickly configure the unit via wizard on common browsers present on the market. The remote access allows supervising and control actions of the unit providing to the service an important tool of assistance in case of any necessary maintenance action.

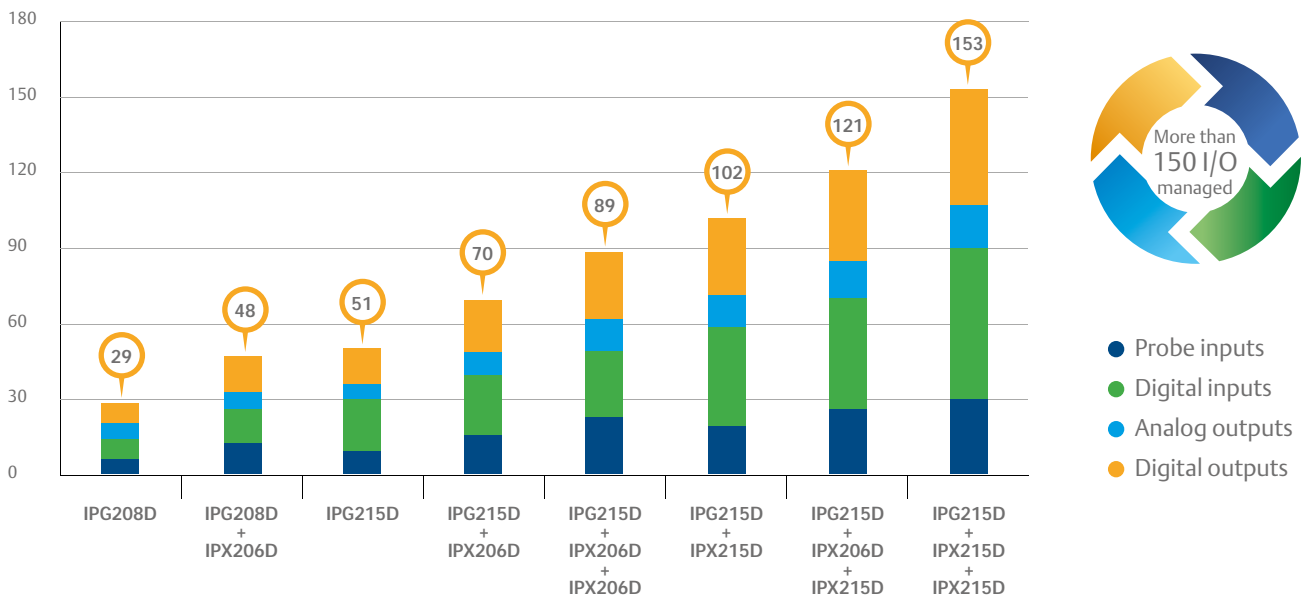


OPTIMIZED MANAGEMENT of the UNIT

The high connectivity and simplified configurability allow an efficient, quick and intuitive management of the unit even by remote. The application is based on function blocks and is customizable in an easy and fast way.



THE COMPLETE SOLUTION for the MANAGEMENT of AIR HANDLING UNITS



APPLICATIONS

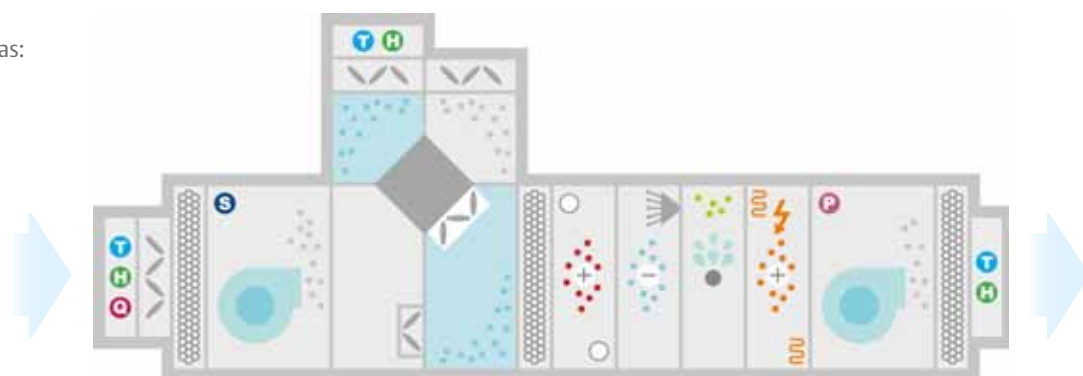
Dixell's solution allows users to manage with advanced regulation most AHU applications, such as fresh air-only units, double flow unit (supply and return), up to more complex AHU units.

APPLICATION EXAMPLE

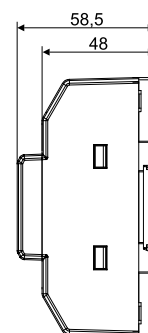
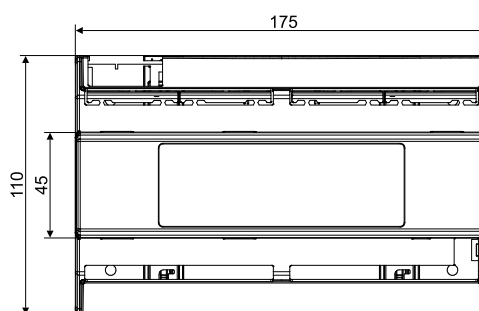
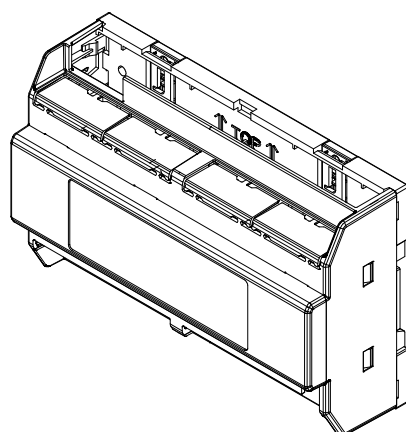
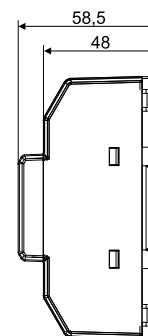
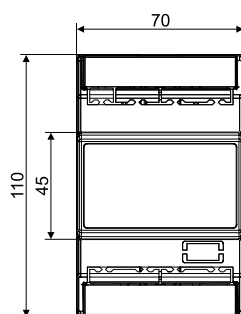
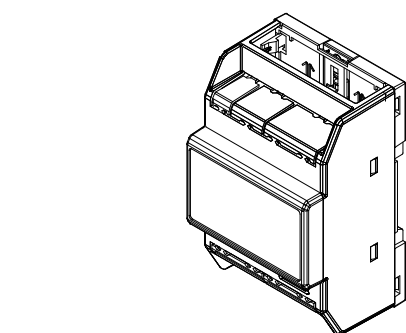
For units with heat exchanger and double supply and return flow, Dixell's proposal includes the use of the IPG215D controller combined with an IPX206D expansion module. The solution allows to optimally manage the water heating coil, the direct expansion cooling coil, the steam humidification, the post-heating coil with electrical heaters and the supply and return modulating ventilation for example depending on a constant air flow control.

The probes are identified as:

- T** Temperature
- P** Pressure
- H** Humidity
- Q** Air quality
- S** Speed



DIMENSIONS



CONTROLLERS for AIR HANDLING UNITS

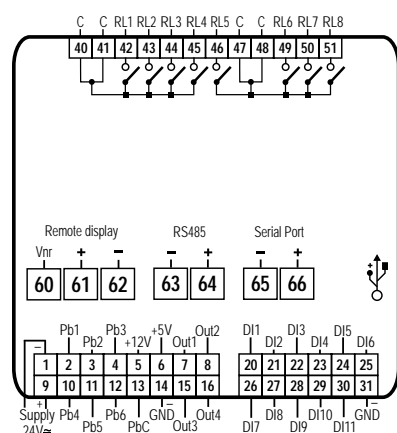


IPG208D A01 Programmable controller in 4 DIN format for AHU units with disconnectable screw/bayonet connectors

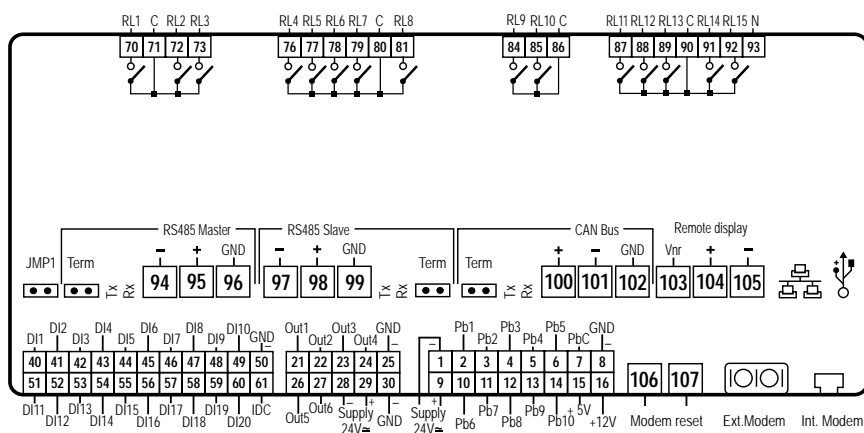
IPG215D A01 Programmable controller in 10 DIN format for AHU units with disconnectable screw/bayonet connectors

FEATURES	IPG208D A01	IPG215D A01
Power supply	24Vac/dc from TF40D	24Vac/dc from TF20D
Probe inputs		
Configurable	6	10
Digital inputs		
Configurable optoinsulated	11	20
Relay outputs		
Configurable	8x5A	15x5A
Other outputs		
0÷10V or 4÷20mA	4 config	2 config
0÷10V		4
RS485	4 config	up to 4
USB	1xhost	up to 2xhost + 1 device
RS232		opt
LAN/RS485	pres	
CANBus		pres
Ethernet	via USB-ETH-CONV	pres
Other		
Remote keyboard	1xV2IPG/VTIPG	2xV2IPG/VTIPG
Real time clock	pres	pres
Flash memory	128MB	512MB
Connection	bayonet + screw	bayonet + screw
Connection kit	IP-FC208	IP-FC215CP
BACnet protocol	opt	opt

IPG208D A01



IPG215D A01



EXPANSION MODULES



IPX206D

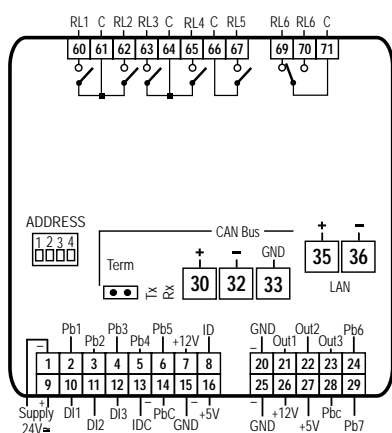
Expansion module in 4 DIN Rail format with disconnectable screw/
bayonet connectors and 6 relay outputs

IPX215D

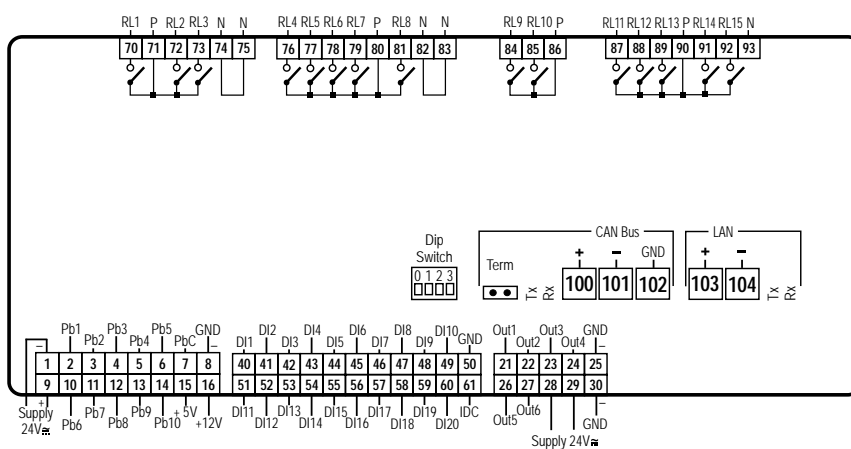
Expansion module in 10 DIN Rail format with disconnectable screw/
bayonet connectors and 15 relay outputs

FEATURES	IPX206D	IPX215D
Power supply	24Vac/dc from TF10D	24Vac/dc from TF20D
Probe inputs		
Configurable	7	10
Digital inputs		
Configurable optoinsulated	3	20
Relay outputs		
Configurable	5x5A + 1x8A 4x5A + 1x8A + 1xSSR opt	15x5A 4x5A + 1x8A + 1xSSR opt
Other outputs		
0÷10V or 4÷20mA		2 config
0÷10V	3	4
LAN/CANBus	pres	pres
Other		
Dip switches for addresses set	pres	pres
Connections	bayonet + screw	bayonet + screw
Connection kit	IP-FCEX60	IP-FCX215

IPX206D



IPX215D



iProDRY-COOLER SERIES

PROGRAMMABLE CONTROLLERS for AIR COOLERS



The **Dry Cooler** solution for complete management of units dedicated to the cooling of fluids by forced air, is ideal for machines dedicated to liquid or gas cooling, such as remote condensers. A dedicated application easily configurable and characterized by high flexibility of the unit composition (in terms of available actuators, extra functionalities and energy savings) also thanks to a graphic configurator on the integrated website.

- Optimized regulation algorithms for an efficient unit management with high energy savings
- Fan management with configuration regulated by steps or modulating of single or dual circuit
- High machine efficiency guaranteed through the adiabatic cooling management
- 3-way valve management with different configuration options
- Instant and complete visualization of the unit values thanks to the VISOGRAPH graphic display and of the plant by means of VISOTOUCH touch display
- Powerful platform based on LINUX operative system on ARM9 microprocessor (200MHz/32bit)
- Ethernet for connection to an intranet-internet network
- USB output for configuration update
- BACnet and LON (with external gateway) communications allow the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- Connection to the expansion modules in order to increase system capacity

WEBSITE

The website in the iPro controllers is characterized by an intuitive interactive graphical interface and allows you to quickly configure the unit via wizard on common browsers present on the market. The remote access allows supervising and control actions of the unit providing to the service an important tool of assistance in case of any necessary maintenance action.

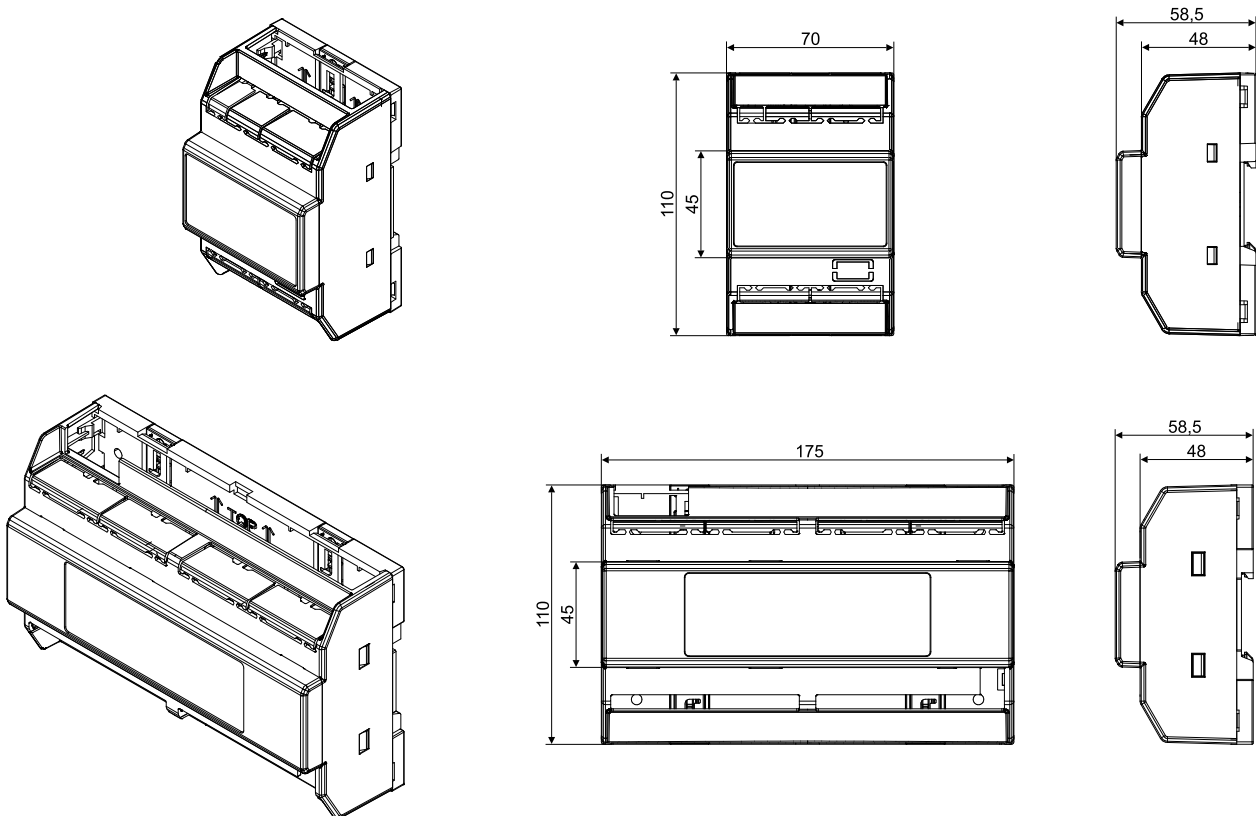


OPTIMIZED MANAGEMENT of the UNIT

The high connectivity and simplified configurability allow an efficient, quick and intuitive management of the unit even by remote. The application is based on function blocks and is customizable in an easy and fast way.



DIMENSIONS

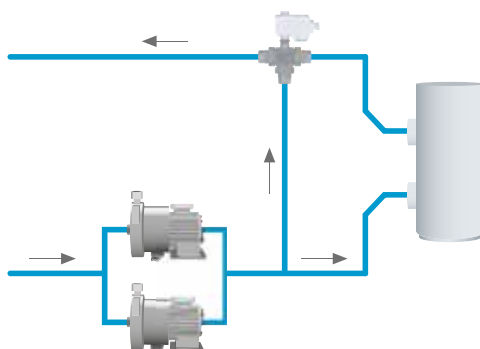


APPLICATIONS

The application for the control of the Dry Cooler units features high flexibility that allows users to completely manage many configurations such as: condenser units configured as gas or water, condensers for water/water chiller units, free-cooler units for chiller units, hybrid dry cooler units and pumping stations.

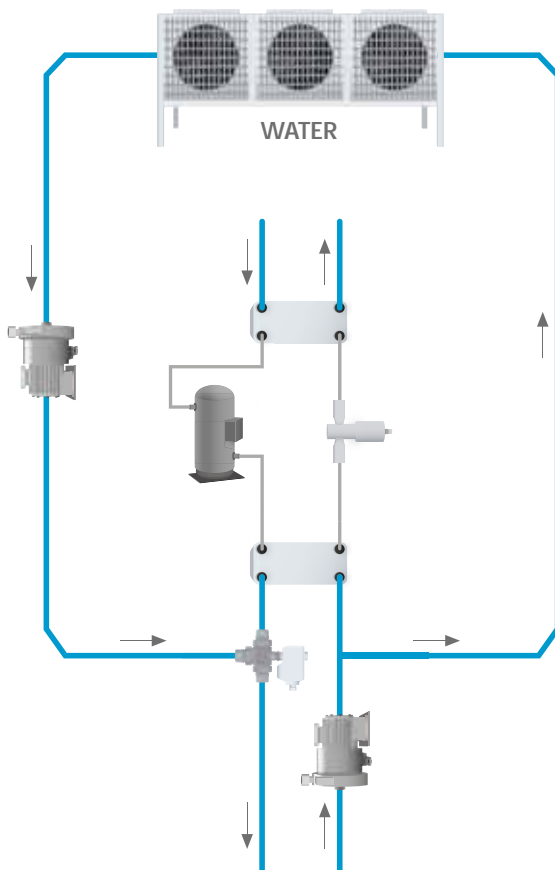
PUMPING STATIONS

Management of pumping units and of the 3-way modulating valve for temperature control, connected to a water tank system.



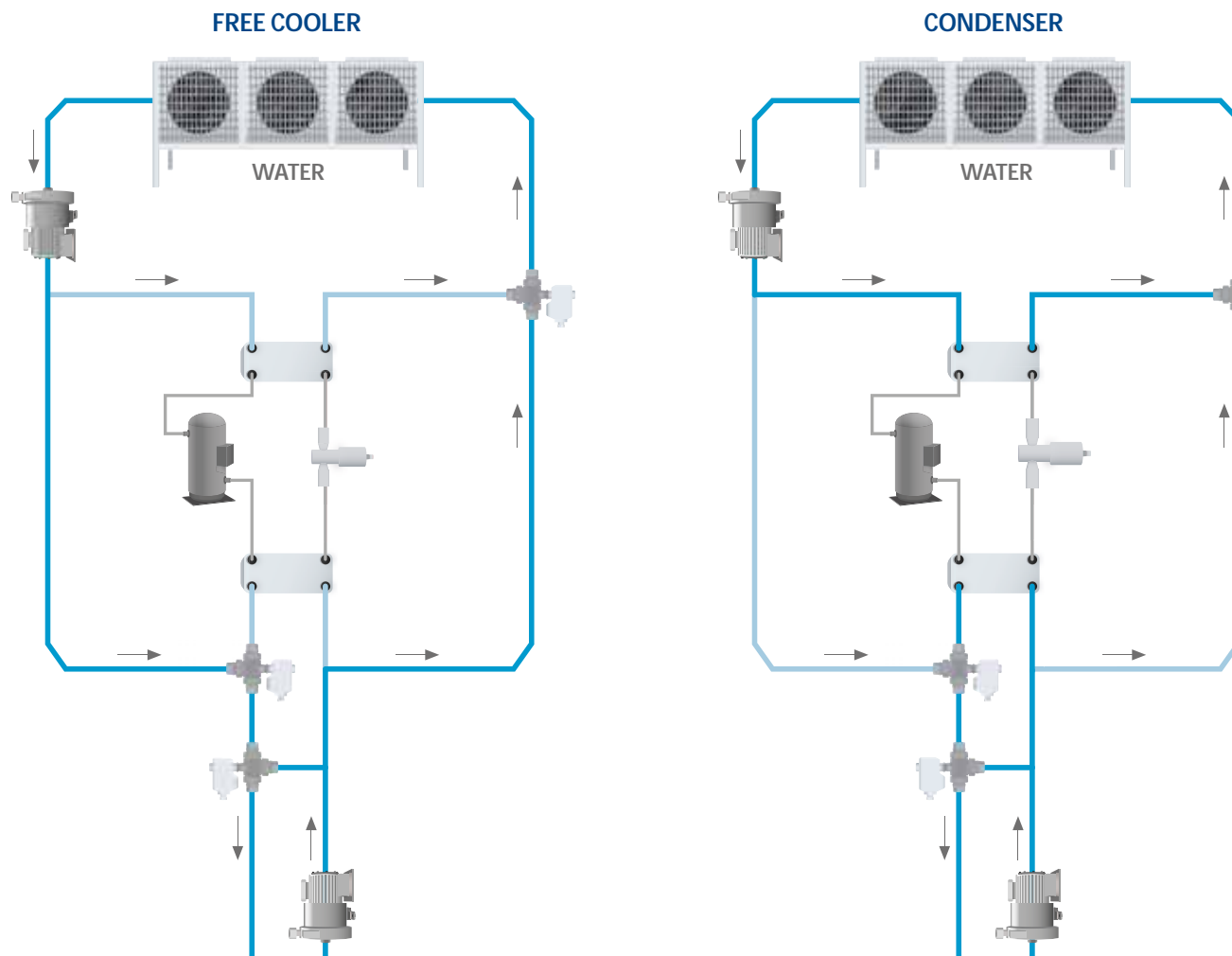
FREE-COOLER for CHILLER UNITS SUPPORT

Management of free-cooler units for chiller units with cold water production and control of the 3-way change-over valve.



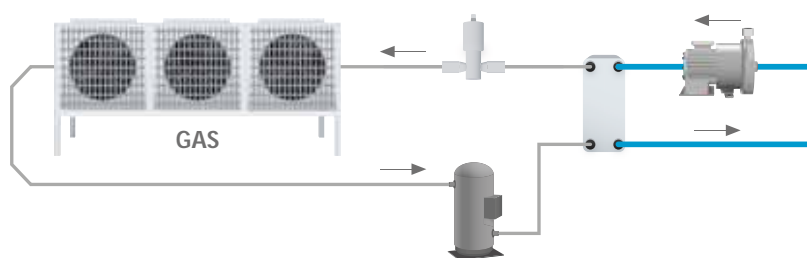
HYBRID DRY COOLER UNITS

Management of hybrid units for water/water chiller with management of 3-way change-over valve free-cooler/condenser, management of the pumping group and of the 3-way modulating valve for temperature control.



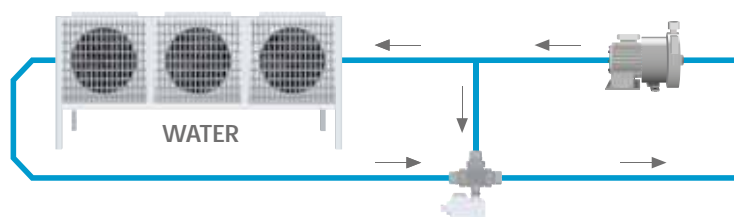
REMOTE CONDENSER CONFIGURED as GAS UNIT

Management of condensing unit configured as gas for remote evaporating systems. Fan regulation according to the refrigerant pressure or temperature.



REMOTE CONDENSER CONFIGURED as WATER UNIT

Management of condensing units configured as water with pumping groups and 3-way valve for temperature control.



CONTROLLERS for AIR COOLERS

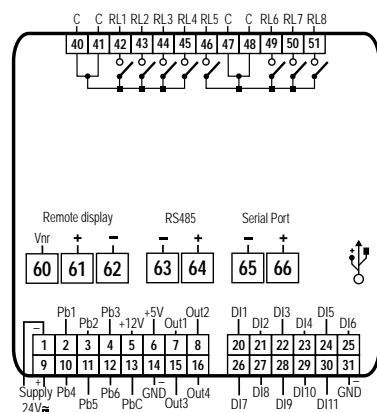


IPG208D W01 Programmable controller in 4 DIN format for air coolers with disconnectable screw/bayonet connectors

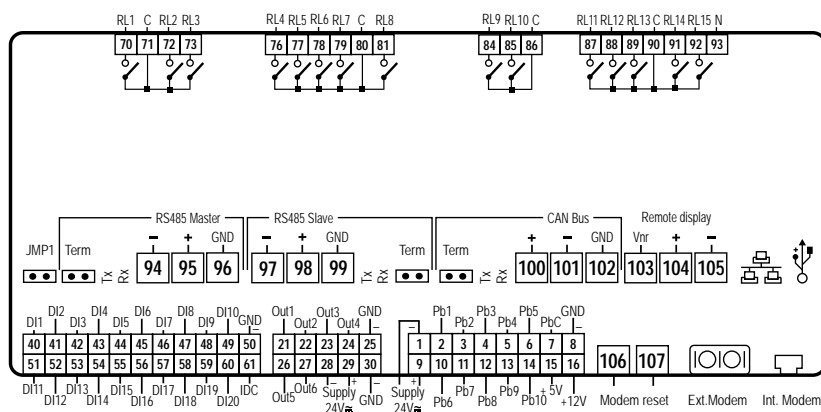
IPG215D W01 Programmable controller in 10 DIN format for air coolers with disconnectable screw/bayonet connectors

FEATURES	IPG208D W01	IPG215D W01
Power supply	24Vac/dc from TF40D	24Vac/dc from TF20D
Probe inputs		
Configurable	6	10
Digital inputs		
Configurable optoinsulated	11	20
Relay outputs		
Configurable	8x5A	15x5A
Other outputs		
0÷10V or 4÷20mA	4 config	2 config
0÷10V		4
RS485	pres	up to 4
USB	1xhost	up to 2xhost + 1 device
RS232		opt
LAN/RS485	pres	
CANBus		pres
Ethernet	via USB-ETH-CONV	pres
Other		
Remote keyboard	1xV2IPG/VTIPG	2xV2IPG/VTIPG
Real time clock	pres	pres
Flash memory	128MB	512MB
Connection	bayonet + screw	bayonet + screw
Connection kit	IP-FC208	IP-FC215CP
BACnet protocol	opt	opt

IPG208D W01



IPG215D W01



EXPANSION MODULE

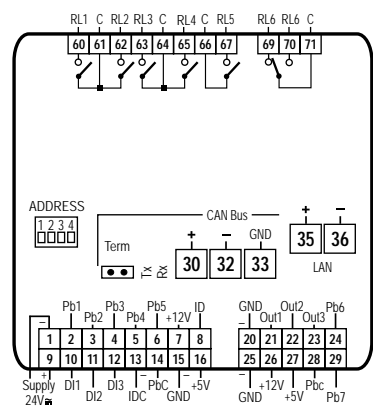


IPX206D

Expansion module in 4 DIN Rail format
with disconnectable screw/bayonet connectors and 6 relay outputs

FEATURES	IPX206D
Power supply	24Vac/dc from TF10D
Probe inputs	
Configurable	7
Digital inputs	
Configurable optoinsulated	3
Relay outputs	
Configurable	5x5A + 1x8A 4x5A + 1x8A + 1xSSR opt
Other outputs	
0÷10V	3
LAN/CANBus	pres
Other	
Dip switches for addresses set	pres
Connections	bayonet + screw
Connection kit	IP-FCEX60

IPX206D



IPM500D SERIES

MASTER/SLAVE MODULE

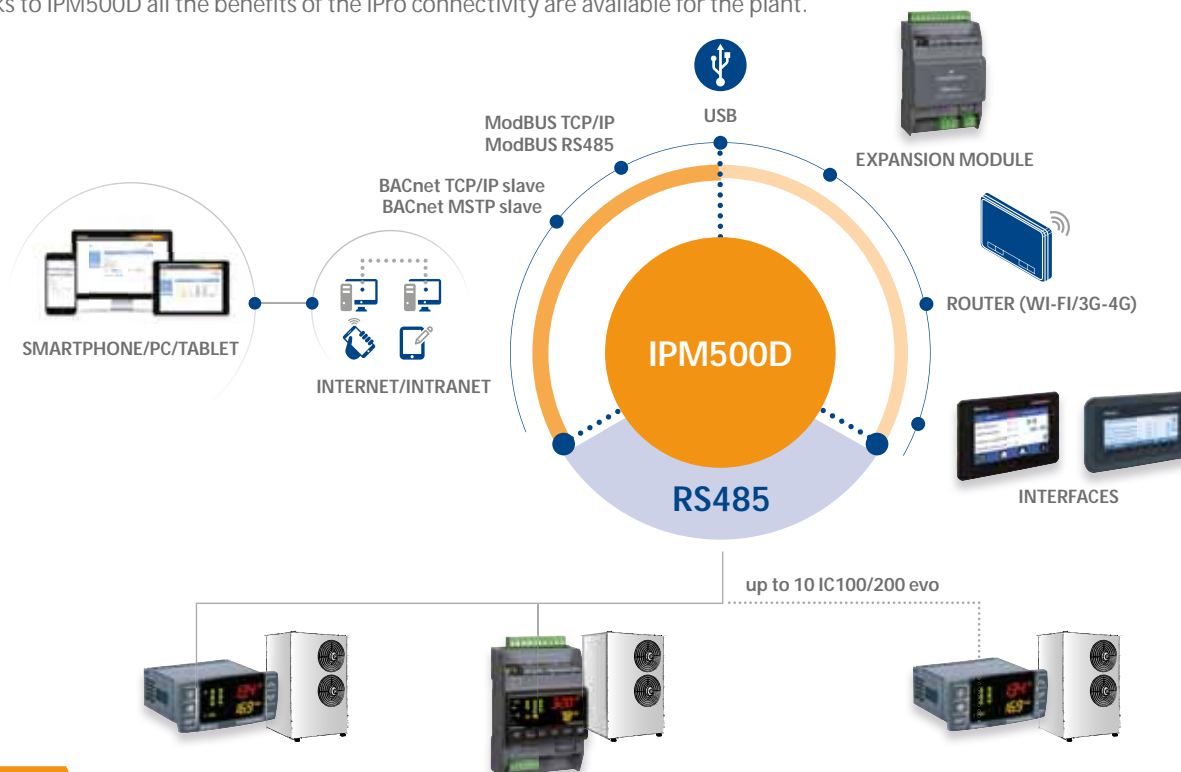


IPM500D is the master/slave module designed to better meet the demands of the HVAC world allowing the creation and management of most of the circuits, even the most complex ones. The master module can control different types of machines equipped with IC100/200 evo, parametric controllers and adds further functionalities to the adjustment. IPM500D can be connected to VISOGRAPH graphic keyboard and VISOTOUCH touch display, ensuring an immediate and comprehensive overview of the status of plant variables.

- Up to 10 slave units (max. 40 steps) management with On/Off compressors
- Back-up management
- Resources re-distribution in case of unit local alarm
- Automatic defrost synchronization
- Over-boost
- Energy saving by scheduler
- Proportional or neutral zone regulation
- Adjustment made on the average active probes of the unit

CONNECTIVITY

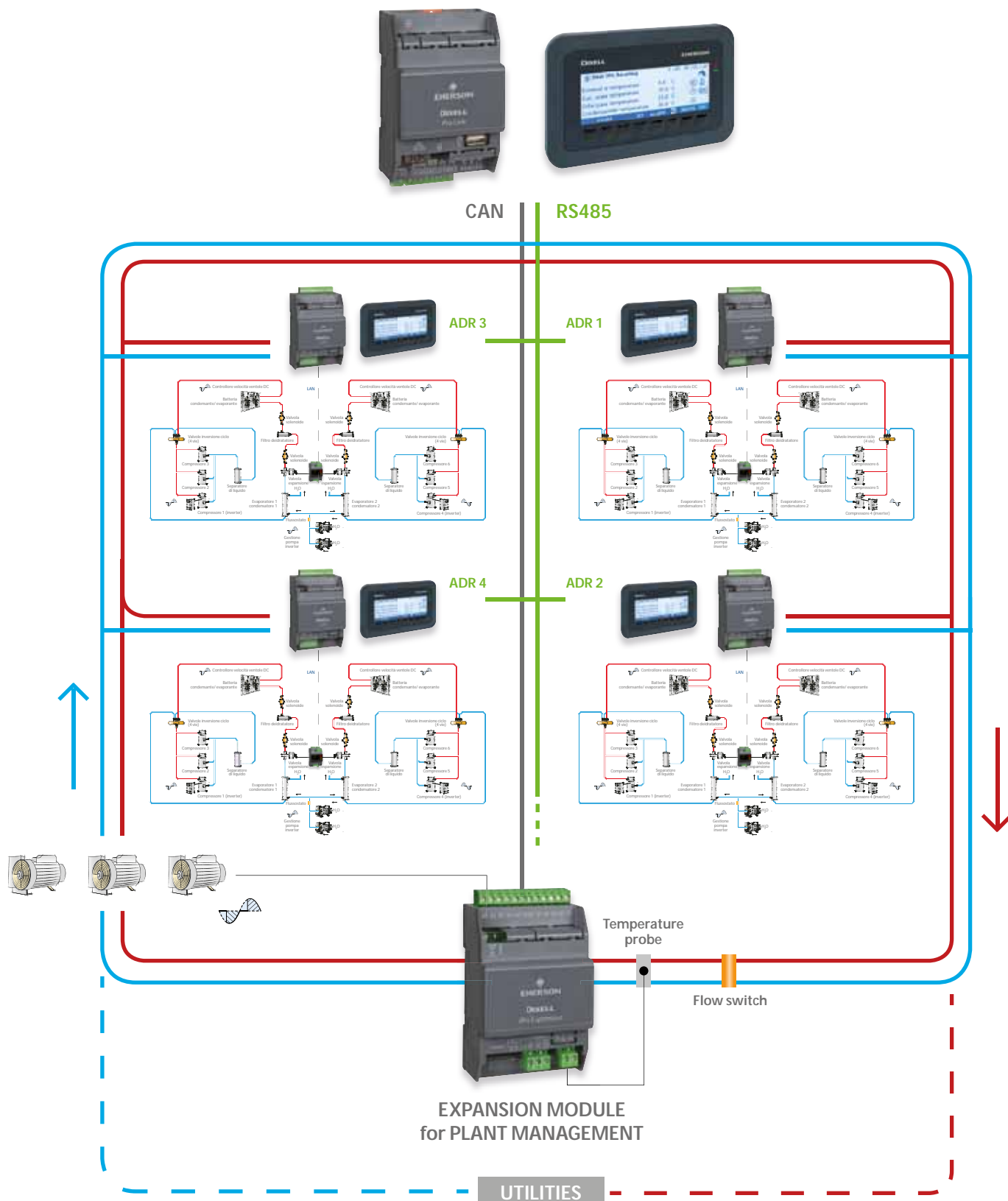
Thanks to IPM500D all the benefits of the iPro connectivity are available for the plant.



EXPANSION

The ability to link an expansion to IPM500D enables many features already present.

- Up to 3 On/Off water pumps management
- Up to 2 flow switches and 1 configurable pressure switch
- Shut-down function via digital input
- Limiting power function via digital input
- Changeover function via digital input
- Plant regulation via probes



The completeness and flexibility of the IPM500D module, offer the possibility to develop custom web pages for the master.



BACK-UP MACHINE FUNCTION

One of the units in the system can be configured as back-up machine. The back-up machine offers considerable advantages to the system.

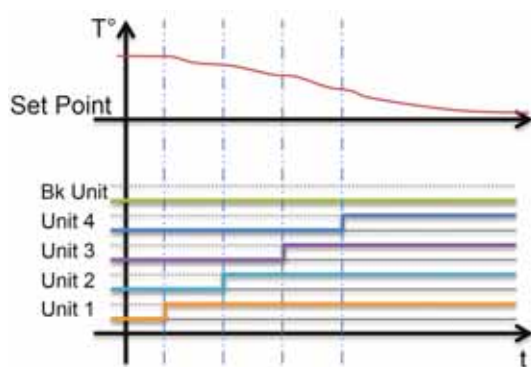
- Compensation of units in alarm for the maintenance of system power
- Rotation between units (in addition to the rotation between circuits and to that between compressors)
- Supply of extra-power during overboost phases

OVERBOOST FUNCTION

The overboost function was developed in order to allow the system to reach the desired temperature in the shortest time possible by using all the available resources.

The function can be activated manually or timed.

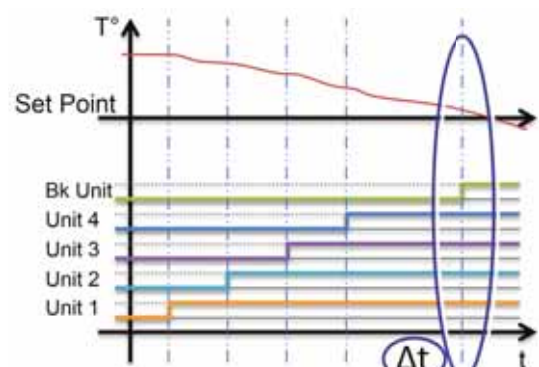
Without OVERBOOST



The power output is not enough for the set point to be reached

OVERBOOST ACTIVATION

With TIME OVERBOOST



The back-up unit delivers extra power allowing the set point to be reached

MASTER/SLAVE MODULE

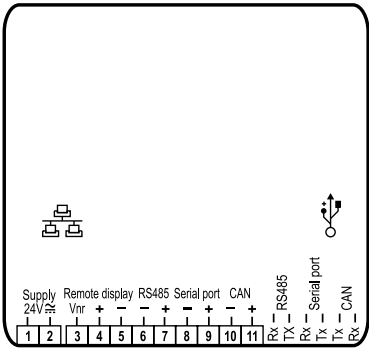


IPM500D

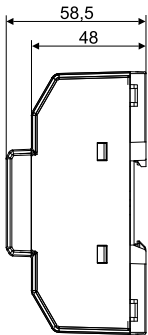
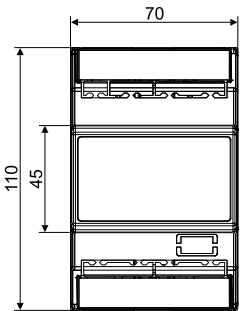
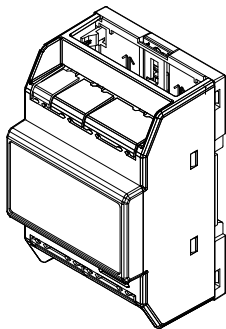
Master/slave module with up to 10 slave units management (max 40 steps)

FEATURES	IPM500D
Power supply	24Vac/dc from TF20D
Outputs	
RS485	slave
USB	pres
RS485	master
CANBus	pres
Ethernet	pres
Other	
Remote keyboard	V2IPM/VTIPM
Expansion	IPX106D, IPX306D
Real time clock	pres
Flash memory	128MB
Connections	screw
Connection kit	IP-FC500

IPM500D

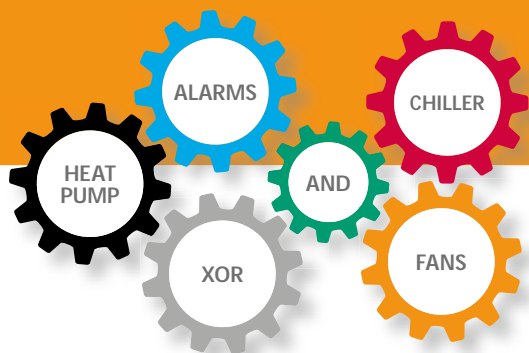


DIMENSIONS



Function blocks

DEVELOPMENT TOOL for CUSTOM
and MODULAR APPLICATIONS



In addition to standard controllers dedicated to the complete management of "conventional units" such as chillers, heat pumps, air handling units (AHU) and dry coolers, Dixell provides a cutting-edge development environment for solutions for applications such as close control, shelter and roof-top.

The iPro programmable controllers family is enhanced thanks to a NEW APPROACH for a fast and easy DEVELOPMENT of APPLICATIONS. In a short time you can now create custom applications using the new ISaGRAPH® development tool, the complete family of function blocks and the many available templates.

The STRUCTURE

NEW FUNCTION BLOCK STRUCTURE

EASIER WAY TO MODIFY
OR ADAPT AN APPLICATION

All applications can be developed
starting from the same template,
then we can use different libraries.

FASTER AND EASIER DEVELOPMENT

For example, the HVAC application
already developed can be used for
simple chiller units, or it can be modified
to create a more complex application.

WEBSITE



The iProAcademy website is totally intuitive and featuring an attractive design. The exchange of information between the members of the iProAcademy and the users themselves is the point of strength of the new website. The site is available at the <http://ipro.academy> address.

Several sections are available:

- FAQ
- Documentation download
- Forum
- "Function block" libraries
- Newsletter
- Templates
- Calendar

IProACADEMY

The iProAcademy is a Center of Excellence that combines INNOVATION REQUESTS received from the market with TECHNOLOGICAL OPPORTUNITIES, guaranteeing a continuous growth of the iPro Platform. The iPro Academy team CREATES, TRAINS, COORDINATES and SUPPORTS the application developers/customers.

We organize focused TRAININGS depending on different levels and needs using advanced training methods:

- In class
- E-learning (by WebEx meeting)
- Self-learning (video)





HMI (Human Machine Interface)

46 VI - remote control - LED display

46	Adapters for VI keyboards	V-KIT/W – V-KIT/B
47	Remote keyboards for IC100/200 evo controllers	VI613 – VICX620 – VI622

48 VISOGRAPH - remote control - LCD graphic display

49	Graphic keyboard for IC100 evo controllers	V2I810
49	Graphic keyboard for IC200 evo controllers	V2I820
49	Graphic keyboard for iProCHILL controllers	V2IPC
49	Graphic keyboard for iProLINK, iProAHU and iProDRY-COOLER controllers	V2IPG
49	Graphic keyboard for IPM500D controllers	V2IPM

50 VISOTOUCH - high programmability - touch screen display

52	Touch screen display for IC100 evo controllers	VTIC10
52	Touch screen display for IC200 evo controllers	VTIC20
52	Touch screen display for iProCHILL controllers	VTIPC
52	Touch screen display for iProLINK, iProAHU and iProDRY-COOLER controllers	VTIPG
52	Touch screen display for IPM500D controllers	VTIPM

VI

REMOTE KEYBOARDS with LED DISPLAY



VI remote keyboards, combined with IC100 evo and IC200 evo controllers, are the ideal solution to control and manage the unit remotely.

- Quick and easy panel mounting (also wall mounting by V-KIT for VI keyboards)
- Up to 2 keyboards
- Maximum distance from the controller: 100m
- Optional internal temperature probe

ADAPTERS for VI KEYBOARDS

Besides wall or panel mounting (using a standard commercial enclosure), VI keyboards can be easily wall mounted using the V-KIT adapter, available in black or white colors.



V-KIT/W

Wall adapter for vertical keyboards - white

V-KIT/B

Wall adapter for vertical keyboards - black

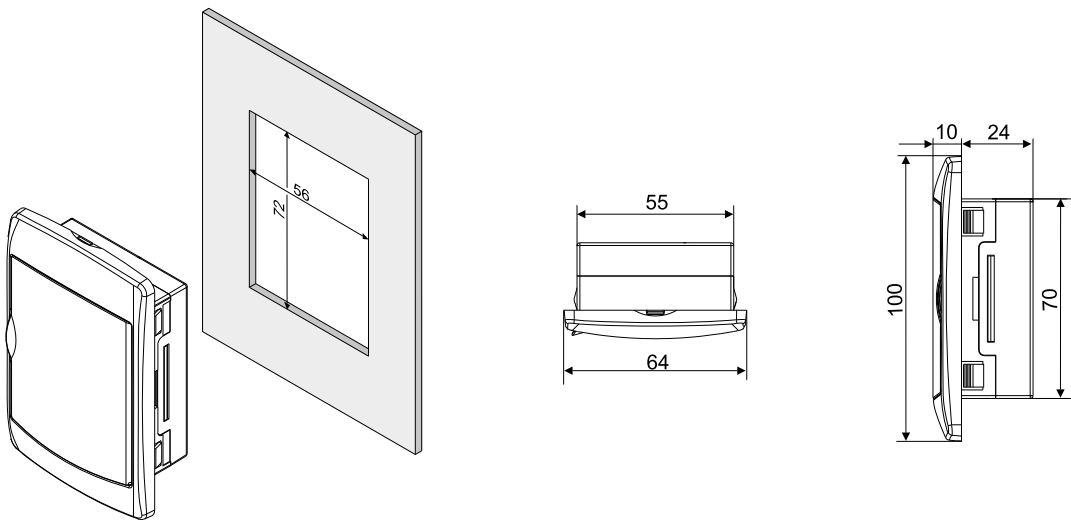
REMOTE KEYBOARDS for IC100/200 evo CONTROLLERS



VI613	Vertical keyboard for IC100 evo controllers
VICX620	Vertical keyboard for IC206CX and IC208CX controllers
VI622	Vertical keyboard for IC205D and IC207D controllers

FEATURES	VI613	VICX620	VI622
First display: n° digits	±4 d.p.	±4 d.p.	±4 d.p.
Second display: n° digits	±4 d.p.	±4 d.p.	±4 d.p.
Power supply	from controller	from controller	from controller
Internal probe	opt	opt	opt
Buzzer	opt	opt	opt

DIMENSIONS & CUT-OUT



VISOGRAPH

REMOTE KEYBOARDS with LCD GRAPHIC DISPLAY



VISOGRAPH graphic displays are characterized by a new design and a membrane keyboard and are ideal for interfacing with compatible Dixell controllers (**IC100/200 evo**, **iPro** and **IPM500D**); they instantly provide complete information about the status of a machine or of a residential plant thanks to an intuitive and complete interface. The keyboards, suitable for both panel and wall mounting, are available in black or white, with flat or chamfered frame.

- Built-in probe for temperature and humidity control
- Frontal red LED (alarms) and green LED (ON status)
- 240x96pixels LCD display
- VISOPROG development tool for the creation of graphic interfaces
- VISOKEY output to upload or download the user interface application
- UNICODE character compatible (Oriental languages)
- Maximum distance from the controller: 100m
- Possibility to connect an additional external temperature probe
- Quick panel or wall mounting

PROGRAMMING TOOL

Thanks to the VISOPROG software developed by Dixell, it is possible to create simple and intuitive user interfaces based on customer's needs.



GRAPHIC DISPLAYS for IC100/200 evo, iPro and IPM500D controllers

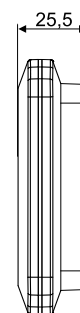
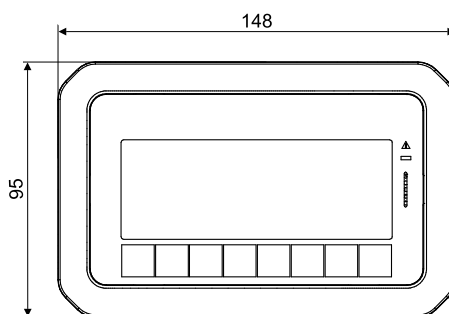
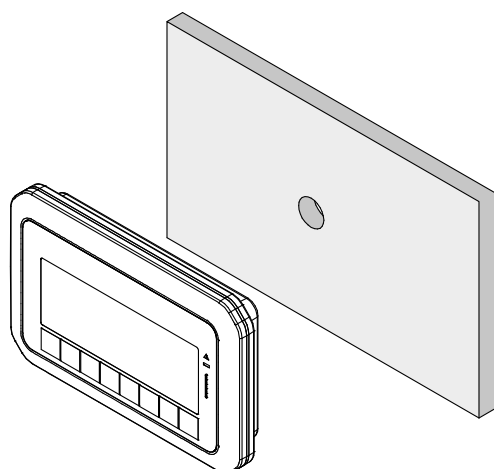
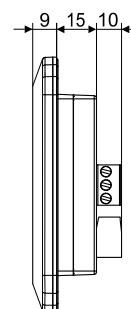
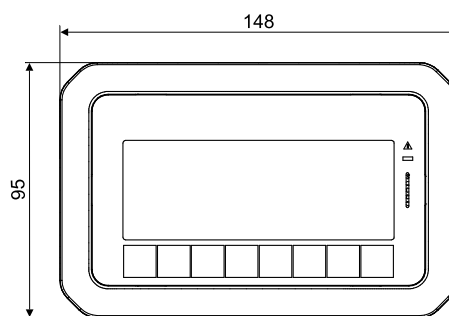
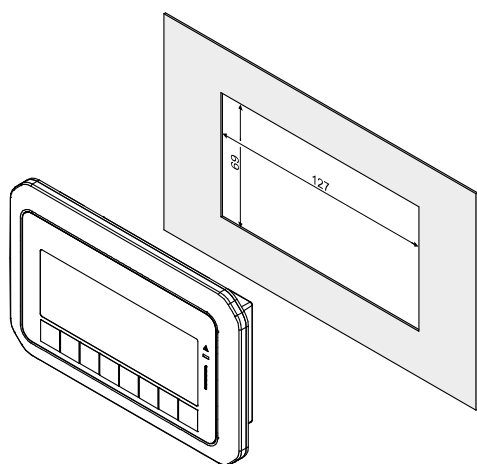


V2I810	Graphic display with interface for IC100 evo controllers
V2I820	Graphic display with interface for IC200 evo controllers
V2IPC	Graphic display with interface for iProCHILL controllers
V2IPG	Graphic display with interface for iProLINK, iProAHU and iPro DRY-COOLER controllers
V2IPM	Graphic display with interface for IPM500D controllers

FEATURES	V2I810	V2I820	V2IPC	V2IPG	V2IPM
<i>Power supply</i>	from controller	from controller	from controller	from controller	da controllore
<i>Internal and external probe</i>	opt	opt	opt	opt*	opt
<i>Visokey output</i>	pres	pres	pres	pres	pres
<i>Buzzer</i>	opt	opt	opt	opt*	opt

* for iProAHU and iProDRY-COOLER versions, probes aren't available and the buzzer is always present

DIMENSIONS & CUT-OUT



VISOTOUCH

PROGRAMMABLE TOUCH SCREEN DISPLAYS



VISOTOUCH programmable touch screen display features a wide 4.3" and ensures a high performing hardware and full compatibility with **IC100/200 evo**, **iPro** and **IPM500D**. The elegant design, the compact and solid structure and the possibility of panel or wall mounting, make it extremely versatile and suitable for residential environments or as a machine terminal. Available in horizontal and vertical versions, with or without built-in probes, it is particularly appreciated for its high degree of connectivity, for its touch technology and for its bright display.

VISOTOUCH was created to make Dixell controllers with LAN port even more complete, simple and intuitive.

- Built-in probe for temperature and humidity control
- Frontal red LED (alarms) and green LED (ON status)
- High connectivity degree via LAN, RS485 (with ModBUS protocol) and USB port
- Graphic display TFT
- High programmability thanks to the VISOPROG software
- Versatility in mounting (panel or wall) and in the format (horizontal or vertical)
- Maximum distance from the controller: 100m
- Possibility to connect an additional external temperature probe

PROGRAMMING TOOL

Thanks to the VISOPROG software developed by Dixell, it is possible to create simple and intuitive user interfaces based on customer's needs. Icons and colored texts give to the screen a more modern and appealing look, making the access to information even more clear and immediate.

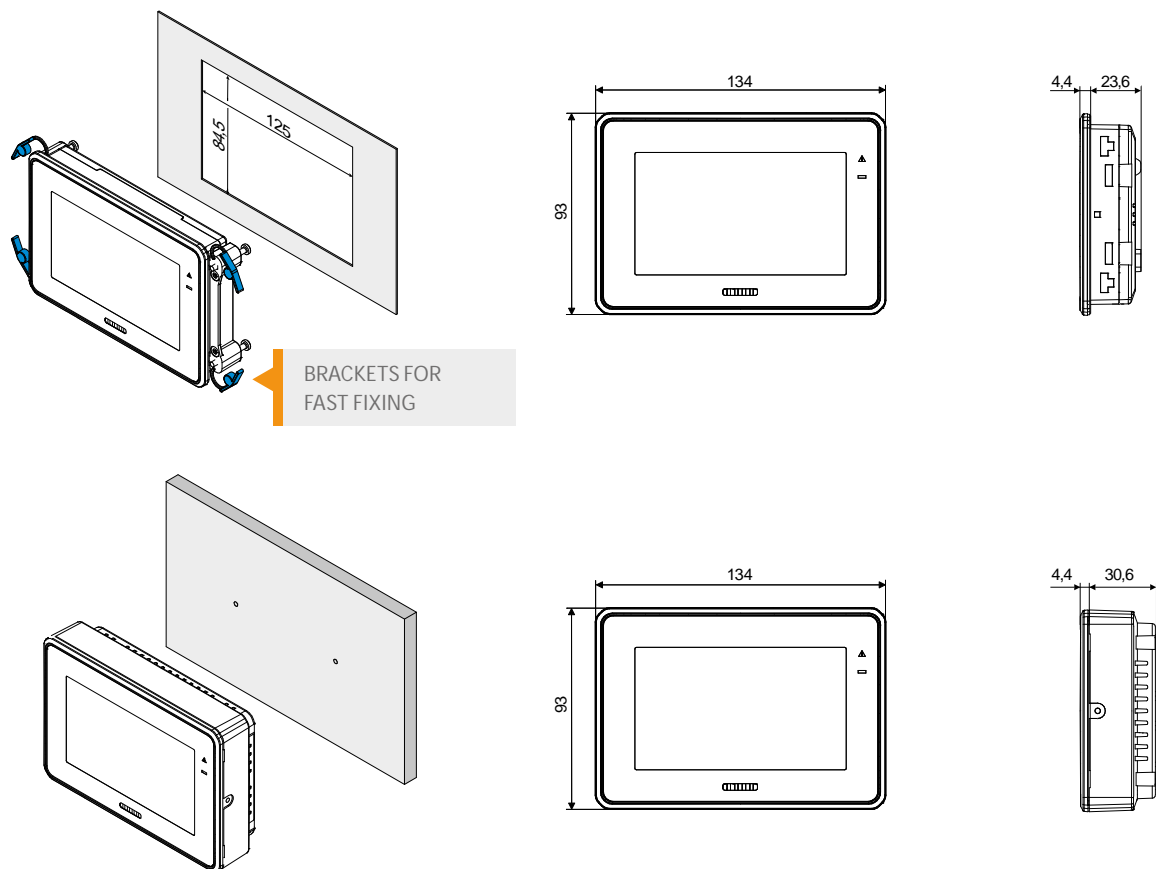


HIGH CUSTOMIZATION POSSIBILITIES

The graphic TFT color display stands out thanks to its great brightness and provides real-time information in a clear and detailed way. Thanks to its many features available, you can quickly create user interfaces dedicated to specific customer's needs.



DIMENSIONS & CUT-OUT



PROGRAMMABLE TOUCH SCREEN DISPLAY

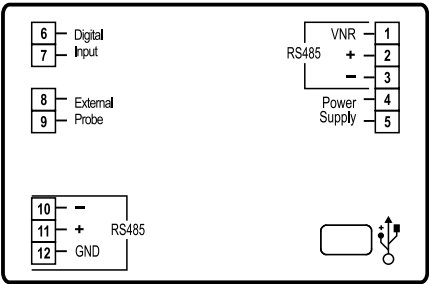


VTIC10	TFT touch screen display for IC100 evo controllers
VTIC20	TFT touch screen display for IC200 evo controllers
VTIPC	TFT touch screen display for iProCHILL controllers
VTIPG	TFT touch screen display for iProLINK, iProAHU and iPro DRY-COOLER controllers
VTIPM	TFT touch screen display for IPM500D controllers

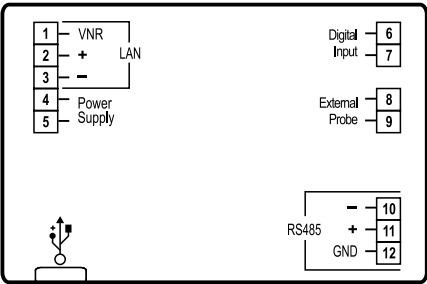
FEATURES	VTIC10	VTIC20	VTIPC	VTIPG	VTIPM
Power supply	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc	12, 24Vac/dc
Internal and external probe, digital input	opt	opt	opt	opt*	opt
LAN output	pres	pres	pres	pres	pres
RS485 output	opt	opt	opt	opt	opt
Buzzer	pres	pres	pres	pres	pres

* for iProAHU and iProDRY-COOLER versions, probes and digital input aren't available

Panel mounting version



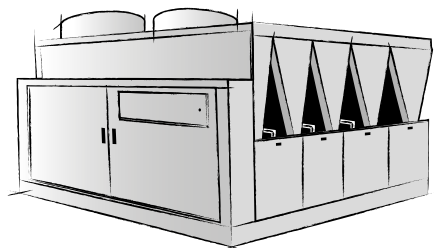
Wall mounting version



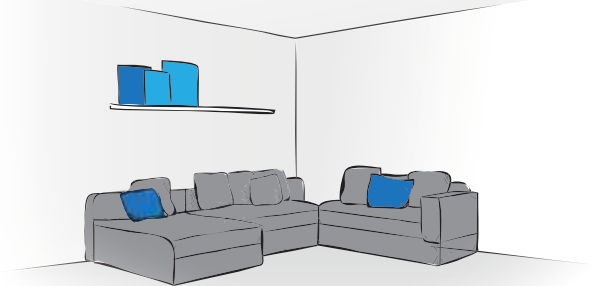
MAIN APPLICATIONS

The high performance hardware and the compatibility with Dixell controllers make VISOTOUCH the ideal answer to the needs of the HVAC field.

CHILLER, AHU, DRY-COOLER and HEAT PUMPS



ROOM TERMINALS





EEV DRIVER

54 IEV & XEV - management of stepper electronic expansion valves

- | | | |
|----|------------------------------------------------------------------------------------------------------|-----------------------------------|
| 56 | Drivers for EEV management with stand-alone functioning or compatible with IC100/200 evo controllers | IEV12D – IEV14D – IEV22D – IEV24D |
| 57 | Driver for EEV management compatible with iPro controllers | XEV20D |

IEV & XEV SERIES

DRIVER for STEPPER ELECTRONIC EXPANSION VALVES MANAGEMENT

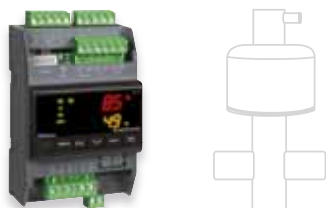


IEV & XEV represent Dixell solution for stepper electronic expansion valves management. IEV models (stand-alone functioning or combined with IC100/200 evo controllers) and XEV20D (combined with iPro controllers), allow the best superheat regulation of the unit. In this way the maximum performance of the unit is guaranteed during every weather operating condition, thus improving energy saving.

- Unipolar/bipolar stepper valve support
- Increased energy savings
- Models managing 1 or 2 valves

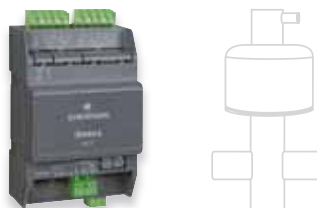
IEV

- RS485 output for connection to monitoring systems
- LAN output for connection to IC100/200 evo controllers
- Programming via HOT KEY or PC (WIZMATE PROG TOOL KIT)



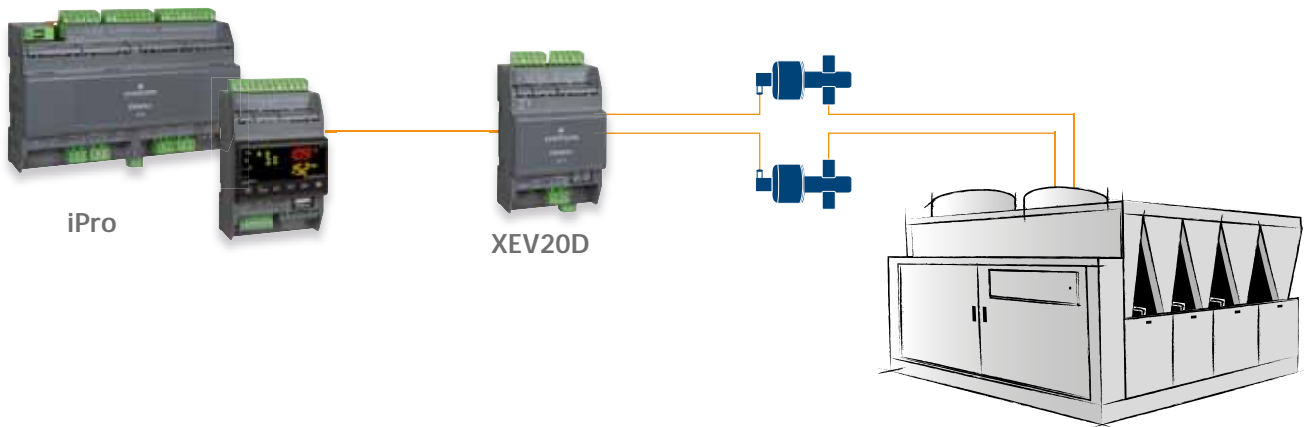
XEV

- CANBus output for connection to iPro controllers (10DIN format)
- LAN output for connection to iPro controllers (4DIN format)
- 4 position DIP Switch to set the address



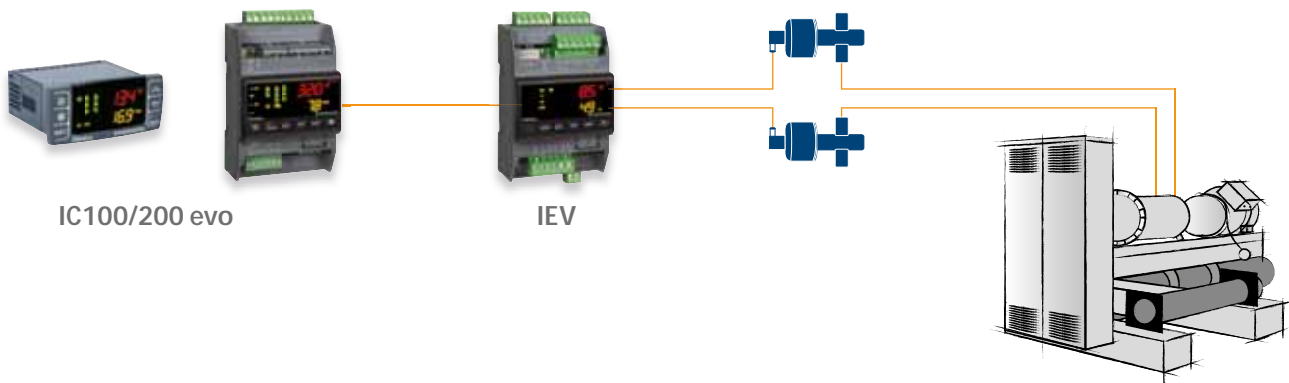
EXAMPLE of APPLICATION with XEV20D DRIVER

XEV20D driver combined with iPro controllers is the ideal solution for complex units.

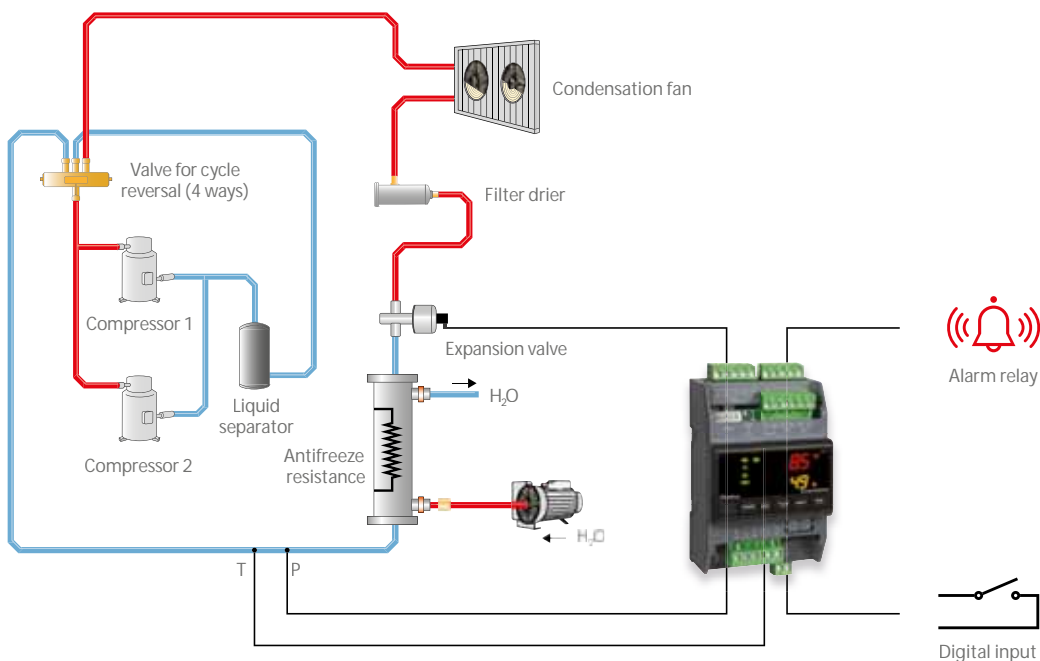


EXAMPLE of APPLICATION with IEV DRIVER

IEV drivers are designed to be combined with IC100/200 evo controllers or to work in stand-alone mode and thanks to their algorithms they are ideal for the electronic expansion valves adjustment.



1 CIRCUIT APPLICATION with STAND-ALONE FUNCTIONING



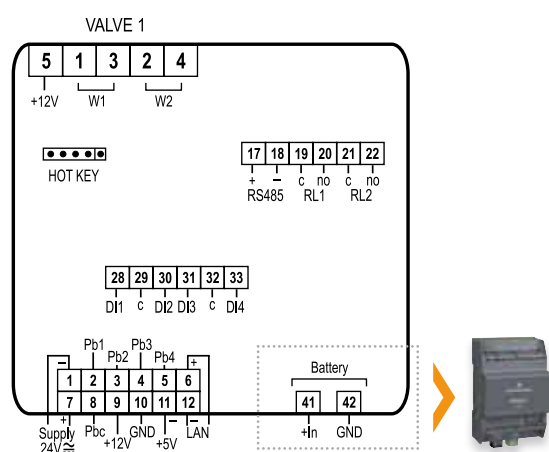
DRIVERS for EEV MANAGEMENT with STAND-ALONE FUNCTIONING and COMPATIBLE with IC100/200 evo CONTROLLERS



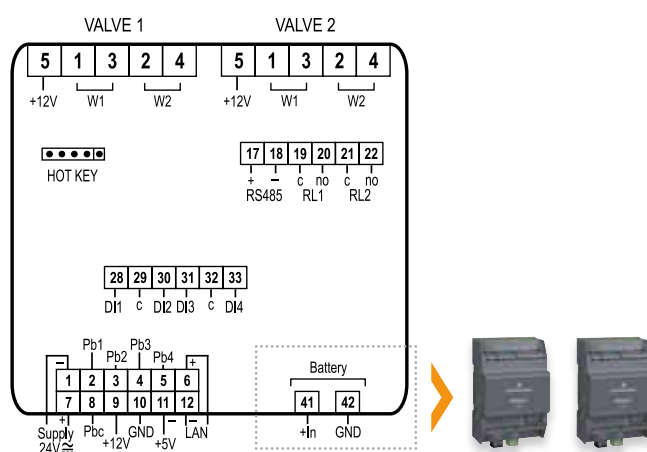
IEV12D	Driver for 1 unipolar stepper electronic expansion valve with stand-alone functioning or in combination with IC100/200 evo controllers
IEV14D	Driver for 2 unipolar stepper electronic expansion valves with stand-alone functioning or in combination with IC100/200 evo controllers
IEV22D	Driver for 1 unipolar and bipolar stepper electronic expansion valve with stand-alone functioning or in combination with IC100/200 evo controllers
IEV24D	Driver for 2 unipolar and bipolar stepper electronic expansion valves with stand-alone functioning or in combination with IC100/200 evo controllers

FEATURES	IEV12D	IEV14D	IEV22D	IEV24D
First display: n° digits	±4 d.p.	±4 d.p.	±4 d.p.	±4 d.p.
Second display: n° digits	±4 d.p.	±4 d.p.	±4 d.p.	±4 d.p.
Display: n° digits	5	5	5	5
Power supply	24Vac/dc (from TF20D)	24Vac/dc (from TF40D)	24Vac/dc (from TF20D)	24Vac/dc (from TF40D)
N° valves/type	1/unipolar	2/unipolar	1/unipolar or bipolar	2/unipolar or bipolar
Probe inputs				
Pressure	4÷20mA/0÷5V config	4÷20mA/0÷5V config	4÷20mA/0÷5V config	4÷20mA/0÷5V config
Temperature	Pt1000/NTC config	Pt1000/NTC config	Pt1000/NTC config	Pt1000/NTC config
Digital inputs				
Free voltage	n° 4	n° 4	n° 4	n° 4
Relay outputs				
24V 0,5A	n° 2	n° 2	n° 2	n° 2
Other				
Hot Key output	pres	pres	pres	pres
LAN output	pres	pres	pres	pres
RS485 output	pres	pres	pres	pres
Connection kit	DWXEV30	DWXEV30	DWXEV30	DWXEV30

IEV12D - IEV22D



IEV14D - IEV24D



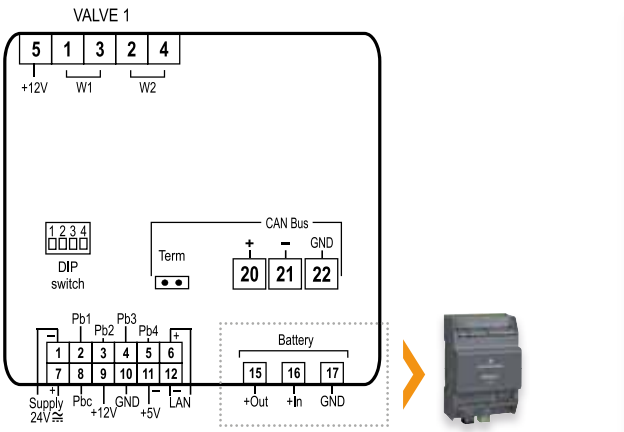
DRIVER for EEV MANAGEMENT COMPATIBLE with iPro CONTROLLERS



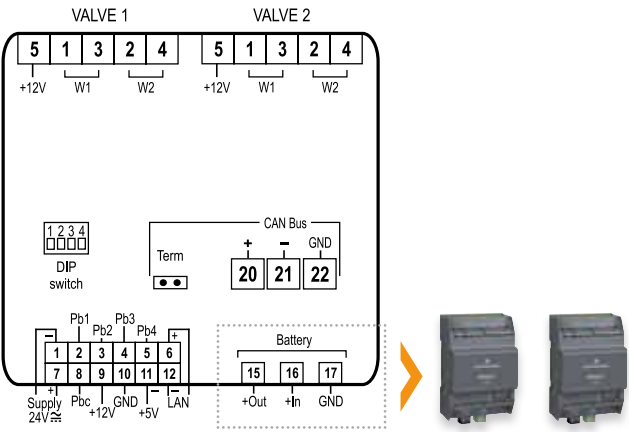
XEV20D Driver for 1 or 2 unipolar and bipolar stepper electronic expansion valves for iPro controllers

FEATURES		XEV20D
Power supply		24Vac/dc (from TF20D/TF40D)
N° valves		up to 2
Probe inputs		
N°4 (Pb1, Pb2, Pb3, Pb4)		0÷5V/4÷20mA/NTC/PTC/Pt1000 config
Other		
LAN output		pres
CANBus output		pres
DIP switch for address selection		pres
Connection kit		DWXEV30

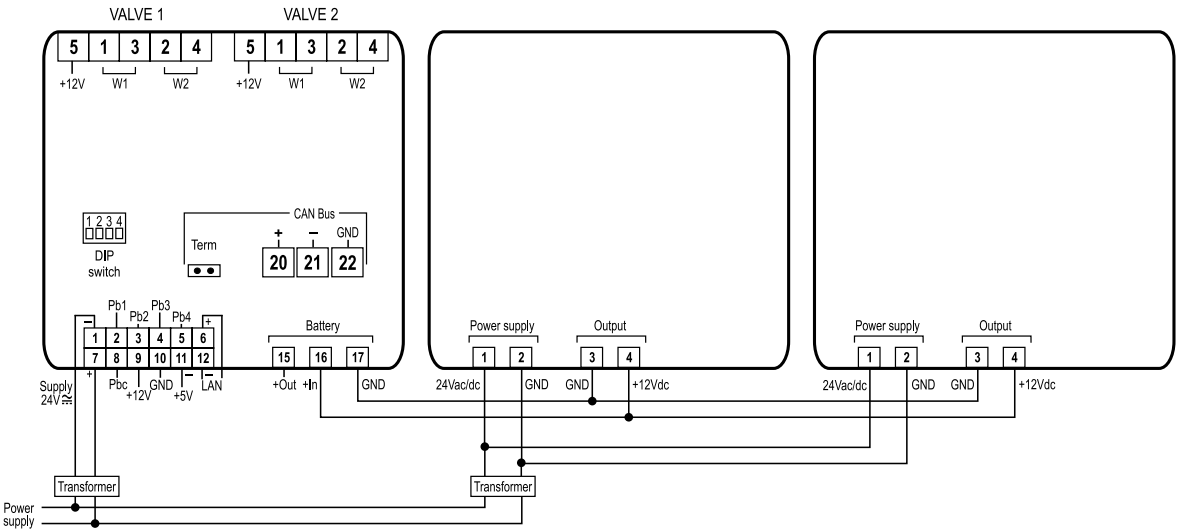
XEV20D - 1 valve



XEV20D - 2 valves



XEV20D - 2 valves and XEC back-up modules



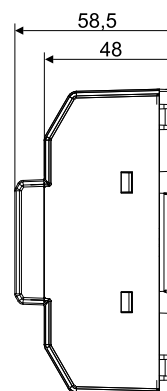
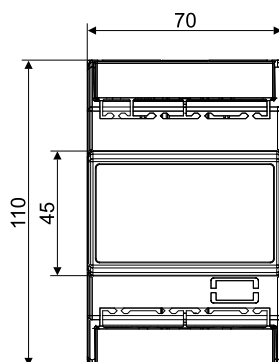
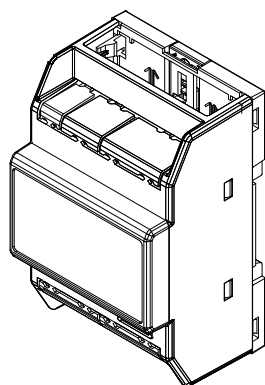
BACK-UP MODULE



XEC back-up module
for valve closing
in case of lack
of power supply



DIMENSIONS





FAN SPEED CONTROLLERS

60 **XV05/10/22 - single-phase fan speed control**

61	Single-phase fan speed controllers	XV05PD – XV05PK – XV10PK – XV22PK
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62 **XV300 - three-phase fan speed control**

63	Three-phase fan speed controllers in slave version	XV308K – XV310K – XV312K – XV316K – XV320K XV328K – XV340K – XV350K – XV360K
64	Three-phase fan speed controllers in master version	XV308K – XV312K – XV320K – XV328K XV340K – XV350K – XV360K

XV05/10/22 SERIES

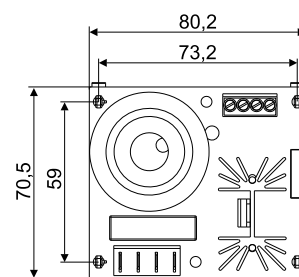
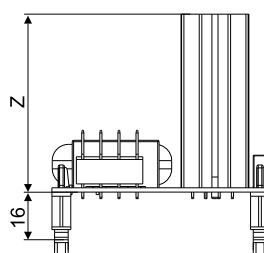
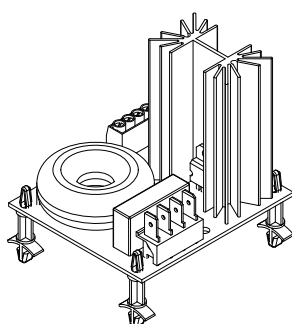
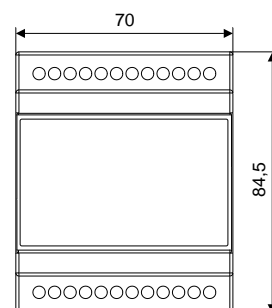
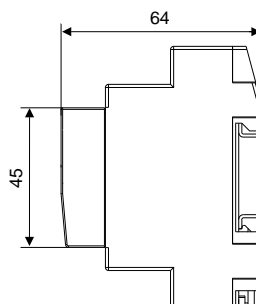
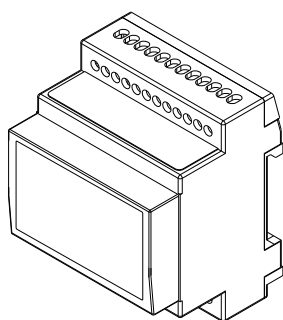
SINGLE-PHASE FAN SPEED CONTROLLERS



XV05/10/22 is the range of cut phase controllers dedicated to condenser fans speed control.

- Compatibility with all IC100/200 evo controllers
- Compatibility with iPro controllers
- Trigger output to drive up to 2 modules

DIMENSIONS



XV05PK
Z = 26,5

XV10PK
Z = 43,5

XV22PK
Z = 65,5

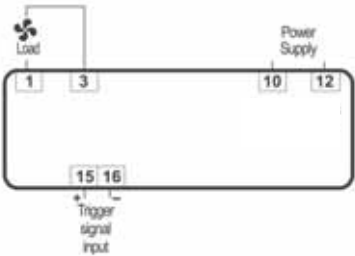
SINGLE-PHASE FAN SPEED CONTROLLERS



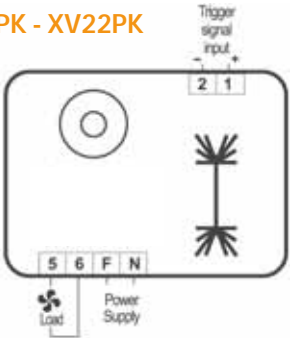
XV05PD XV05PK	Fan speed controllers designed for single-phase A.C. motors up to 500W, 2A, PWM input
XV10PK	Fan speed controller designed for single-phase A.C. motors up to 1000W, 4A, PWM input
XV22PK	Fan speed controller designed for single-phase A.C. motors up to 2200W, 9,5A, PWM input

FEATURES	XV05PD	XV05PK	XV10PK	XV22PK
Power supply	230Vac	230Vac	230Vac	230Vac
Maximum load	2A	2A	4A	9,5A
Control input	PWM	PWM	PWM	PWM
Trigger signal	pres	pres	pres	pres

XV05PD



XV05PK - XV10PK - XV22PK



XV300 SERIES

THREE-PHASE FAN SPEED CONTROLLERS



XV300 is the range of cut phase controllers dedicated to condenser fans speed control in master or slave version, designed for the control of three-phase fan speed with adjustable voltage asynchronous motors. The versatility of the range and the 9 power levels available (from 5,5KVA to 41kVA) provide the optimal solution for each type of system.

- Designed for adjustable voltage motors from 8 to 60A
- Oversized heat sinks for better heat disposal
- Integrated heat protection
- Oversized power stages
- Optimized radiofrequency filters
- Time and costs reduction of wiring
- 0÷10V output to be used for testing operations
- Compatibility with all IC100/200 evo family controllers
- Compatibility with iPro family controllers

DIMENSIONS

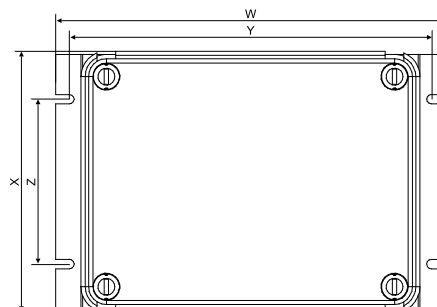
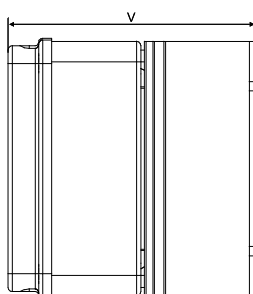
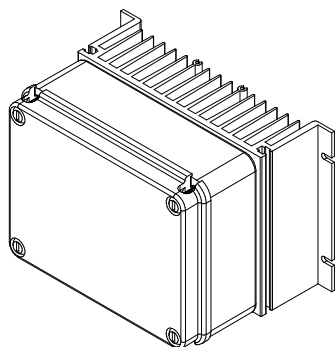
XV308K, XV310K
V = 150
W = 230
X = 165
Y = 220
Z = 90

XV312K, XV316K
V = 165
W = 230
X = 265
Y = 220
Z = 200

XV320K
V = 230
W = 230
X = 265
Y = 220
Z = 200

XV328K, XV340K
V = 235
W = 340
X = 270
Y = 322
Z = 165

XV350K, XV360K
V = 235
W = 340
X = 440
Y = 322
Z = 340



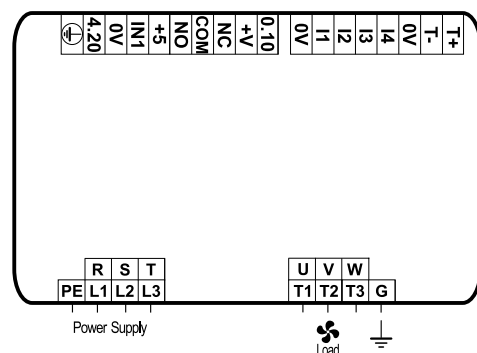
THREE-PHASE FAN SPEED CONTROLLERS in SLAVE VERSION



XV308K	Fan speed controller designed for three-phase A.C. motors up to 5,5kVA, 8A, with input for PWM, 4÷20mA or 0÷10V
XV310K	Fan speed controller designed for three-phase A.C. motors up to 6,5kVA, 10A, with input for PWM, 4÷20mA or 0÷10V
XV312K	Fan speed controller designed for three-phase A.C. motors up to 8kVA, 12A, with input for PWM, 4÷20mA or 0÷10V
XV316K	Fan speed controller designed for three-phase A.C. motors up to 11kVA, 16A, with input for PWM, 4÷20mA or 0÷10V
XV320K	Fan speed controller designed for three-phase A.C. motors up to 13kVA, 20A, with input for PWM, 4÷20mA or 0÷10V
XV328K	Fan speed controller designed for three-phase A.C. motors up to 19kVA, 28A, with input for PWM, 4÷20mA or 0÷10V
XV340K	Fan speed controller designed for three-phase A.C. motors up to 26kVA, 40A, with input for PWM, 4÷20mA or 0÷10V
XV350K	Fan speed controller designed for three-phase A.C. motors up to 32kVA, 50A, with input for PWM, 4÷20mA or 0÷10V
XV360K	Fan speed controller designed for three-phase A.C. motors up to 41kVA, 60A, with input for PWM, 4÷20mA or 0÷10V

FEATURES	XV308K	XV310K	XV312K	XV316K	XV320K	XV328K	XV340K	XV350K	XV360K
<i>Power supply</i>	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac
<i>Protection grade</i>	IP55	IP20	IP55	IP20	IP55, IP20 opt	IP55, IP20 opt	IP55, IP20 opt	IP55	IP55
<i>Maximum load</i>	8A	10A	12A	16A	20A	28A	40A	50A	60A
<i>Control input</i>	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V
<i>Alarm relay</i>	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc
<i>Auxiliary output</i>	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc
<i>Supply LED</i>	pres	pres	pres	pres	pres	pres	pres	pres	pres
<i>Alarm LED</i>	pres	pres	pres	pres	pres	pres	pres	pres	pres
<i>ModBUS-RTU</i>	pres	pres	pres	pres	pres	pres	pres	pres	pres

XV308K - XV310K - XV312K - XV316K - XV320K - XV328K - XV340K - XV350K - XV360K



THE TERMINAL POSITION
CAN VARY DEPENDING
ON THE MODEL

THREE-PHASE FAN SPEED CONTROLLERS in MASTER VERSION



XV308K Fan speed controller designed for three-phase A.C. motors up to 5.5kVA, 8A, with input for PWM, 4÷20mA or 0÷10V

XV312K Fan speed controller designed for three-phase A.C. motors up to 8kVA, 12A, with input for PWM, 4÷20mA or 0÷10V

XV320K Fan speed controller designed for three-phase A.C. motors up to 13kVA, 20A, with input for PWM, 4÷20mA or 0÷10V

XV328K Fan speed controller designed for three-phase A.C. motors up to 19kVA, 28A, with input for PWM, 4÷20mA or 0÷10V

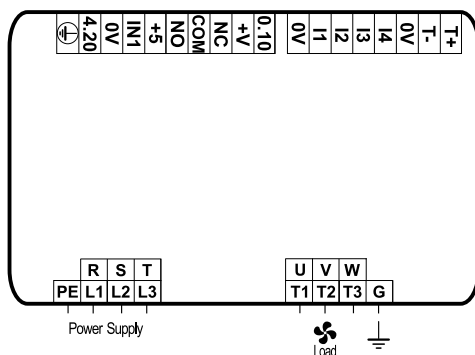
XV340K Fan speed controller designed for three-phase A.C. motors up to 26kVA, 40A, with input for PWM, 4÷20mA or 0÷10V

XV350K Fan speed controller designed for three-phase A.C. motors up to 32kVA, 50A, with input for PWM, 4÷20mA or 0÷10V

XV360K Fan speed controller designed for three-phase A.C. motors up to 41kVA, 60A, with input for PWM, 4÷20mA or 0÷10V

FEATURES	XV308K	XV312K	XV320K	XV328K	XV340K	XV350K	XV360K
Power supply	230/400Vac	230/400Vac	230/400Vac	230/400Vac	230/400Vac	230/400Vac	230/400Vac
Protection grade	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Maximum load	8A	12A	20A	28A	40A	50A	60A
Control input	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V
Alarm relay	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc
Auxiliary output	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc
OLED LCD display	opt	opt	opt	opt	opt	opt	opt
Real time clock	opt	opt	opt	opt	opt	opt	opt
ModBUS-RTU	pres	pres	pres	pres	pres	pres	pres

XV308K - XV312K - XV320K - XV328K - XV340K - XV350K - XV360K



THE TERMINAL POSITION
CAN VARY DEPENDING
ON THE MODEL



SYSTEMS

66 XWEB evo - alarm monitoring and controlling

69	Alarm and controlling web server	XWEB300D evo
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69	Monitoring and controlling web server	XWEB500D evo
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70 iProLINK - programmability - high connectivity

72	Connectivity module	IPL500D
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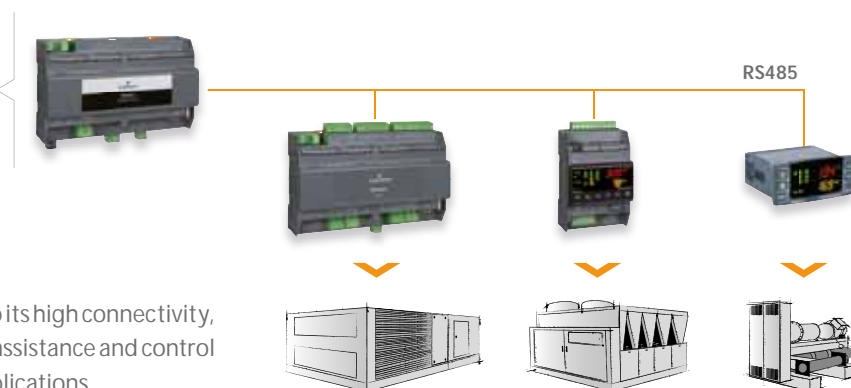
XWEB evo SERIES

ALARM MONITORING and CONTROLLING SYSTEMS



XWEB300D evo and **XWEB500D evo** are flexible solutions offered by Dixell for remote management, monitoring, and control of Dixell controllers and their alarms. Ideal for remote maintenance of chillers, roof-top units, heat pumps, and more, XWEB evo checks the unit status and in case of alarm malfunction, notifies recipients by SMS or e-mail. Information on alarm status given by the XWEB evo is fundamental in deciding the kind of action to take in order to optimize time and costs.

- Connection to Dixell and other OEM compatible controllers with ModBUS-RTU
- Easy rail mounting (DIN) directly inside the machine framework (or wall using the special brackets)
- Quick and easy access to information on Web pages
- Access to functioning data from local or remote connection without using proprietary programs but with a standard browser
- Possibility to see and modify the parameters of the connected devices remotely
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical or tabular format (Excel®)
- Up to one year of stored data inside the XWEB evo memory
- Automatic data export to USB
- Customizable user interface (XWEB500D evo)



The XWEB evo family of controllers, thanks to its high connectivity, distinguishes itself as a best-solution in tele-assistance and control in residential, commercial and industrial applications.

UNIQUE INTERFACE

The XWEB evo web interface automatically adapts to each kind of device. The same look is available for PC, tablet and smartphone, ensuring the same completeness of information for mobile devices.



CONNECTIONS

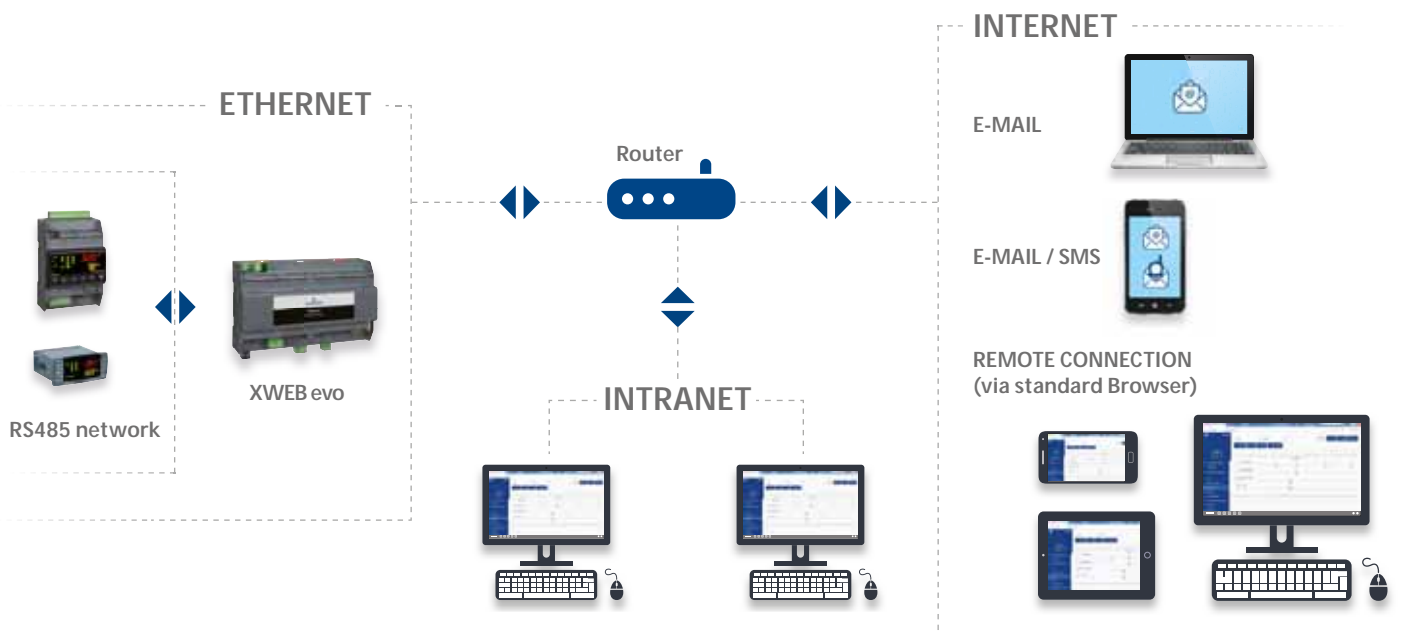
LOCAL CONNECTIONS

XWEB evo systems can be connected directly to a PC.

REMOTE CONNECTIONS

XWEB evo systems servers can be remotely accessed using several methods:

- By modem with point to point connection;
- By Ethernet network with standard net connector RJ45;
- By Internet connection, once provided a public and static IP address.



FUNCTIONS

The XWEB evo family provides the user with special functions for the control of connected units; they are user-friendly thanks to an intuitive and easy interface.

- **ALARM MACHINE STATUS**

This special function allows to display the machine status during an alarm in order to give useful information to the user about alarm causes.

- **GRAPHS**

The XWEB evo gives the possibility to create high-resolution graphs to represent the recorded data on the same page. The graph also supports a multi-axis system that allows you to compare at the same time, temperatures, energy consumption, alarms, etc...

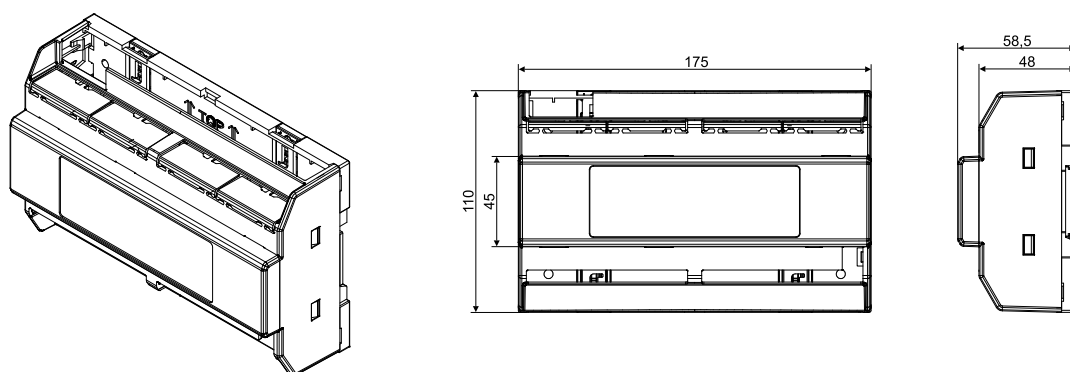
- **VIEW OF DEVICES**

The Run Time function displays main data of many devices simultaneously, in a unique window. This is a dynamic page and the displayed data are updated in real time. The status of the devices is displayed simply and clearly.

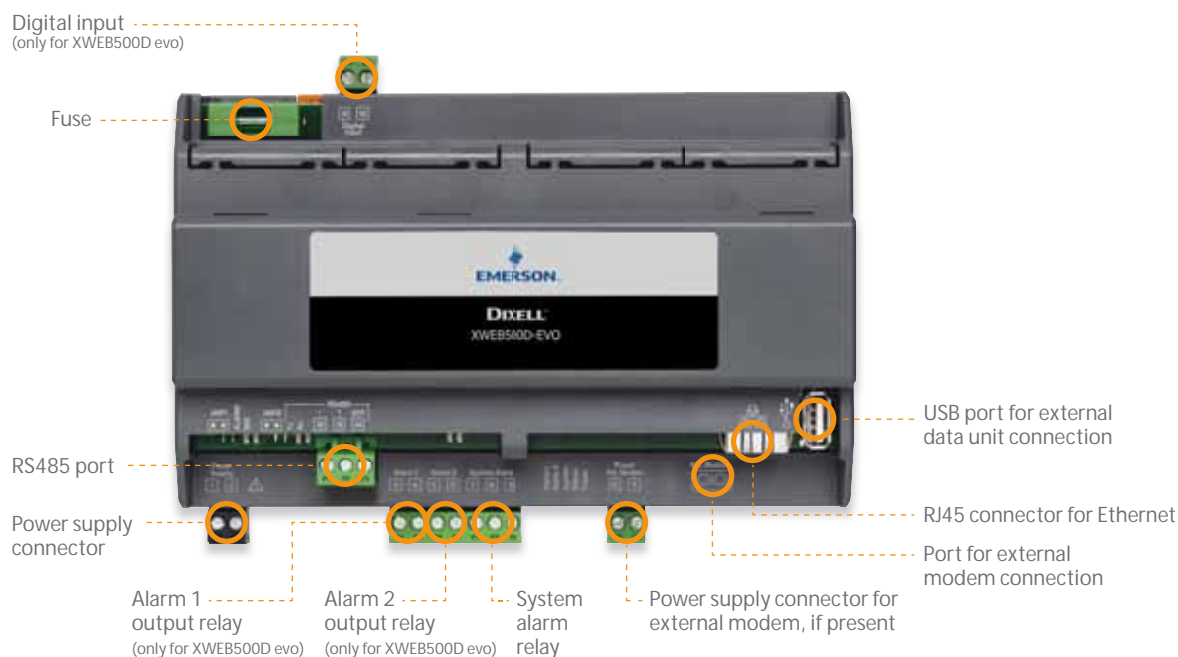
- **PARAMETERS**

With XWEB evo the user has an intuitive, yet powerful and versatile device that allows the user to modify all the various operation parameters of the instruments (for third party instrumentation please contact Dixell).

DIMENSIONS



HARDWARE



WEB SERVER for MONITORING, CONTROLLING and ALARM MANAGEMENT



XWEB300D evo

Web server for control and alarms management with the possibility to connect 6 or 18 instruments

XWEB500D evo

Web server for monitoring and control with the possibility to connect 36 or 100 instruments

FEATURES	XWEB300D evo	XWEB500D evo
Applications	small and medium	medium and large
Hardware		
Power supply	24Vac or 100÷230Vac	24Vac or 100÷230Vac
N° of instruments	6-18	36-100
Peripheral USB output	pres	pres
Relay outputs	1	3
Digital input		pres
LAN output	pres	pres
RS485 output	pres	pres
External modem support	pres	pres
Functions		
RS485 line-check	pres	pres
Parameter programming	pres	pres
Plant Home Page	pres	pres
Instruments visualization	pres	pres
Fast Sampling Mode	pres	pres
Data export in Excel format	pres	pres
Graphs	pres	pres
Circular graphs (high resolution charts)	pres	pres
Real time graphs	pres	pres
System log	pres	pres
Users setup	pres	pres
Instruments setup	pres	pres
System setup	pres	pres
Calendar setup	pres	pres
Alarms setup	pres	pres
System update	pres	pres
Connect+ support	pres	pres
Gateway ModBUS TCP/IP	pres	pres
TCP/IP protocol	pres	pres
Back-up/restore	pres	pres
Data log status	pres	pres
Automatic export module	pres	pres
Languages management	pres	pres
Consumption analyzer	pres	pres
Global command layout		pres
Alarms on XJR40D module		pres
Scheduler		pres
Performance meter		pres

iProLINK SERIES

HIGH CONNECTIVITY and PROGRAMMABILITY MODULE



iProLINK is the connectivity module designed to meet the different requirements of the HVAC world thanks to the many communication ports available. This device can be used as a collector of data from other devices, Dixell or third parties, for data storage and management and for Supervision actions processing and planning. Since it has been developed on a programmable platform, it is compatible both with hardware and software of the iPro family controllers. Applications can be downloaded directly into it for data processing or for the management of other devices, and to send and receive SMS and e-mail.

- Powerful platform characterized by LINUX operating system based on ARM9 (200MHz/32bit) microprocessor
- Ethernet for connection to intranet-internet and to other controllers for the management of distributed applications
- USB output for parameters download, alarms/data log and applications and parameters upload
- Slave serial output RS485 for connection to XWEB supervision and control or to applications developed by third party System Integrators
- BACnet communication which favors the system to an easy and immediate integration with components from other manufacturers ensuring absolute interoperability

WEBSITE

A helpful internal web server with a standard or customized web site that allows complete management of the unit through dedicated web pages.



iProLINK high connectivity ensures the full local and remote management of the unit/plant. A few features available are: receipt of the machine's operating status or alarms and transmission of commands such as change of comfort set of the plant and turning lights off and on.



CONNECTIVITY MODULE

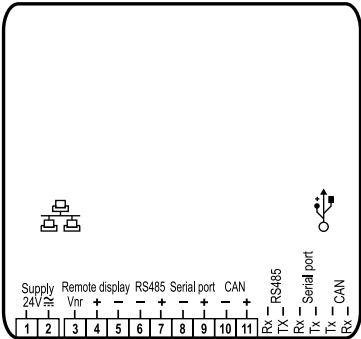


IPL500D

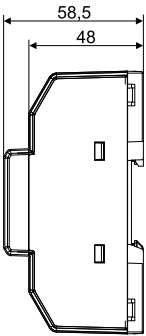
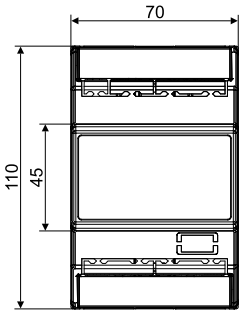
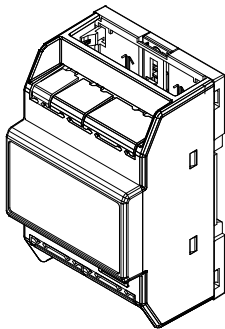
Programmable connectivity module for the collecting, storing, processing and management of the data. It is compatible with iPro and it is possible to download applications directly into it for data process or for the management of other devices

FEATURES	IPL500D
Power supply	24Vac/dc from TF20D
Outputs	
RS485	slave
USB	pres
LAN/RS485 master	pres
CANBus	pres
Ethernet	pres
Other	
Remote keyboard	V2IPG/VTIPG
Real time clock	pres
Flash memory	128MB
Connections	screw
Connection kit	IP-FC500
BACnet protocol	opt

IPL500D



DIMENSIONS





SENSORS

74 TEMPERATURE PROBES

74	NTC probes	NG6 – NG6P – NS4P – NS6S – NY6P – NP4-67 – NT6-67
75	PTC probes	S6 – S6.R – S6.S – S6.SH
75	PT1000 probes	PMG5P – PMP4-67 – PMT6-67

75 TEMPERATURE/HUMIDITY PROBES

75	Temperature/humidity probes	XH50P – XH55P
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76 PRESSURE TRANSDUCERS

76	Pressure transducers	PP07 – PP11 – PP30 – PP50
76	Ratiometric pressure transducers	PPR15 – PPR30 – PPR45
77	Ratiometric pressure transducers with automotive disconnectable connector	PP100 – PP101 – PP102 – PP103
77	Wires for ratiometric pressure transducers with automotive disconnectable connector	PPC02 – PPC05 – PPC02UV – PPC05UV – PPC08UV

78 AHU SENSORS

78	Temperature probes	APT1 – APT2
78	Temperature/humidity probes	APH0 – APH1 – APH2 – APH3
78	Differential pressure transducers	APP0
79	Differential pressure switch	APS0
79	Generic probes for air management	APG1 – APG2
79	Accessories for AHU sensors	APA0 – APA1 – APA2

80 GAS LEAK DETECTORS







80	Infrared-semi-conductor detectors	GDS41 – GDS66 – GDS41M – GDS66M – GDI41M – GDI66M
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SENSORS






TEMPERATURE PROBES



NTC PROBES

PROBE	DESCRIPTION	CABLE	TEMP. RANGE	
NG6	General purpose, over-molded, IP67, thermoplastic cap dimension Ø6x15mm	Thermoplastic 1,5m - 3,0m	-50÷120°C -58÷248°F	
NG6P	General purpose, over-molded, IP68, cap dimension Ø5x20mm	Thermoplastic 1,5m - 3,0m	-50÷110°C -58÷230°F	
NS4P	Rapid response, thermoplastic, IP67, inox steel cap dimension 4x40mm	UV-resistant thermoplastic 1,5m - 3,0m 6,0m - 12,0m	-50÷110°C -58÷230°F	
NS6S	General purpose, resinated, IP67, inox steel cap dimension Ø6x30mm	Silicone 1,5m - 3,0m	-50÷120°C -58÷248°F	
NY6P	Thermoplastic, IP68, inox steel cap dimension Ø6x50mm	Thermoplastic 1,5m - 3,0m	-50÷110°C -58÷230°F	
NP4-67	Pipemount fitting Ø4÷Ø30mm in diameter, IP67, over-molded, copper sensor	Thermoplastic 1,5m - 3,0m	-50÷110°C -58÷230°F	
NT6-67	Pipemount fitting Ø4÷Ø30mm in diameter, IP67, over-molded, thermoplastic sensor			

PTC PROBES

PROBE	DESCRIPTION	CABLE	TEMP. RANGE	
S6	General purpose, resinated, IP67, inox steel cap dimensions Ø6x30mm	PVC 1,5m - 3,0m	-30÷80°C -22÷176°F	
S6.R	Waterproof, resinated, IP67, inox steel cap dimensions Ø6x40mm	PVC 1,5m - 3,0m	-30÷80°C -22÷176°F	
S6.S	Waterproof, resinated, inox steel cap dimensions Ø6x30mm	Silicone 1,5m - 3,0m	-50÷120°C -58÷248°F	
S6.SH	Heating applications, inox steel cap dimensions Ø6x40mm	Silicone 1,5m - 3,0m	-50÷150°C -58÷302°F	

PT1000 PROBES

PROBE	DESCRIPTION	CABLE	TEMP. RANGE	
PMG5P	Thermoplastic, resinated, IP68, inox steel cap dimensions Ø5x20mm	Thermoplastic 1,5m - 3,0m	-50÷110°C -58÷230°F	
PMP4-67	Pipemount fitting Ø4÷Ø30mm in diameter, IP67, over-molded, copper sensor	Thermoplastic 1,5m - 3,0m	-50÷110°C -58÷230°F	
PMT6-67	Pipemount fitting Ø4÷Ø30mm in diameter, IP67, over-molded, thermoplastic sensor	Thermoplastic 1,5m	-50÷120°C -58÷248°F	

TEMPERATURE/HUMIDITY PROBES

Temperature/humidity probes for HVAC with DEW-POINT calculation and RS485 output with ModBUS protocol. They are ideal for residential/industrial conditioning (stand-alone functioning). If combined with iPro controllers, they become a fundamental device to manage the comfort of any room in houses, hotel rooms, hospitals, etc... In any zone it is possible to detect temperature and humidity simultaneously.

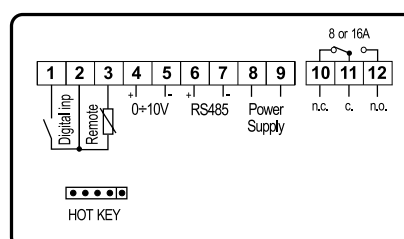
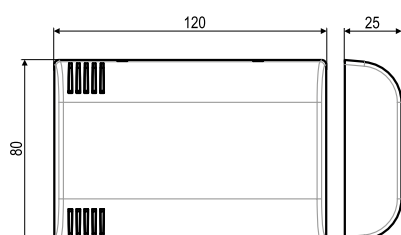
- LED to display the device status
- Wall mounting (503 box dim. compatible)
- NTC external probe for external/internal temperature compensation management
- 0÷10V output for mixing valves and regulation dampers management
- iPro management of up to 31 probes simultaneously

XH50P	Temperature/humidity probe without knob
XH50P	Temperature/humidity probe with knob for comfort sensor



FEATURES

Power supply	12÷24Vac/dc - 12÷40Vdc
Remote probe input	NTC
Digital input	free voltage
Configurable relay output	8A, 16A optional
Hot Key output	present
Serial output	RS485
Optional analog output	0÷10V



PRESSURE TRANSDUCERS

PRESSURE TRANSDUCERS

Pressure transducers supply a standard output current signal ($4\div 20\text{mA}$). The silicon sensor is assembled in a waterproof steel housing filled with oil that guarantees stable and constant measurement with additional protection against vibrations and a duration equivalent to millions of pressure cycles. The tip of the probe allows placement in contact with ammonia and various other kinds of corrosive gases.

PP07	2 wires transducer with $4\div 20\text{mA}$ output and measurement range $-0,5\div 7\text{bar}$ (male or female fitting)
PP11	2 wires transducer with $4\div 20\text{mA}$ output and measurement range $-0,5\div 11\text{bar}$ (male or female fitting)
PP30	2 wires transducer with $4\div 20\text{mA}$ output and measurement range $0\div 30\text{bar}$ (male or female fitting)
PP50	2 wires transducer with $4\div 20\text{mA}$ output and measurement range $0\div 50\text{bar}$ (male or female fitting)



FEATURES

Power supply	$8\div 28\text{Vdc}$
Dimensions	male fitting: $20\times 52,5\text{mm}$ female fitting: $20\times 48\text{mm}$
Output	$4\div 20\text{mA}$
Protection	IP65
Operating temperature	$-40\div 135^{\circ}\text{C}$ ($-40\div 275^{\circ}\text{F}$)
Storage temperature	$-40\div 135^{\circ}\text{C}$ ($-40\div 275^{\circ}\text{F}$)

RATIOMETRIC PRESSURE TRANSDUCERS

Pressure transducers supply a standard output ratiometric signal ($0\div 5\text{V}$). They are ideal for demanding HVAC applications where long term reliability is necessary. The electrical interface is a standard in the connection field. Thanks to a wide range of temperatures, this device maintains accuracy in every situation.

PPR15	3 wires ratiometric transducer with $0\div 5\text{V}$ output and measurement range $0\div 15\text{bar}$
PPR30	3 wires ratiometric transducer with $0\div 5\text{V}$ output and measurement range $0\div 35\text{bar}$
PPR45	3 wires ratiometric transducer with $0\div 5\text{V}$ output and measurement range $0\div 45\text{bar}$



FEATURES

Power supply	$4,5\div 5,5\text{Vdc}$
Dimensions	$20\times 48\text{mm}$
Output	$0,5\div 4,5\text{Vdc}$
Protection	IP65
Operating temperature	$-40\div 135^{\circ}\text{C}$ ($-40\div 275^{\circ}\text{F}$)
Storage temperature	$-40\div 135^{\circ}\text{C}$ ($-40\div 275^{\circ}\text{F}$)

RATIOMETRIC PRESSURE TRANSDUCERS with AUTOMATIVE DISCONNECTABLE CONNECTOR

Pressure transducers with automative disconnectable connector that provide a ratiometric output signal (0÷5V). They are particularly appreciated in HVAC applications (except those containing ammonia) where the long-term reliability and accuracy are a must. The transducers, depending on the model, are available with brass or galvanized steel fitting.

PP100	3 wires ratiometric transducer with brass cap, 0÷5V output and measurement range 1÷12,8bar
PP101	3 wires ratiometric transducer with brass cap, 0÷5V output and measurement range 0÷20,7bar
PP102	3 wires ratiometric transducer with brass cap, 0÷5V output and measurement range 0÷34,5bar
PP103	3 wires ratiometric transducer with brass cap, 0÷5V output and measurement range 0÷45bar



FEATURES

Power supply	4,5÷5,5Vdc
Dimensions	20x51,6mm
Output	0÷4,5Vdc
Protection	IP65
Operating temperature	-40÷135°C (-40÷275°F)
Storage temperature	-40÷135°C (-40÷275°F)

WIRES for RATIOMETRIC PRESSURE TRANSDUCERS with AUTOMATIVE DISCONNECTABLE CONNECTOR

PP100, PP101, PP102 and PP103 pressure transducers are paired with the PPC wires with insulation and PVC jacket, also available in UV-resistant version.

PPC02	2m PVC wire with 3 pins connector, female fitting
PPC05	5m PVC wire with 3 pins connector, female fitting
PPC02-UV	2m anti-UV PVC wire with 3 pins connector, female fitting
PPC05-UV	5m anti-UV PVC wire with 3 pins connector, female fitting
PPC08-UV	8,5m anti-UV PVC wire with 3 pins connector, female fitting



AHU SENSORS

TEMPERATURE PROBES

Temperature probes for residential and commercial HVAC applications, used for air temperature measurement in ventilation and air conditioning systems, and industrial environments.

APT1 Wall mounting probe with NTC or 4÷20mA output, IP30, working range: -5÷55°C, dimensions 85x100x26mm



APT2 Duct mounting probe with NTC output, IP65, working range: -5÷55°C / 5÷95%RH (non condensing), dimensions 81x56x105mm or 81x56x340mm



TEMPERATURE/HUMIDITY PROBES

Temperature/humidity probes, ideal both for residential comfort and industrial processes. They are available in the stem version or for industrial mounting, wall or duct.

APH0 Industrial mounting probe with 4÷20mA and NTC outputs, IP65, working conditions: -5÷55°C / 0÷95%RH (non condensing) with dimensions 81x40x116mm and -40÷60°C / 10÷95%RH (non condensing) with dimensions 101x46x165mm



APH1 Wall mounting probe with 4÷20mA output, IP30, working conditions: -5÷55°C / 0÷95%RH (non condensing), with dimensions 85x100x26mm



APH2 Duct mounting probe with 4÷20mA and NTC outputs, IP65, working conditions: -5÷55°C / 0÷95%RH (non condensing) with dimensions 81x56x268mm and -40÷60°C / 10÷95%RH (non condensing) with dimensions 101x81x281mm



APH3 Stem probe for industrial/OEM applicative solutions with 4÷20mA and NTC outputs, IP65 and with 3m cable, working conditions: -40÷60°C / 0÷100%RH (non condensing), dimensions 166xØ12mm



Stem probe for industrial/OEM applicative solutions with ModBUS, IP65, working conditions: -40÷80°C / 0÷100%RH (non condensing), dimensions 83xØ12mm



DIFFERENTIAL PRESSURE TRANSDUCERS

Differential pressure transducers with industrial mounting, designed both for environmental monitoring and for the measurement of differential pressures on HVAC units and the fan inlet. Range and transducer output can be configured appropriately by using the DIP-Switch.

APP0 Differential pressure transducers with industrial mounting with 4÷20mA/0÷20mA/0÷10V or ModBUS outputs, 2m pipe and 2 conduct pressure connection included, working conditions: 0÷70°C (non condensing), dimensions 92x85x48mm



DIFFERENTIAL PRESSURE SWITCHES

Differential pressure switches designed to monitor the efficiency of filtration and check the presence of air flow. They are available for industrial mounting, have two different operation ranges, and the activation point is configurable on the device.

APSO

Differential pressure switch with industrial mounting, with NC/NO relay output, 20÷300Pa or 100÷1000Pa range, 2m pipe and 2 conduct pressure connection included, dimensions 72x85x95mm



GENERIC PROBES for AIR MANAGEMENT

Generic probes for the regulation of complex units (plant-side usable) both for residential comfort and for industrial processes. They are available in wall or duct mounting.

APG1

Air quality probe (CO₂) with IP30, wall mounting, working conditions: -20÷60°C / 0÷90%RH (non condensing) with 4÷20mA and ModBUS outputs, dimensions 85x100x26mm



APG2

Air quality probe (CO₂) probe with IP65 duct mounting with 4÷20mA and NTC outputs working conditions: -20÷60°C / 0÷95% RH (non condensing), dimensions 101x81x250mm

Air speed probe with IP65 duct mounting with 4÷20mA output, working conditions: -10÷50°C / 5÷95%RH (non condensing), dimensions 101x81x262mm



ACCESSORIES for AHU SENSORS

APA0

Ultra slim power supply 100÷240Vac to 24Vac, DIN mounting, available with rated current 0,63A (dimensions 17,5x90x54,5mm), 1,5A (dimensions 35x90x54,5mm) and 2,5A (dimensions 52,5x90x54,5mm)



APA1

Stainless steel immersion well for temperature probe, 65mm length, R1/2" to be used with APT2 or with NTC Dixell standard probes



Radiation shield for temperature/humidity probe for outside measurements with mounting kits for wall and pole mounting. It is suitable for all sensor probes with Ø12mm, such as APH3 temperature & humidity probes



Mounting flange for duct probes such as APT2 e APH2, Ø6mm in diameter



APA2

4-wires connector M12x1, IP67 suitable for APH3 stem probes



GAS LEAK DETECTORS

The refrigerant gas detectors of GD family are devices that report gas leaks in HVAC applications such as chillers, heat pumps, roof-tops etc... They can be used in stand-alone mode or in combination with Dixell controllers and managed remotely by the supervisory and monitoring XWEB systems or third parties. The GD sensors can report any gas leak via configurable buzzer or relay output; they are equipped with an analog output, which allows you to constantly check the plant and to act preventively on the gas leakage preventing downtime. The detectors are available in semiconductor or infrared versions with IP41 or IP66 protection degree and enable you to fulfill the European F-Gas and EN378 standards.

GDS41	Gas leak detector with semiconductor sensor and IP41 protection
GDS66	Gas leak detector with semiconductor sensor and IP66 protection
GDS41M	Gas leak detector with semiconductor sensor, IP41 protection and RS485 output
GDS66M	Gas leak detector with semiconductor sensor, IP66 protection and RS485 output
GDI41M	Gas leak detector with infrared sensor, IP41 protection and RS485 output
GDI66M	Gas leak detector with infrared sensor, IP66 protection and RS485 output



FEATURES

Format	IP41: 86x142x53mm IP66: 175x165x82mm
Mounting	wall
Power supply	12÷24Vac/Vdc
Signaling led	red and green
Analog inputs	4÷20mA; 0÷5V; 0÷10V; 1÷5V; 2÷10V
Relay output	1A 24Vac/Vdc
Serial output	RS485 (depending on model)
Buzzer	present



WIRING & ACCESSORIES

82 WIRING

82	Ethernet patch cables	CAB/WEB/NET – CAB/WEB/PC
82	Wiring for IC100/200 evo	CWCXA15-KIT – CWCXA30-KIT – CWCXB15-KIT – CWCXB30-KIT DWDE15-KIT – DWDE30-KIT – DWDEX15-KIT – DWDEX30-KIT
83	Wiring for iPro	DWS30-KIT – DWEX306-30KIT – DWB30-KIT – DWEX60-30KIT DWB315-KIT – IP-FC108 – IP-FC208 – IP-FC215CP – IP-FCEX60 IP-FCX215 – IP-FC315 – IP-FC500
83	Wiring for IEV & XEV	DWXEV30

84 PROGRAMMING

84	Programming tools	LIB BUILDER – VISOPROG – WIZMATE PROG-TOOL KIT – XJ485USB-KIT
84	Programming keys	HOT KEY – HOT KEY 64 – VISOKEY 2.0

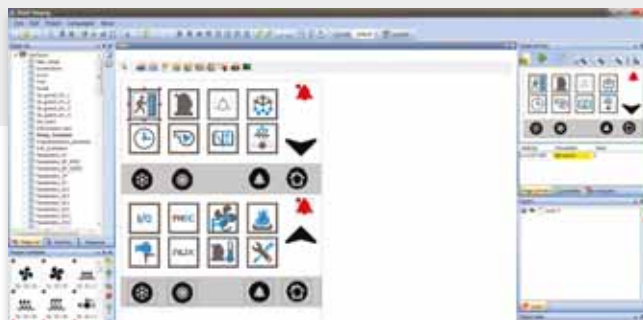
85 ENERGY ANALYZERS

85	Energy analyzers	EM210-72D – EM23D-1P – EM23D-3P
85	Transformers for energy analyzers	TA100-5 – TA200-5

85 VARIOUS

85	Modems	TC35-KIT – KIT MODEM GT-HE910
85	Serial interface	XJ485CX
85	USB Converter	USB-ETH-CONV
86	Gasket	RG-V
86	Transformers	TF5 – TF10 – TF10D – TF20D – TF40D
86	Expansion module	RT314-KIT
86	Supercap battery	XEC
86	Simulator	KIT SIMULATORE UNIVERSALE

WIRING & ACCESSORIES



WIRING

ETHERNET PATCH CABLES

CAB/WEB/NET	For iPro and XWEB evo	Ethernet patch cable, 3m
CAB/WEB/PC	For iPro and XWEB evo	Ethernet patch cross over cable, 1m



WIRING for IC100/200 evo

CWCXA15-KIT	For IC106CX and IC206CX	1+2 disconnectable female connectors, with 1,5m wires
CWCXA30-KIT	For IC106CX and IC206CX	1+2 disconnectable female connectors, with 3m wires
CWCXB15-KIT	For IC108CX and IC208CX	1+2 disconnectable female connectors, with 1,5m wires
CWCXB30-KIT	For IC108CX and IC208CX	1+2 disconnectable female connectors, with 3m wires



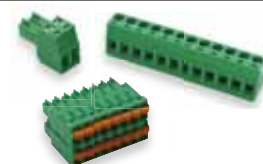
DWDE15-KIT	For IC105D, IC107D, IC205D and IC207D	2 disconnectable female connectors, with 1,5m wires
DWDE30-KIT	For IC105D, IC107D, IC205D and IC207D	2 disconnectable female connectors, with 3m wires
DWDEX15-KIT	For ICX207D	2 disconnectable female connectors, with 1,5m wires
DWDEX30-KIT	For ICX207D	2 disconnectable female connectors, with 3m wires



WIRING for iPro

DWS30-KIT	For IPC108D and IPC108E	2 disconnectable female connectors, with 3m wires
DWEX306-30KIT	For IPX306D	2 disconnectable female connectors, with 3m wires
DWB30-KIT	For IPC115D	3 + 3 disconnectable female connectors, with 3m wires
DWEX60-30KIT	For IPX106D	1+2 disconnectable female connectors, with 3m wires
DWB315-KIT	For IPC315D	3 disconnectable female connectors, with 3m wires

IP-FC108	For IPC108D and IPC108E	1 + 1 screw female connectors
IP-FC208	For IPG208D	N° 1 + 1 screw female connectors N° 2 bayonet female connectors
IP-FC215CP	For IPG215D	N° 6 screw female connectors N° 3 bayonet female connectors
IP-FC60	For IPX206D	N° 1 screw female connectors N° 2 bayonet female connectors
IP-FCX215	For IPX215D	N° 6 screw female connectors N° 3 bayonet female connectors
IP-FC315	For IPC315D	1+8 screw female connectors
IP-FC500	For IPL500D and IPM500D	2 screw female connectors



WIRING for IEV & XEV

DWXEV30	For IEV & XEV	1 disconnectable female connector, with 3m wires
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PROGRAMMING

PROGRAMMING TOOLS

LIB BUILDER

Programming tool designed to create parameters maps in an easy and fast way for third-party devices for XWEB evo and WIZMATE.

Contact Dixell for further information on the software license.



VISOPROG

Programming tool designed to develop user interfaces for VISOGRAPH and VISOTOUCH. Thanks to the many available functions it is possible to create very simple and intuitive user interfaces based on customer's needs. VISOPROG also provides, for those who already have applications on VISOGRAPH, a useful conversion function on VISOTOUCH, for an immediate migration to the new platform.



WIZMATE PROG-TOOL KIT

Tool developed to modify programming parameters of the instrument in an easy and fast way by WIZMATE software.

- Reading and writing of controller parameters;
- Maps saving for storage;
- Maps export into Excel format;
- Comparison between two or more maps.



XJ485USB-KIT

Converter from USB to RS485 (2 wires) which allows to monitor one or more controllers networked to a computer equipped with an USB communication port and where WIZMATE software is installed. XJ485USB only measures 78x40x22mm and supports data rates ranging from 300 to 19200bps.



PROGRAMMING KEYS

HOT KEY

Easy and fast programming key for Dixell controllers.
Dimensions 0,8x16x46mm

HOT KEY 64

Easy and fast programming key for IC200 evo controllers.
Dimensions 0,8x16x46mm



VISOKEY 2.0

Easy and fast programming key for VISOGRAPH keyboards.
Dimensions 0,8x16x46mm




ENERGY ANALYZERS

ENERGY ANALYZERS



EM210-72D	Mono/three-phase energy analyzer with RS485 output. Self-powered. Dimensions: 71,7x71,7x64,3mm. DIN rail or panel mounting. Housing: self-extinguishing ABS. IP50. Operating temperature: -25÷55°C (-13÷131°F). Relative humidity < 90%	
EM23D-1P	Mono energy analyzer with direct connection and with RS485 output. Power supply inputs 10(65)A, tension 230VLN. Self-powered. Dimensions: 71,6x90x66,3mm. DIN rail or panel mounting. Housing: self-extinguishing ABS. Operating temperature: -25÷55°C (-13÷131°F). Relative humidity < 90%	
EM23D-3P	Three-phase analyzer with direct connection and with RS485 output. Power supply inputs 10(65)A, tension 230VLN. Self-powered. Dimensions: 71,6x90x66,3mm. DIN rail or panel mounting. Housing: self-extinguishing ABS. Operating temperature: -25÷55°C (-13÷131°F). Relative humidity < 90%	

ENERGY ANALYZERS TRANSFORMERS


TA100-5	Amperometric transformer for EM210-72D. DIN or plug-in or wall mounting. 100A primary power supply. 5A secondary power supply.	
TA200-5	Amperometric transformer for EM210-72D. DIN or plug-in or wall mounting. 200A primary power supply. 5A secondary power supply.	

VARIOUS


MODEMS

TC35-KIT	GSM modem kit which includes the modem, the power supplier, the antenna with its wire and the connecting wire to the device.	
KIT MODEM GT-HE910	Kit including modem and accessories, for 3G/UMTS network, that allows the sending of SMS notifications.	

SERIAL INTERFACE

XJ485CX	Serial interface that converts a TTL to RS485 signal, in order to connect the instrument to the control and supervision system. Dimensions: 1,6x16x46mm. Multipolar connector included 0,2m	
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USB CONVERTER

USB-ETH-CONV	USB-Ethernet adapter for iPro controllers in 4 DIN Rail format	
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GASKETS

RG-V

IP65 front panel rubber gasket for devices in V format



TRANSFORMERS

TF5

Transformer with 5VA power supply and available in 230/12Vac, 230/24Vac, 110/12Vac and 24/12Vac versions



TF10

Transformer with 10VA power supply and available in 230/12Vac and 230/24Vac versions

TF10D

Transformer in 2 DIN rail format with 10VA power supply and available in 230/24Vac and 110/24Vac versions

TF20D

Transformer in 3 DIN rail format with 20VA power supply and available in 230/24Vac and 110/24Vac versions

TF40D

Transformer in 4 DIN rail format with 40VA power supply and available in 230/24Vac and 110/24Vac versions



EXPANSION MODULE

RT314-KIT

Expansion relay module (12A/250Vac) with support for DIN bar and 12Vac/dc max 40mA power supply



SUPERCAP BATTERY

XEC

Supercap module that allows the closing of the valve in case of power failure. 24Vac/dc power supply. For IEV12D, IEV14D, IEV22D, IEV24D and XEV20D.



SIMULATOR

KIT SIMULATORE UNIVERSALE

The simulator of inputs and outputs is suitable to test the applications developed for IEV/XEV drivers and IC100/200 and iPro controllers. Thanks to a resistant frame, its compact dimensions, a complete series of wiring and a versatile suitcase, the use is facilitated in every situation. The simulator has a 110 or 230Vac power supply. Depending on the type of instrument to be connected, the simulator must be coupled with the relative wiring.





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release 3.0 - 1582300101-GB

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