Solutions for HVAC

Dixell™

EMERSON™

INNOVATION & EFFICIENCY for a better ENVIRONMENT

INDEX

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.

RETAIL SOLUTIONS

A global team of more than 1,000 people at your service

Production
Belluno (ITALY)
Suzhou (CHINA)

Global Service Center
Belluno (ITALY)
Atlanta (GEORGIA)
Manila (PHILIPPINES)

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 9001:2008 Quality System Standard.

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.

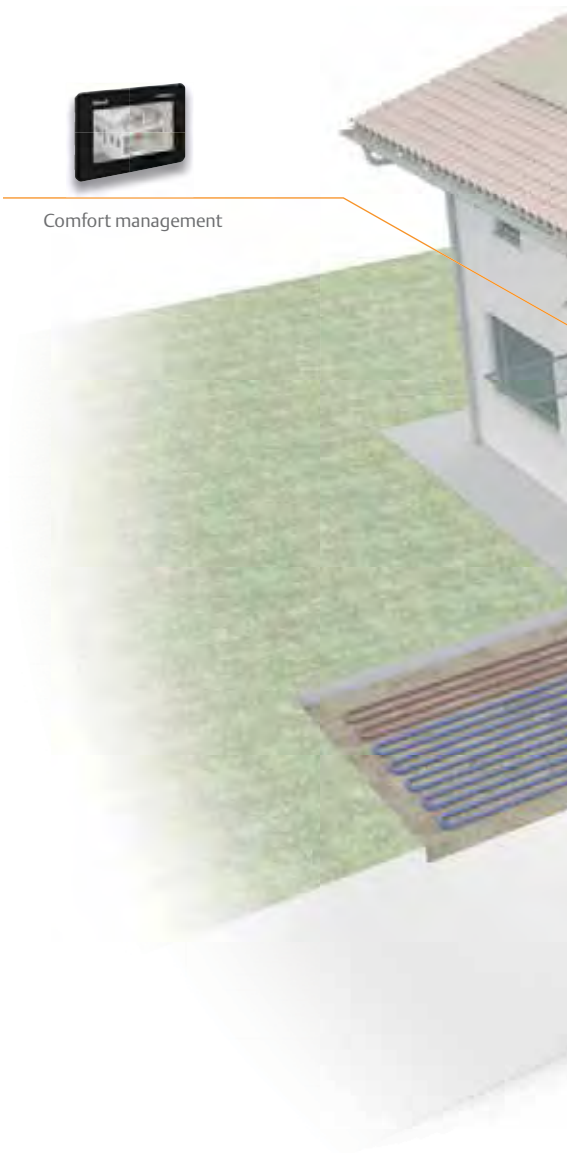
Environment

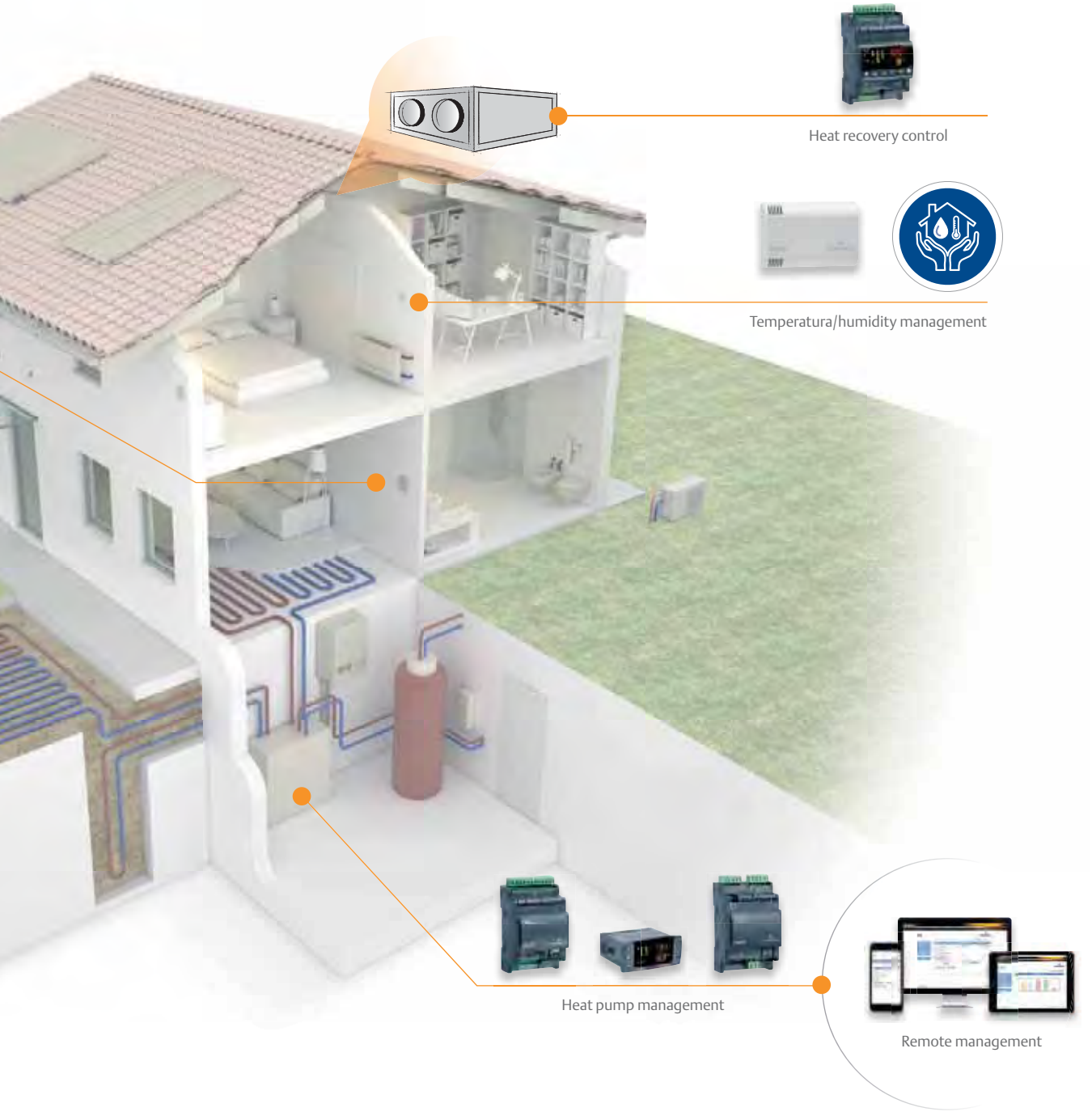
Dixell firmly believes in the respect and safeguard of the environment, with particular attention to all industrial processes and to the research and development of new products. The result is a range capable of ensuring high performances combined with high energy saving and use of environmentally friendly 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 (2002/95/EC) 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.





Heat recovery control

Temperatura/humidity management

Heat pump management

Remote 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

Chiller and heat pump with EEV management

Temperature/pressure/gas leak sensor

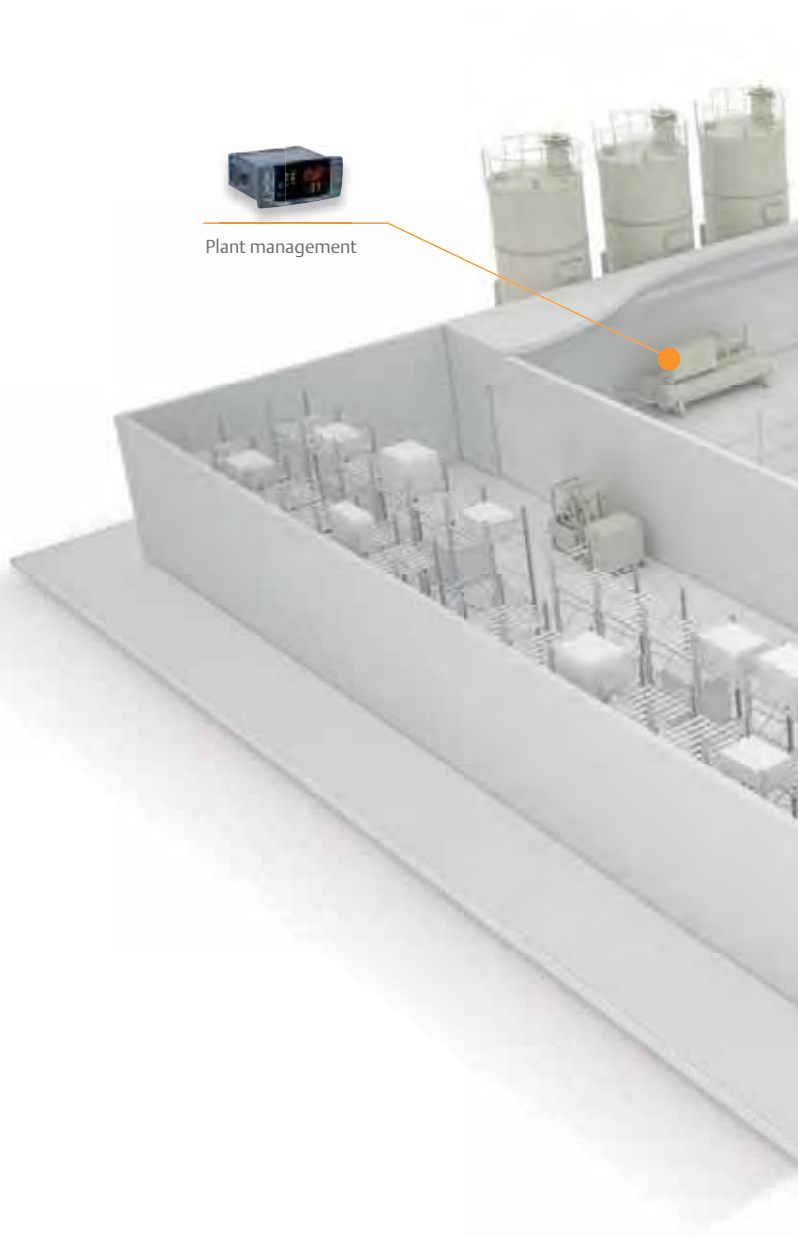
Temperature/humidity management

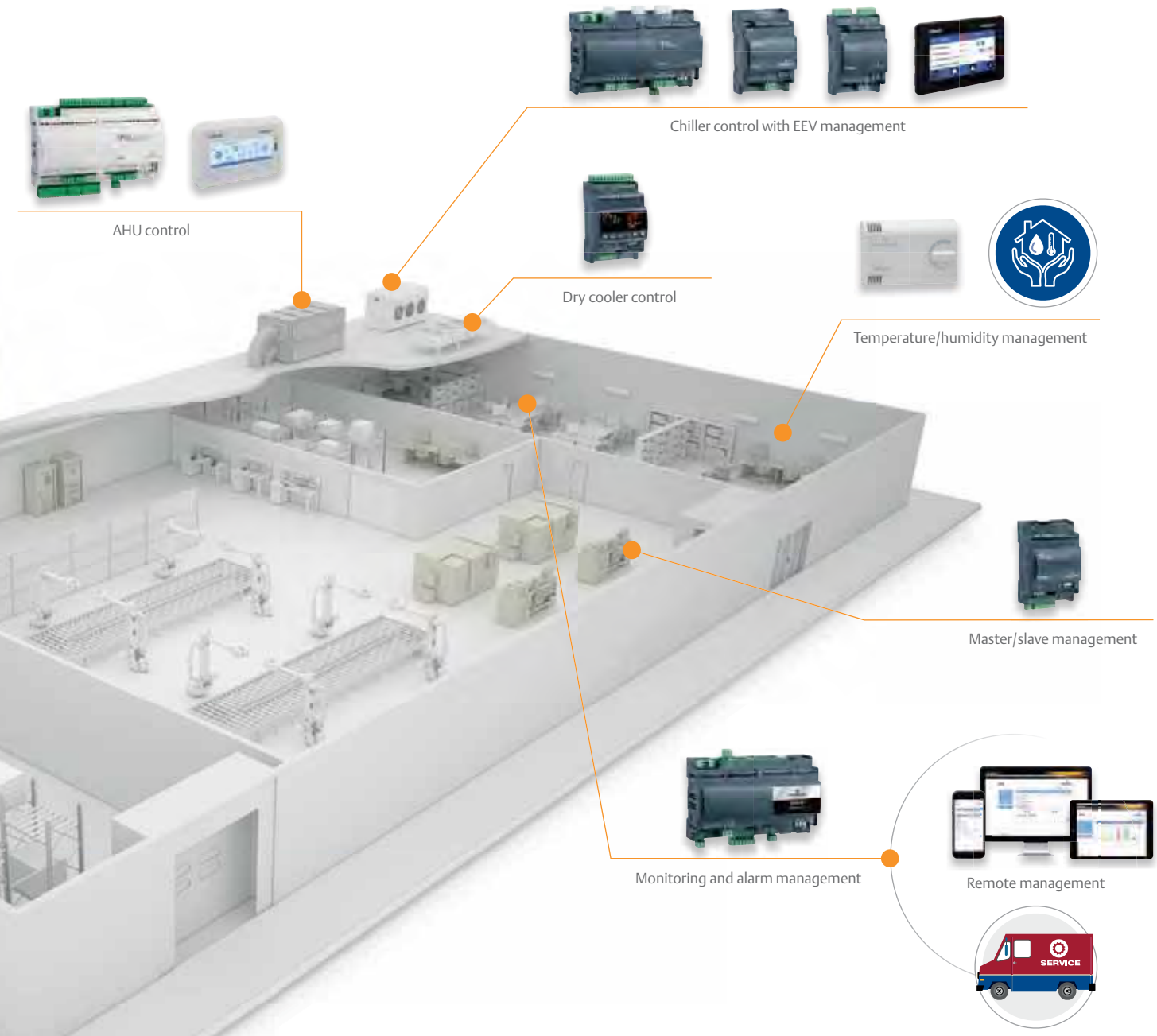
Remote management

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.




Chiller control with EEV management
AHU control
Dry cooler control
Temperature/humidity management
Master/slave management
Monitoring and alarm management
Remote management
SERVICE

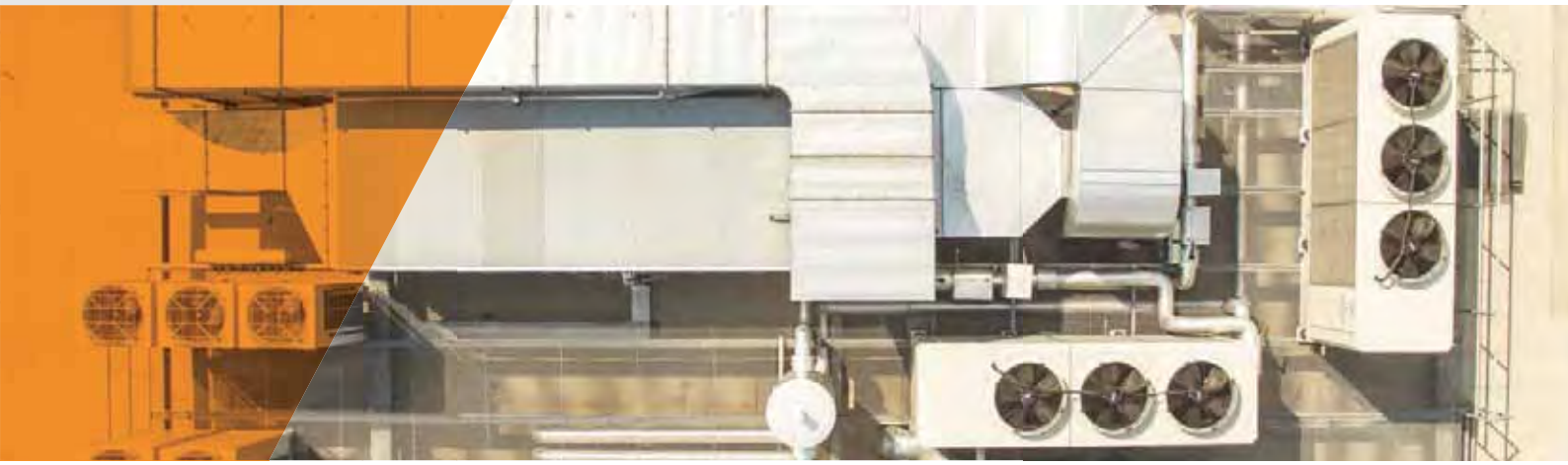
PRODUCTS

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 (ENEC, ULC/CSA) ensuring a reliable international rules conformance.

INDEX



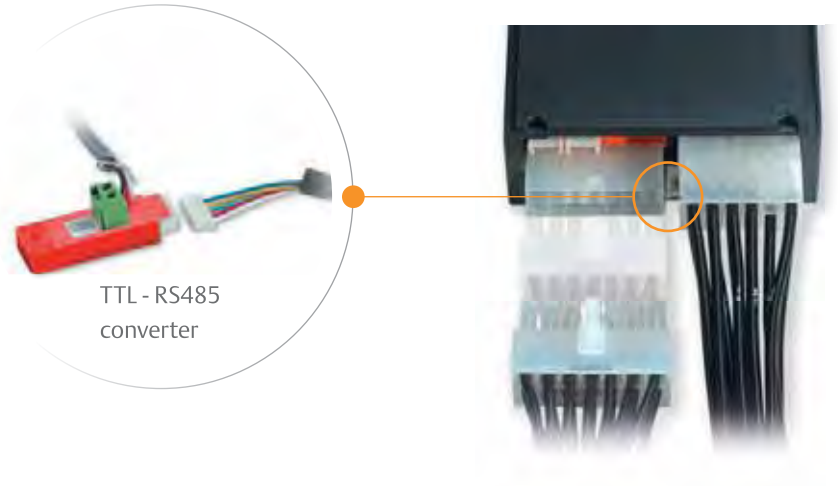
AIR CONDITIONING CONTROLLERS

IC100 SERIES

1-CIRCUIT up to 2-COMPRESSOR UNIT CONTROLLERS

IC100CX is Dixell's answer to real management and control requirements of **single circuit chiller units and heat pumps** (gas and water reversibility) with up to two compressors or a single compressor with capacity stages, by means of a compact instrument with the possibility of controlling units like: **air/air, air/water, water/water, motor-condensing**.

- Twin compressor functioning
- Function of compressor capacity stages for high and low condensing pressure
- ON/OFF or variable speed condensing fan control without the need to use external devices
- Forced and combined defrost
- Energy saving for time band or digital contact
- Internal data logger with up to 50 alarms
- Real time clock
- Voltage output for additional external relay management
- Analog input configurable as NTC, 4÷20mA and 0÷5V ratiometric
- Configurable relays, probes and digital inputs
- Easy programming through HOT KEY or PC (WIZMATE PROG TOOL KIT)
- TTL (convertible in RS485) serial output with ModBUS protocol
- Quick tab connectors on all models



TTL - RS485 converter

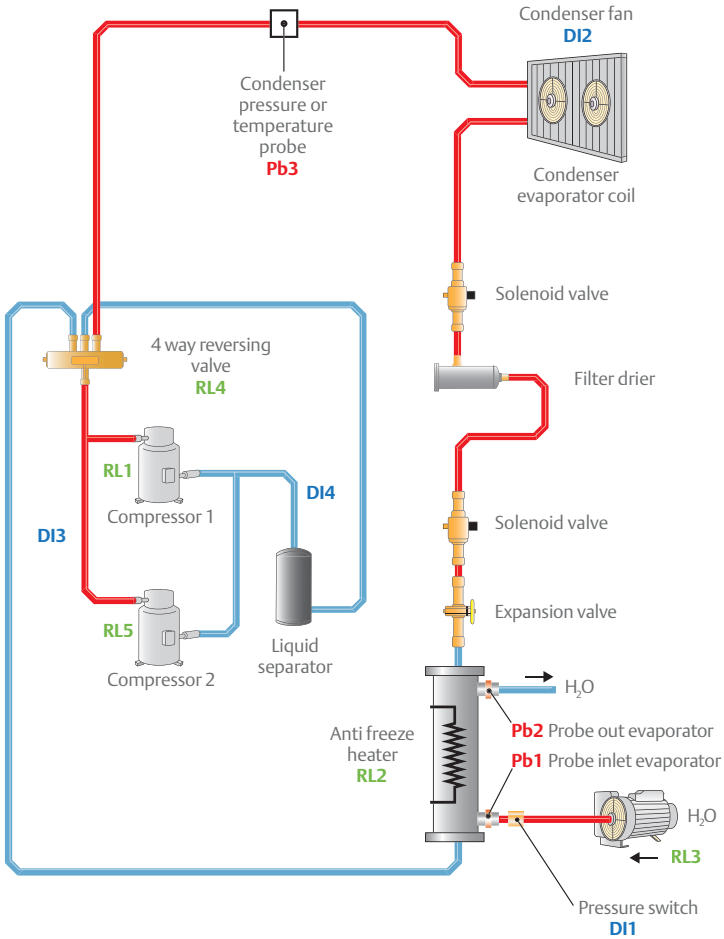
COMPLETE

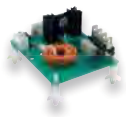
The dual display and the icons display complete information about the machine status.
With a single touch of one key, all main functions of the cooling system are displayed without the need to enter programming mode.

ICON	MEANING
	Condenser fan
	Voltage output ON for external relay
HP	High pressure alarm
Vset	Dynamic set/Energy saving ON
Flow!	Flow alarm

ICON	MEANING
°C	Celsius degrees
°F	Fahrenheit degrees
bar	Bar
PSI	PSI
	Compressor 1
	Compressor 2
	Unit ON - heat pump status (configurable as chiller)
	Unit ON - chiller status (configurable as heat pump)
	Defrost start delay/Defrost ON
	Clock
	Water pump - Supply fan
	Anti-freezing heater - Boiler
	Alarm
LP	Low pressure alarm
menu	Function menu
	Arrow keys

EXAMPLE of APPLICATION for 1-CIRCUIT up to 2-COMPRESSOR AIR/WATER CHILLER





Proportional fan speed signal PWM

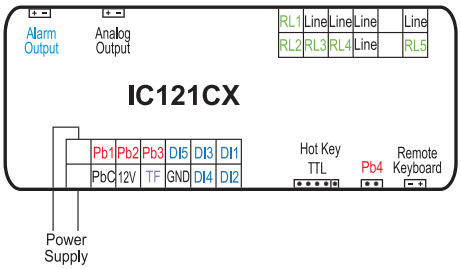
TF

External air

Pb4

Alarm
Alarm Output

REMOTE ON/OFF
DI5



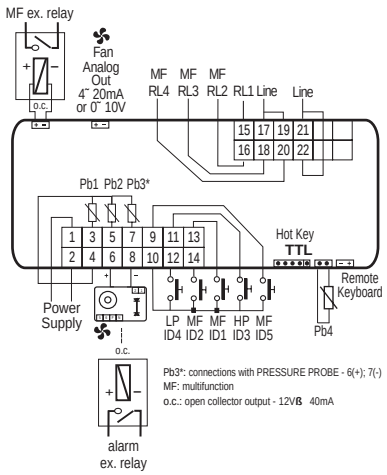
1-CIRCUIT up to 2-COMPRESSOR UNIT CONTROLLERS

IC110CX	Advanced multifunction controller for chiller with 1 circuit and 1 compressor
IC111CX	Advanced multifunction controller for chiller/heat pump with 1 circuit and 1 compressor
IC120CX	Advanced multifunction controller for chiller with 1 circuit and 2 compressors
IC121CX	Advanced multifunction controller for chiller/heat pump with 1 circuit and 2 compressors

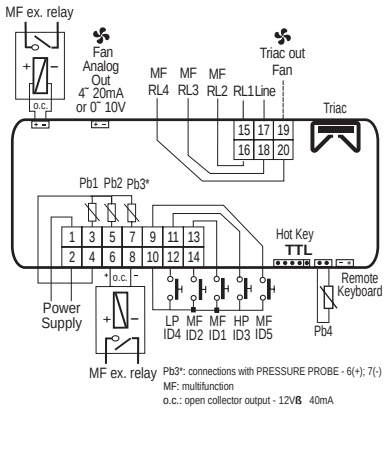
FEATURES	IC110CX - IC111CX	IC120CX - IC121CX
First display: n° digits	±4 d.p.	±4 d.p.
Second display: n° digits	±4 d.p.	±4 d.p.
Power supply	12, 24Vac/dc	12, 24Vac/dc
Probe inputs		
Pb1	NTC	NTC
Pb2	NTC	NTC
Pb3	NTC/4÷20mA/0÷5V config	NTC/4÷20mA/0÷5V config
Pb4	NTC/ID config	NTC/ID config
Digital inputs		
High pressure	pres	pres
Low pressure	pres	pres
N° 3 + 1(Pb4)	config	config
Relay outputs		
RL1 Compressor 1	°8A	8A
RL2	°8A config	8A config
RL3	°8A config	8A config
RL4	°8A config	8A config
RL5	°8A config opt	8A config
Other outputs		
Analog	4÷20mA/0÷10V opt	4÷20mA/0÷10V opt
Signal for fan speed control	*PWM	PWM
Voltage output for external relay	12Vdc-40mA max	12Vdc-40mA max
TTL/Hot Key/Prog Tool Kit	pres	pres
Other		
Triac inside	2A opt	
Remote keyboard	VICX610	VICX610
Buzzer	opt	opt
Real time clock	opt	opt
Connection kit	CF-KIT, CAB/CJ15, CAB/CJ30, CW15-KIT, CW25-KIT	CF-KIT, CAB/CJ15, CAB/CJ30, CW15-KIT, CW25-KIT

° With triac module: RL1 = 5A - RL2 = 5A - RL4 = 5A config - RL5 = not present - Connection kit: CWC15-KIT
* The PWM output is substituted with the output for the external relay driver when the triac is inside

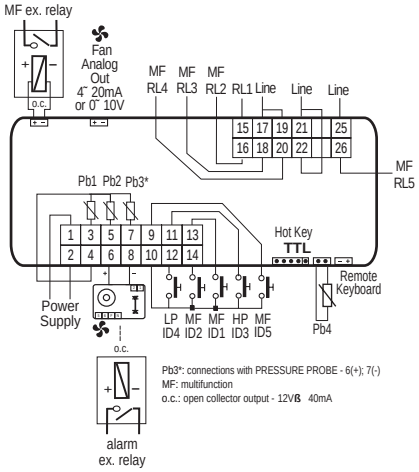
IC110CX - IC111CX



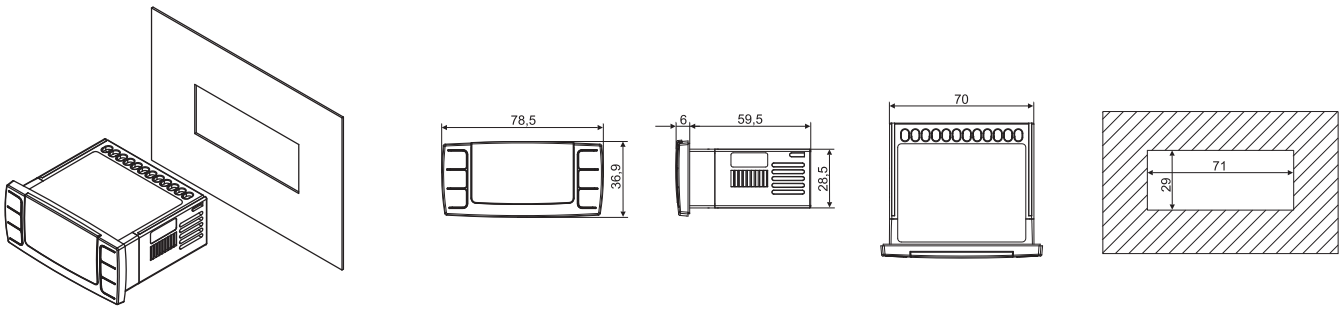
IC110CX - IC111CX (triac module inside)



IC120CX - IC121CX



DIMENSIONS & CUT-OUT



TECHNICAL DATA

Housing	self-extinguishing ABS
Format	frontal 32x74mm; depth 59,5mm
Display	4 digits red LED + 4 digits yellow LED + icons
Mounting	panel mounting in a 29x71mm cut-out
Front protection	IP65
Connections	disconnectable connectors 12-14 or 14-6 pins
Power supply	12Vac/dc -10% ÷ +15%, 24Vac/dc ±10% 50/60Hz
Power absorption	5VA max
Relay outputs	SPDT 8(3)A, 250Vac - SPST 5(2)A, 250Vac
Control mod of external relay output	12Vdc - 40mA max
Analog inputs	PWM signal (single-fan module) 4÷20mA (fan module) 0÷10V (fan module)
Data storing	non-volatile memory (EEPROM)
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Measuring and regulation range	pressure probe: 0÷50bar (725PSI) NTC probe: -50÷110°C (-58÷230°F)
Resolution	0,1°C or 1°F or 0,1bar or 1PSI
Accuracy (at ambient temperature)	±0,8°C (±1°F)

HOW to ORDER

I	C	1			C	X	-	A	B	C	D	0

IC100

A	B	C				D	
Power supply	**Regulation inputs**	**IC110CX / IC111CX - Options**				**Buzzer**	**RTC**
0 = 12Vac/dc	**0** = 4xNTC	**4÷20mA**	**Aux**	**Triac 2A**	**0÷10V**		
1 = 24Vac/dc	**1** = 3xNTC + 1x4÷20mA	**0** = No	No	No	No	**0** = No	No
	2 = 3xNTC + 1x0÷5V	**1** = No	Yes	No	No	**1** = Yes	No
		2 = Yes	No	No	No	**2** = No	Yes
		3 = Yes	Yes	No	No	**3** = Yes	Yes
		4 = No	No	Yes	No		
		5 = No	No	No	Yes		
		6 = No	Yes	No	Yes		
		7 = No	No	Yes	Yes		

IC120CX / IC121CX - Options		
	4÷20mA	**0÷10V**
0 =	No	No
1 =	Yes	No
2 =	No	Yes

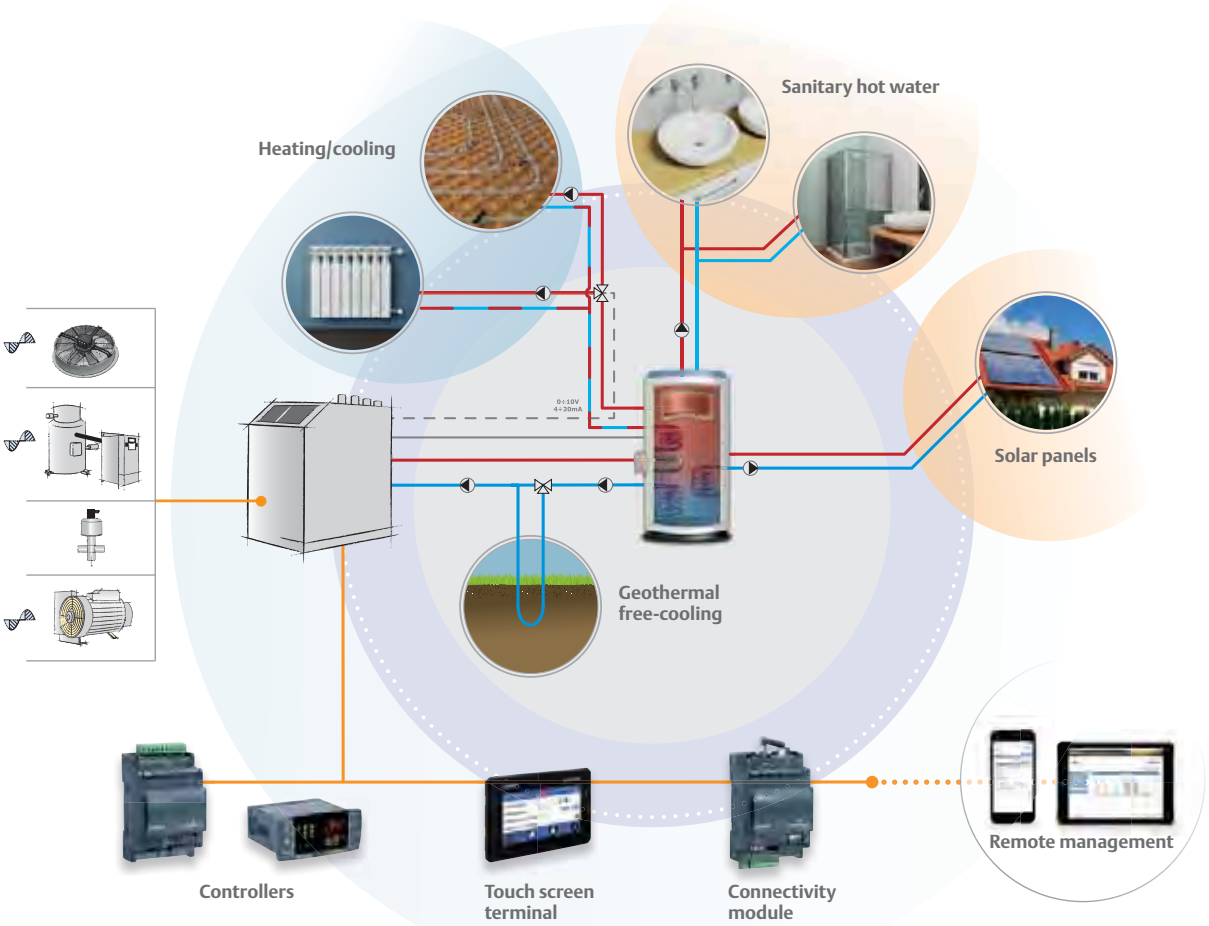
IC200 evo SERIES

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

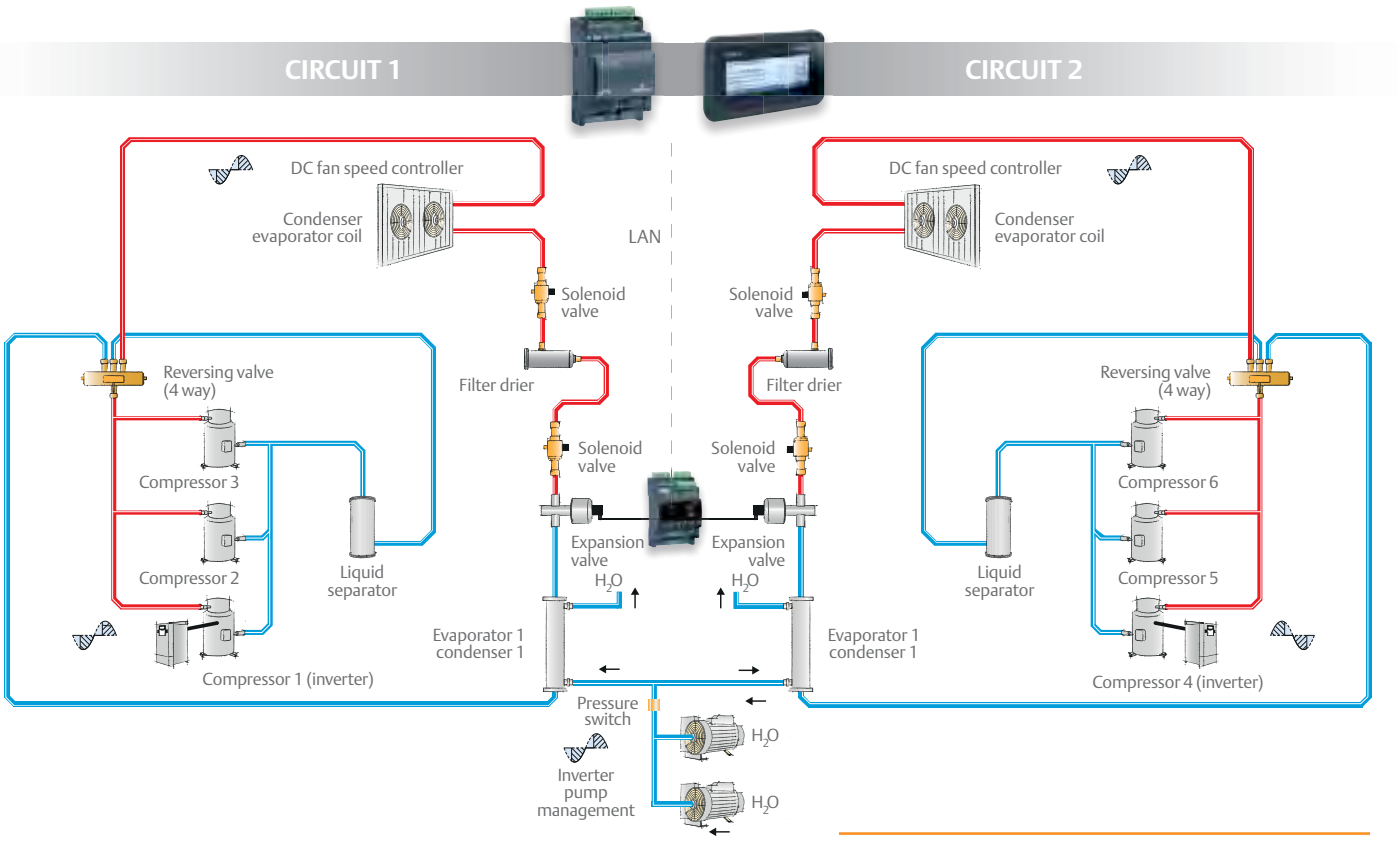
IC200 evo is the iCHILL evolution series of controllers, dedicated to **chiller and heat pump units**. Compactness, extreme flexibility, driver control for the electronic expansion valves and advanced functions such as free cooling and sanitary hot water production are only some of the main elements 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
- Data logger up to 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 (see page 30)
- Heat recovery management
- Free-cooling management

RESIDENTIAL SOLUTION



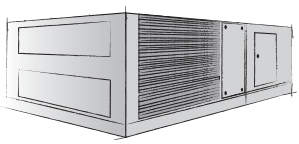
2-CIRCUIT up to 6-COMPRESSOR MANAGEMENT



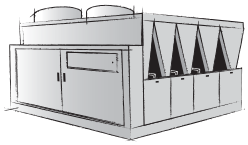
HIGH CONNECTIVITY

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.

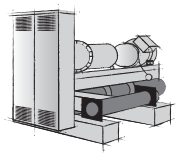
MACHINE TYPES



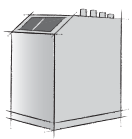
ROOF-TOP AIR/AIR



AIR/WATER

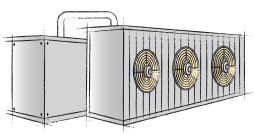


WATER/WATER

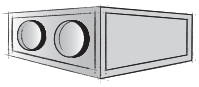


GEOTHERMAL HEAT PUMP

DRYERS



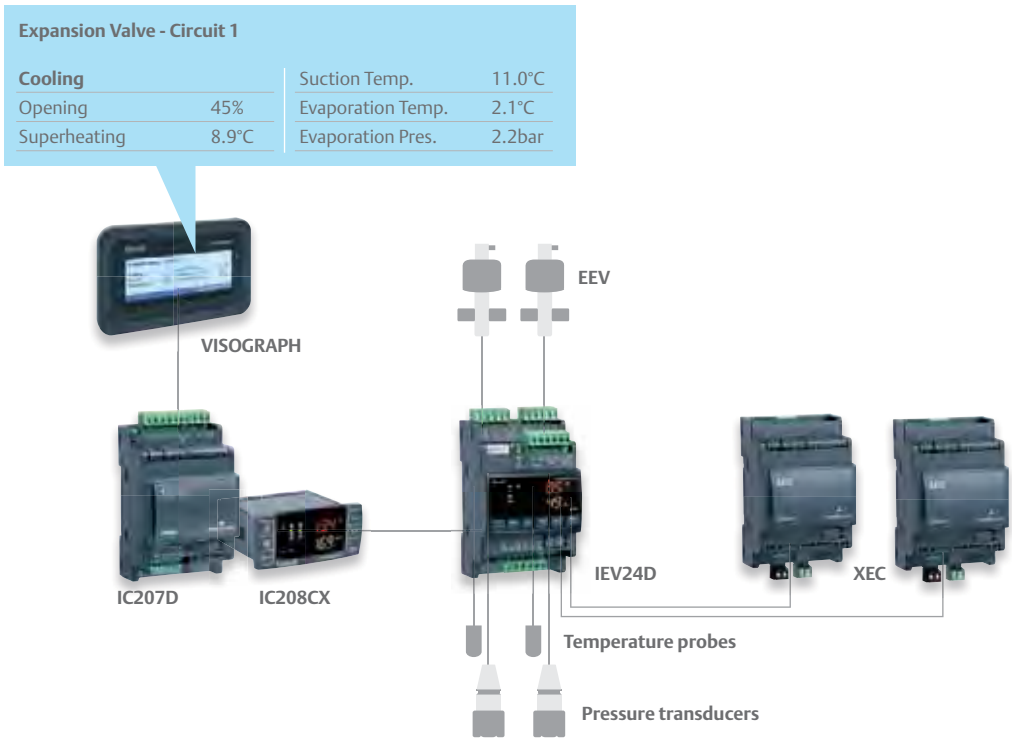
MOTOR-CONDENSING



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 I 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

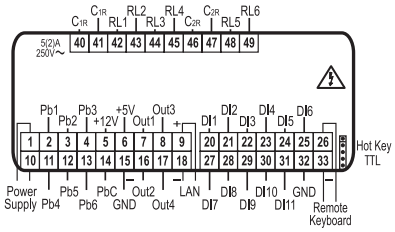
- 1 circuit - 6 compressors
- 2 circuits - 3 compressors per circuit
- 2 circuits - 1 screw compressor per circuit
- 2 circuits - 1 inverter compressor + 2 ON/OFF compressors per circuit

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

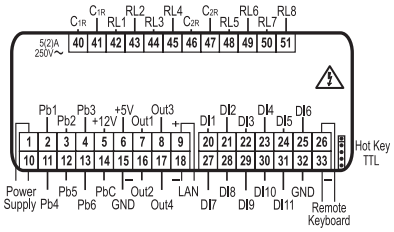
IC205D	Controllers for chillers and heat pumps with 5 relay outputs (available also without display)
IC206CX	Controllers for chillers and heat pumps (up to 4 compressors) with 6 relay outputs
IC207D	Controllers for chillers and heat pumps with 7 relay outputs (available also without display)
IC208CX	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
First display: n° digits	±4 d.p.	no display	±4 d.p.	±4 d.p.	no display	±4 d.p.	no display
Second display: n° digits	±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	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 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 2x0÷10V	2xPWM 0÷10V 4÷20mA 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	

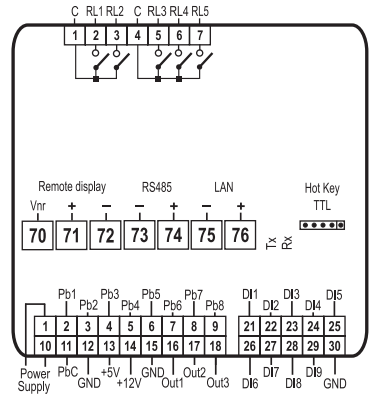
IC206CX



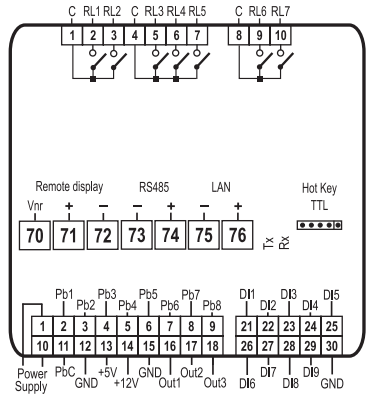
IC208CX



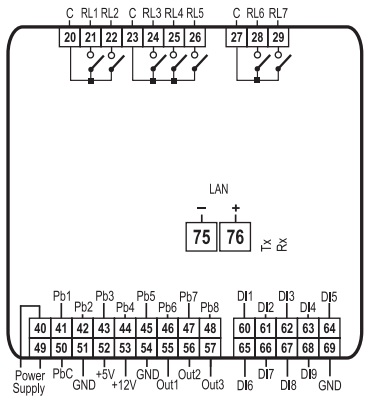
IC205D



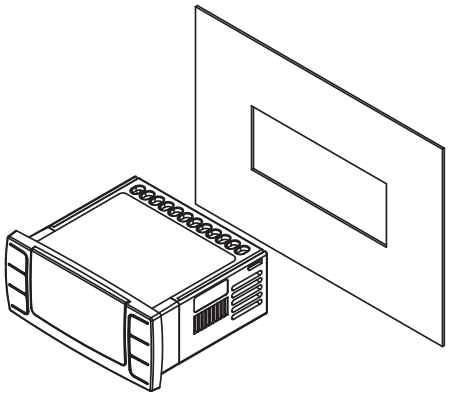
IC207D

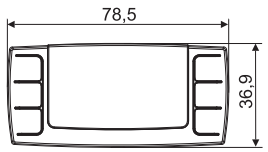


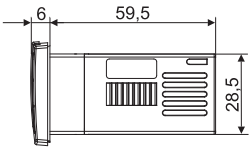
ICX207D

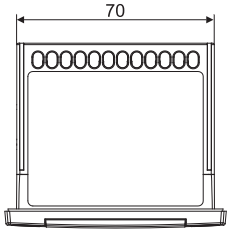


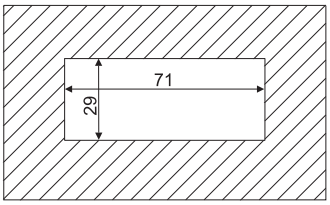
DIMENSIONS & CUT-OUT

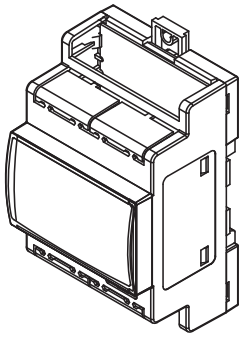


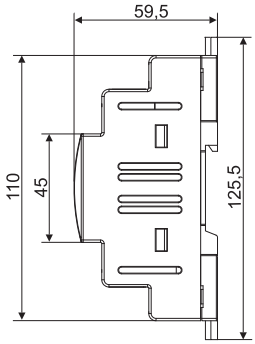


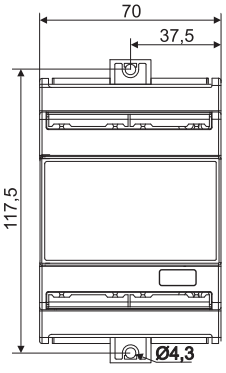












TECHNICAL DATA

Housing	self-extinguishing ABS
Format	CX: frontal 32x74mm; depth 59,5mm D: frontal 110x70mm; depth 59,5mm
Display	models with display: 4 digits red LED + 4 digits yellow LED + icons
Mounting	CX: panel mounting in a 29x71mm cut-out D: DIN Rail or wall mounting through integrated brackets
Front protection	CX: IP65
Connections	disconnectable connectors
Power supply	12Vac/dc -10% ÷ +15%, 24Vac/dc ±10% 50/60Hz
Power absorption	10VA max
Relay outputs	SPST 5(2)A, 250Vac
Analog inputs	CX: 2xPWM/0÷10V 2x0÷10V D: 2xPWM/0÷10V/4÷20mA 1x0÷10V
Data storing	non-volatile memory (EEPROM)
Operating temperature	-10÷55°C (14÷131°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Measuring and regulation range	pressure probe: 0÷50bar (0÷725PSI) NTC probe: -50÷110°C (-58÷230°F) PTC probe: -50÷150°C (-58÷302°F)
Resolution	0,1°C or 1°F or 0,1bar or 1PSI
Accuracy (at ambient temperature)	±0,8°C (±1°F)

HOW to ORDER

I	C	2	0		C	X	-	A	1	C	0	0

IC200CX

A	C
Power supply	**RTC**
0 = 12Vac/dc	**0** = No
1 = 24Vac/dc	**1** = Yes

I	C	2	0		D	-	A	B	C	0	0

IC200D

A	B	C
Power supply	**Display**	**RTC**
0 = 12Vac/dc	**0** = No	**0** = No
1 = 24Vac/dc	**1** = Yes	**1** = Yes

I	C	X	2	0	7	D	-	A	0	0	0	0

ICX207D

A
Power supply
0 = 12Vac/dc
1 = 24Vac/dc

iProCHILL SERIES

UP to 4-CIRCUIT and 16-COMPRESSOR UNIT CONTROLLERS

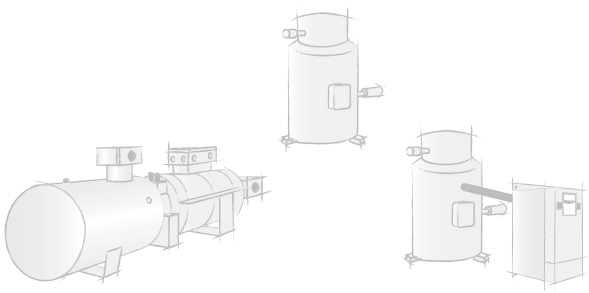
The controllers of the iProCHILL family are Dixell's answer to the requirements of the HVAC world; they are suitable for all **chillers, heat pump units up to 4 circuits and 16 compressors**. These instruments are complete and easy to use; they are the correct solution for the majority of the chiller-machines, 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
- Management and system analysis via EmersonConnected

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

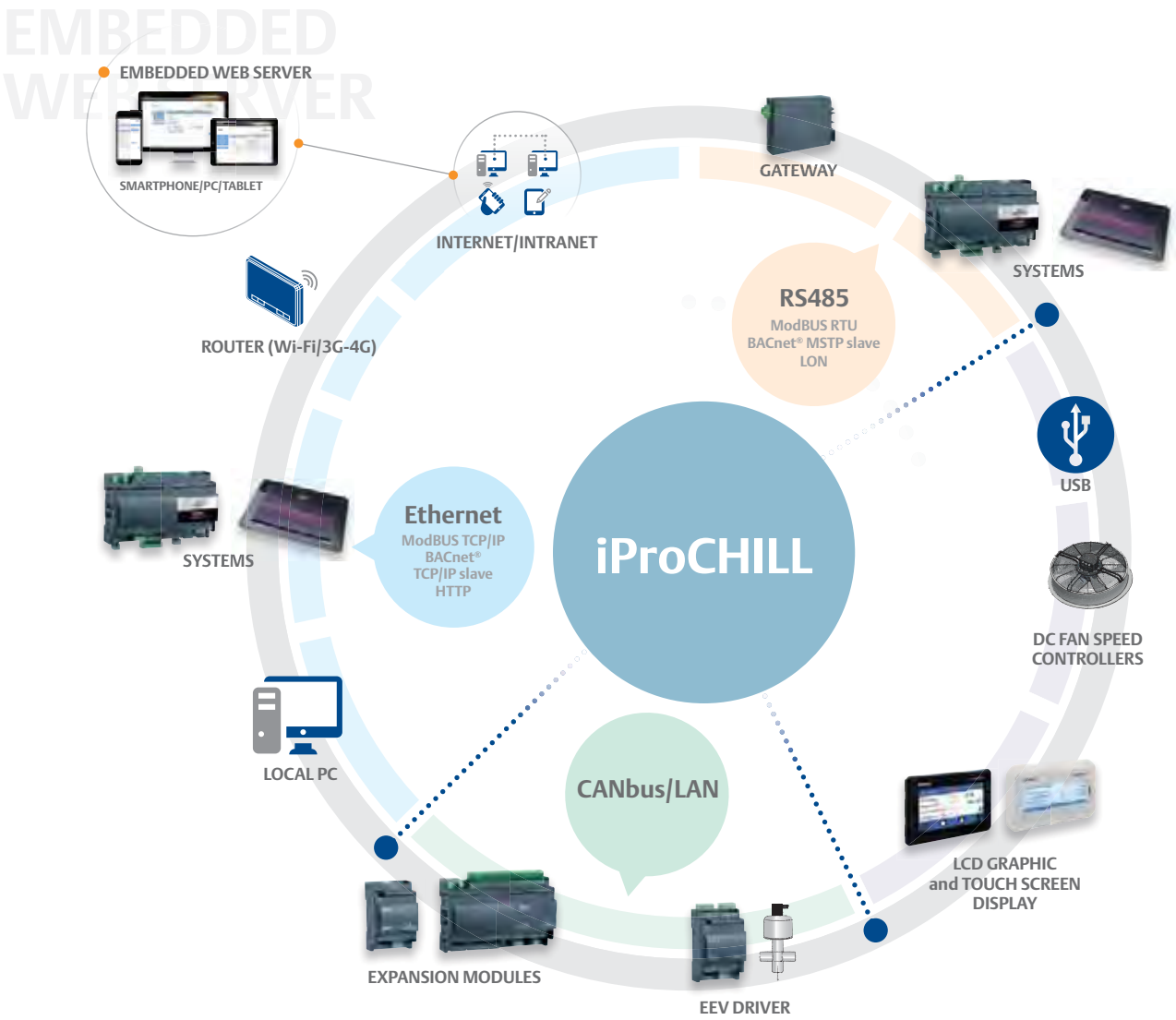


WEB INTERFACE

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.

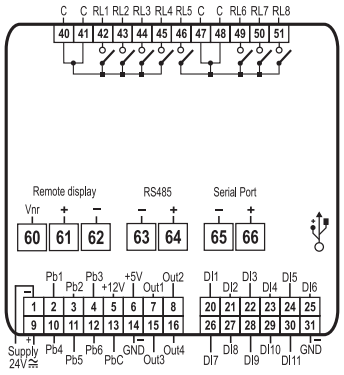


UP to 4-CIRCUIT and 16-COMPRESSOR UNIT CONTROLLERS

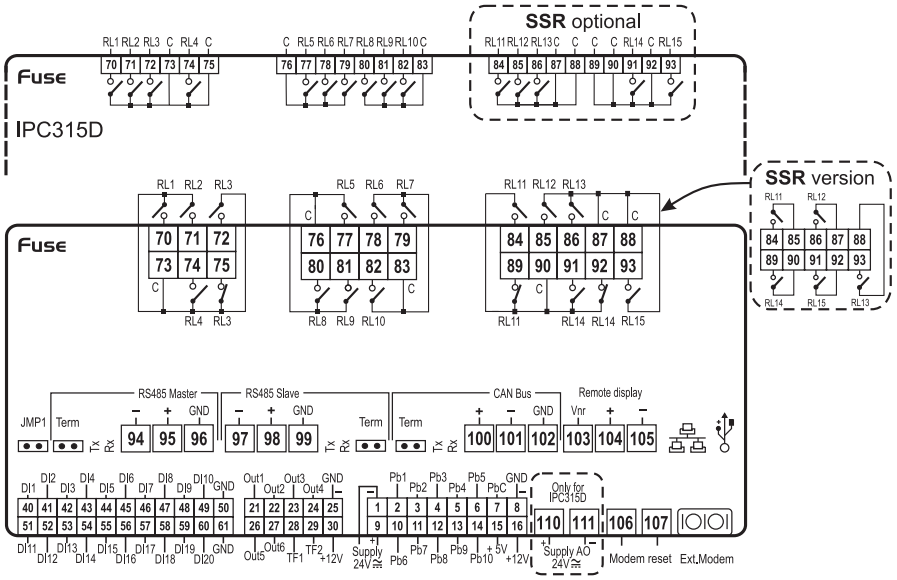
IPC108D	Controller in 4 DIN Rail format for up to 2-circuit and 6-compressor chiller and heat pumps
IPC108E	Controller in 4 DIN Rail format with LED display for up to 2-circuit and 6-compressor chiller and heat pumps
IPC115D	Controller in 10 DIN Rail format for up to 4-circuit and 16-compressor chiller 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
First display: n° digits		±4 d.p.		
Second display: n° digits		±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 10x5A + 5xSSR opt	15x5A 10x5A + 5xSSR opt
Other outputs				
PWM for fan speed module			2 config	2 config
0÷10V, 4÷20mA for fan speed module	4 config	4 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	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

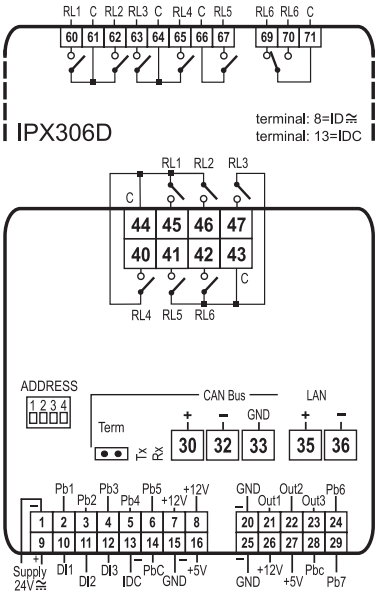


EXPANSION MODULES

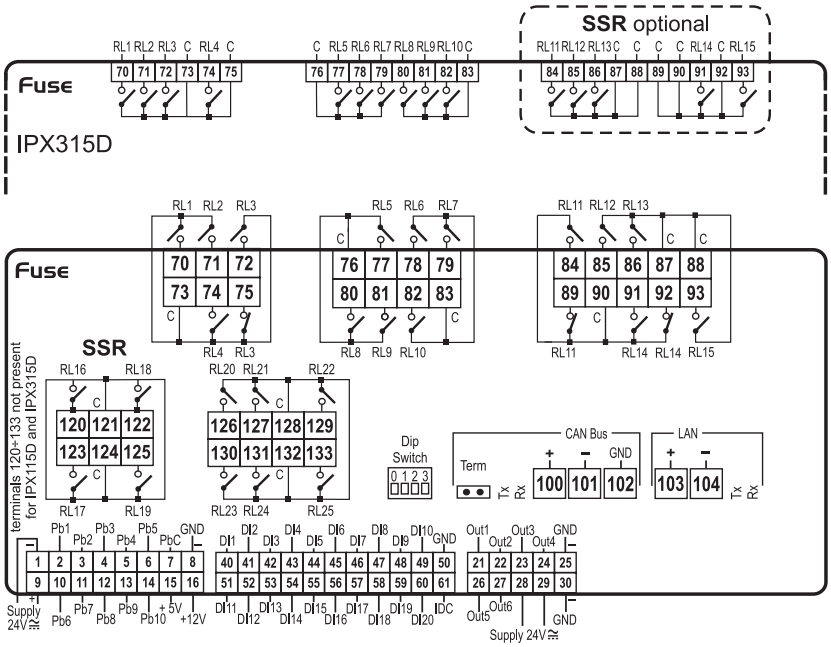
IPX106D	Expansion module in 4 DIN Rail format with disconnectable connectors and 6 relay outputs
IPX115D	Expansion module in 10 DIN Rail format with disconnectable connectors and 15 relay outputs
IPX125D	Expansion module in 10 DIN Rail format with disconnectable connectors and 25 relay outputs
IPX306D	Expansion module in 4 DIN Rail format with screw disconnectable connectors and 6 relay outputs
IPX315D	Expansion module in 10 DIN Rail format with screw disconnectable connectors and 15 relay outputs

FEATURES	IPX106D	IPX115D	IPX125D	IPX306D	IPX315D
Power supply	24Vac/dc from TF10D	24Vac/dc from TF20D	24Vac/dc from TF20D	24Vac/dc from TF10D	24Vac/dc from TF20D
Probe inputs					
Configurable	7	10	10	7	10
Digital inputs					
Configurable optoinsulated	3	20	20	3	20
Relay outputs					
Configurable	6x5A	12x5A + 3x8A	18x5A + 3x8A + 4xSSR	5x5A + 1x8A 4x5A + 1x8A + 1xSSR opt	15x5A 10x5A + 5xSSR opt
Other outputs					
0÷10V, 4÷20mA		2 config	2 config		2 config
0÷10V	3	4	4	3	4
LAN	pres	pres	pres	pres	pres
CANBus				pres	pres
Other					
Dip switches for addresses set	pres	pres	pres	pres	pres
Connections	disconnectable	disconnectable	disconnectable	disconnectable + screw	disconnectable + screw
Connection kit	DWEX60-30KIT	DWX115-30KIT	DWEX70-30KIT	DWEX306-30KIT	DWX315-30KIT, IP-FCX315

IPX106D - IPX306D



IPX115D - IPX125D - IPX315D



TECHNICAL DATA

Housing	self-extinguishing ABS
Format	4 DIN Rail: frontal 110x70mm; depth 59,5mm 10 DIN Rail: frontal 110x175mm; depth 59,5mm
Display	IPC108E: 4 digits red LED + 4 digits yellow LED + icons
Mounting	DIN Rail or wall mounting through integrated brackets
Connections	disconnectable, bayonet and screw connectors (depending on the model) RS485, USB, LAN, CANBus, Ethernet, keyboard (depending on the model)
Power supply	24Vac/dc ±10% 50/60Hz
Power absorption	IPC (4 DIN Rail): 40VA max IPC (10 DIN Rail), IPX (10 DIN Rail): 20VA max IPX (4 DIN Rail): 10VA max
Relay outputs	IPC108D/E: 8 SPDT 5(2)A, 250Vac IPC115D: 12 SPDT 5(2)A and 3 SPDT 8(3)A, 250Vac or 10 SPDT 5(2)A and 5 SSR, 250Vac IPC315D: 15 SPDT 5(2)A or 10 SPDT 5(2)A and 5 SSR, 250Vac IPX106D: 6 SPDT 5(2)A, 250Vac IPX115D: 12 SPDT 5(2)A and 3 SPDT 8(3)A, 250Vac IPX125D: 18 SPDT 5(2)A, 3 SPDT 8(3)A and 4 SSR, 250Vac IPX306D: 5 SPDT 5(2)A, 1 SPDT 8(3)A or 4 SPDT 5(2)A, 1 SPDT 8(3)A, 1 SSR, 250Vac IPX315D: 15 SPDT 5(2)A or 10 SPDT 5(2)A and 5 SSR, 250Vac
Analog inputs	PWM, 4÷20mA, 0÷10V (depending on the model)
Data storing	IPC (4 DIN Rail): on 16MB Flash memory IPC (10 DIN Rail): on 128MB Flash memory
RAM memory	IPC (4 DIN Rail): 32MB IPC (10 DIN Rail): 64MB
Processor	32bit
CPU	200MHz
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Measuring and regulation range	pressure probe: 0÷50 bar (0÷725PSI) NTC probe: -50÷110°C (-58÷230°F) PTC probe: -50÷150°C (-58÷302°F)
Resolution	0,1°C or 1°F
Accuracy (at ambient temperature)	±0,8°C (±1°F)

HOW to ORDER

I	P	C	1	0	8		-	1	0	C	D	0

IPC108D - IPC108E

C	D
Protocols	**Serial port**
0 = No	**1** = LAN
3 = BACnet	**2** = RS485 master

I	P	C		1	5	D	-	A	0	C	0	E

IPC115D - IPC315D

A	C	E
Power supply	**Protocols**	**N. SSR relays**
1 = 24Vac/dc	**1** = ModBUS	**0** = No
2 = 24Vac (UL versions)	**3** = BACnet	**2** = 5 SSR relays

I	P	X	1			D	-	1	0	0	0	0

IPX106D - IPX115D

I	P	X	1	2	5	D	-	1	0	0	0	2

IPX125D

I	P	X	3			D	-	1	0	0	0	E

IPX306D - IPX315D

E
N. SSR relays
0 = No
2 = SSR relays (1 for IPX306D, 5 for IPX315D)

IPM500D SERIES

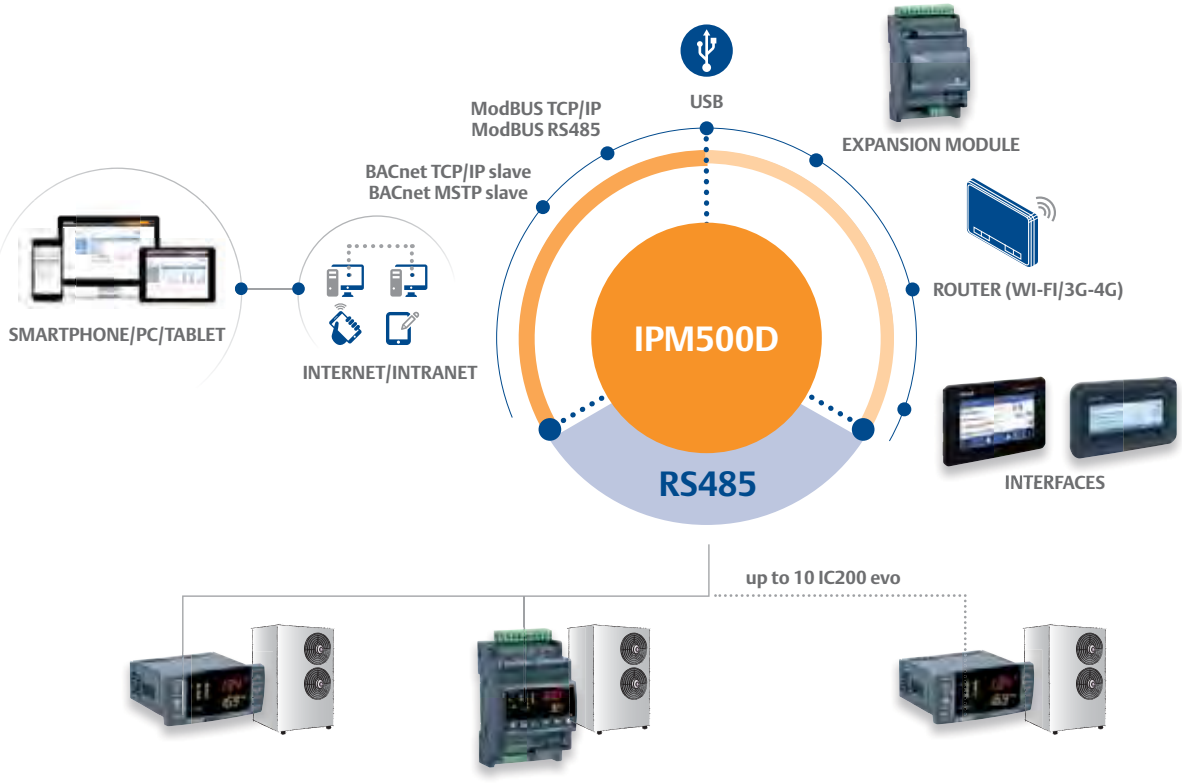
MASTER/SLAVE MODULE

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 IC200 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
- 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

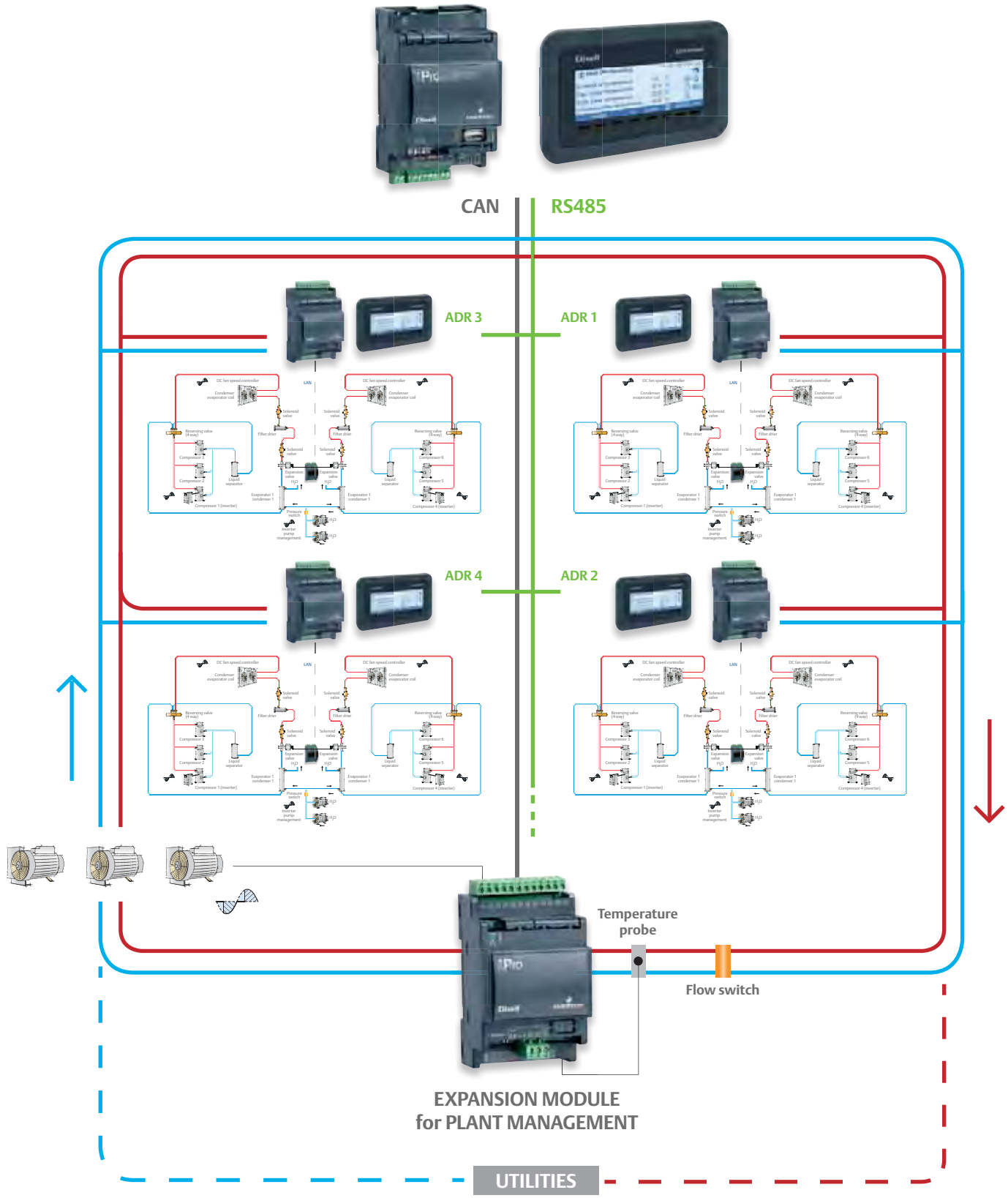
Thanks to IPM500D all the benefits of the iPro connectivity are available for the plant.



EXPANSION

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

- Up to 3 water pumps (1 inverter + 2 On\Off) 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



WEB INTERFACE

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

BACK-UP MACHINE FUNCTION

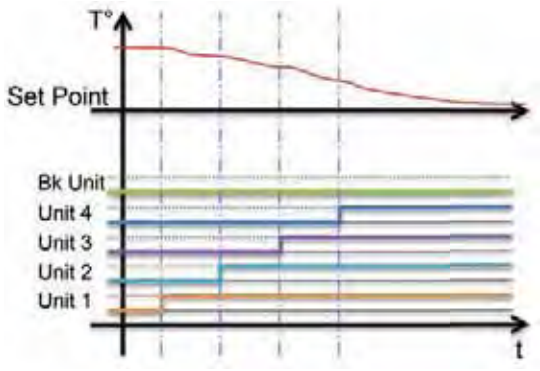
One of the units in the system can be configured as back-up machine. The back-up machine offers considerable advantages to the system.

- 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.

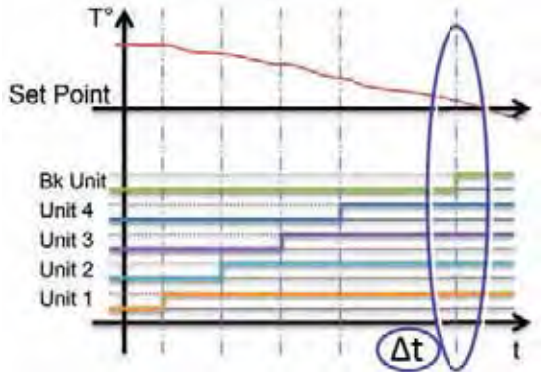
Without OVERBOOST



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

OVERBOOST ACTIVATION

With TIME OVERBOOST

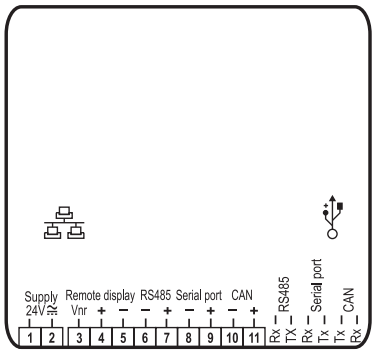


The back-up unit delivers extra power allowing the set point to be reached

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



TECHNICAL DATA

Housing	self-extinguishing ABS
Format	4 DIN Rail: frontal 110x70mm; depth 59,5mm
Mounting	DIN Rail or wall mounting through integrated brackets
Power supply	24Vac/dc ±10% 50/60Hz
Power absorption	20VA max
Data storing	on 128MB Flash memory
RAM memory	64MB
Processor	32bit
CPU	200MHz
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Measuring and regulation range	-50÷110°C (-58÷230°F)
Resolution	0,1°C or 1°F
Accuracy (at ambient temperature)	±0,8°C (±1°F)

HOW to ORDER

I	P	M	5	0	0	D	-	1	0	1	2	0

IPM500D

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:

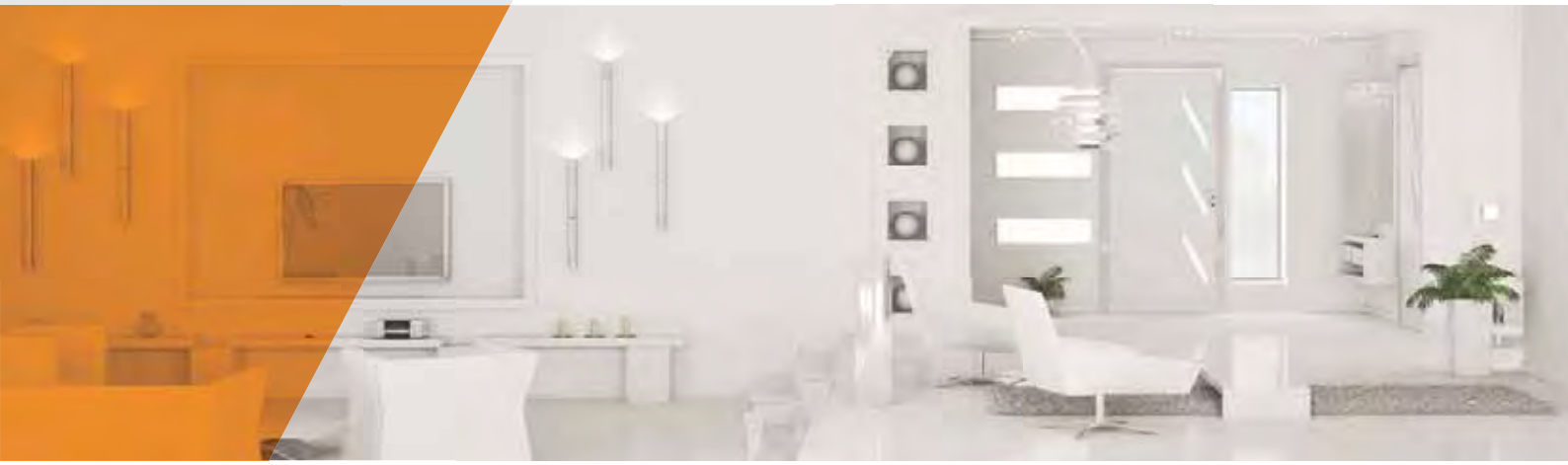
- FAQ
- Forum
- Newsletter
- Calendar
- Documentation download
- "Function block" libraries
- Templates

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)

INDEX



HMI (Human Machine Interface)

VI

REMOTE KEYBOARDS with LED DISPLAY

VI remote keyboards, combined with IC100CX and IC200 evo, are the ideal solution to control and manage the unit remotely.

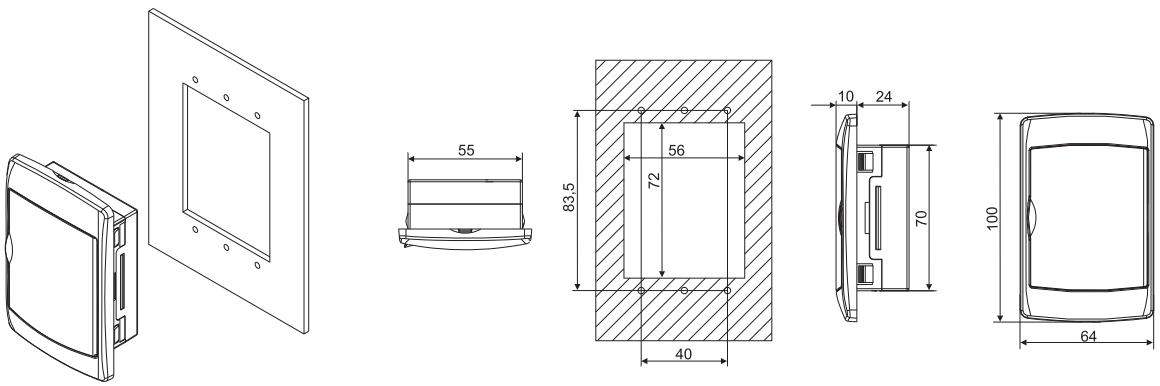
- Quick and easy panel mounting (also wall mounting by V-KIT for VI keyboards)
- Up to 2 keyboards (1 for IC100CX series)
- Maximum distance from the controller: 100m
- Optional internal temperature probe

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

DIMENSIONS & CUT-OUT



REMOTE KEYBOARDS for IC100CX and IC200 evo CONTROLLERS

VICX610	Vertical keyboard for IC100CX controllers
VICX620	Vertical keyboard for IC206CX and IC208CX controllers
VI622	Vertical keyboard for IC205D and IC207D controllers

FEATURES	VICX610	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
Connection kit	CAB/CJ15 CAB/CJ30		

TECHNICAL DATA

Housing	self-extinguishing ABS
Format	frontal 100x64mm; depth 24mm
Display	4 digits red LED + 4 digits yellow LED + icons
Mounting	panel mounting in a 72x56mm cut-out (or wall mounting using the V-KIT)
Front protection	IP65 with gasket
Connections	screw-terminal block ≤ 2,5mm²
Power supply	from controller
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Measuring and regulation range	-50÷110°C (-58÷230°F)
Resolution	0,1°C or 1°F
Accuracy (at ambient temperature)	±0,8°C (±1°F)

HOW to ORDER

V	I	C	X	6		0	-	A	B	0	0	0

VICX610 - VICX620

V	I	6	2	2	-	A	B	0	0	0

VI622

A	B
Internal probe	**Buzzer**
0 = No	**0** = No
1 = Yes	**1** = Yes

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 (**IC200 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

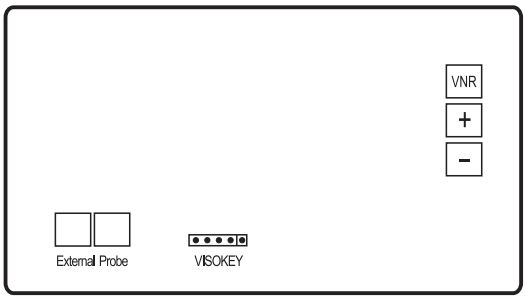
Thanks to version 5 of VISOPROG software developed by Dixell, it is now possible to create simple and intuitive user interfaces based on customer's needs.

VISO PROG

GRAPHIC DISPLAYS for IC200 evo, iPro and IPM500D 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 controllers
V2IPM	Graphic display with interface for IPM500D controllers

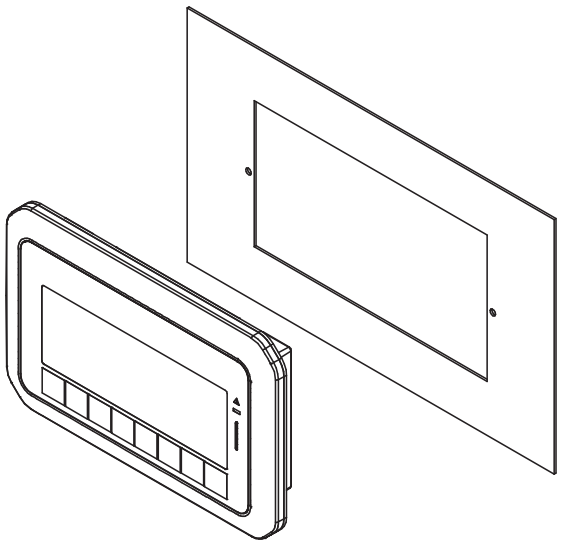
FEATURES	V2I820	V2IPC	V2IPG	V2IPM
Power supply	from controller	from controller	from controller	from controller
Internal and external probe	opt	opt	opt	opt
Visokey output	pres	pres	pres	pres
Buzzer	opt	opt	opt	opt

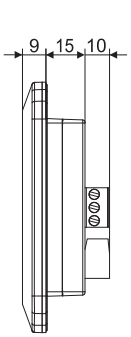


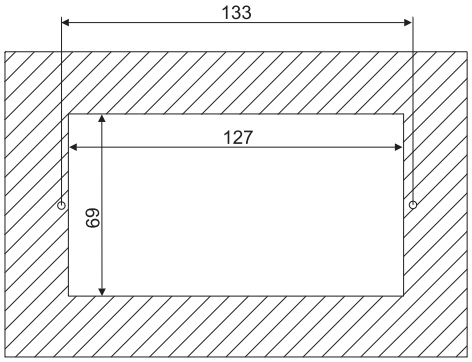
TECHNICAL DATA

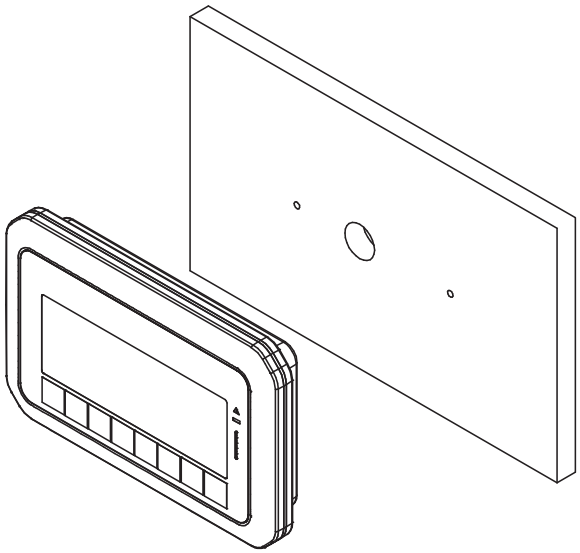
Housing	self-extinguishing ABS
Format	frontal 95x148mm; depth 25mm for panel mounting and 25,5mm for wall mounting
Display	240x96 pixel, LCD monochrome display
Mounting	panel mounting in a 89x127mm cut-out or wall mounting
Front protection	panel: model without built-in probes: IP54 model with built-in probes: IP30 wall: IP30
Connections	screw-terminal block ≤ 2,5mm^2
Power supply	from controller
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷70°C (-22÷158°F)
Measuring and regulation range	internal temperature probe: -10÷60°C (14÷140°F) internal humidity probe: 0÷99% external temperature probe: -50÷110°C (-58÷230°F)
Relative humidity	20÷85% (non condensing)
Resolution	0,1°C or 1°F or 1RH%
Accuracy (at ambient temperature)	temperature: ÷1% humidity: ÷5%

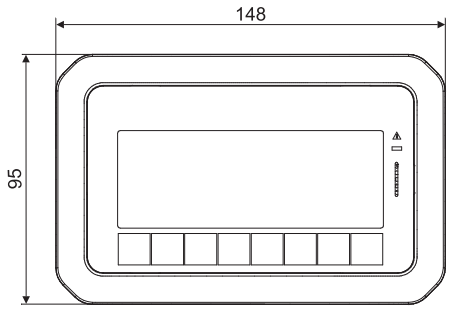
DIMENSIONS & CUT-OUT











HOW to ORDER

V	2	I	8	2	0	-	A	B	C	D	0
V	2	I	P	C	-	A	B	C	D	0	
V	2	I	P	G	-	A	B	C	D	0	
V	2	I	P	M	-	A	B	C	D	0	

V2I820

V2IPC

V2IPG

V2IPM

A	B	C	D
Buzzer/Probes	**Type of mounting**	**Frame/Color**	**Character encoding**
0 = No/No	**P** = Panel	**0** = Flat/White	**0** = Ascii
1 = Yes/No	**W** = Wall	**1** = Chamfered/White	**1** = Unicode (Oriental languages)
2 = No/Yes		**2** = Flat/Black	
3 = Yes/Yes		**3** = Chamfered/Black	

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 **IC200 evo**, **iPro** and **IPM500D** Dixell controllers. 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 new VISOPROG 5 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

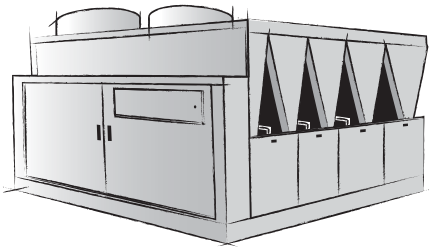
Thanks to version 5 of VISOPROG software developed by Dixell, it is now possible to create simple and intuitive user interfaces based on customer's needs. Icons and colored texts give to the screen a more modern and appealing look, making the access to information even more clear and immediate.

VISO PROG

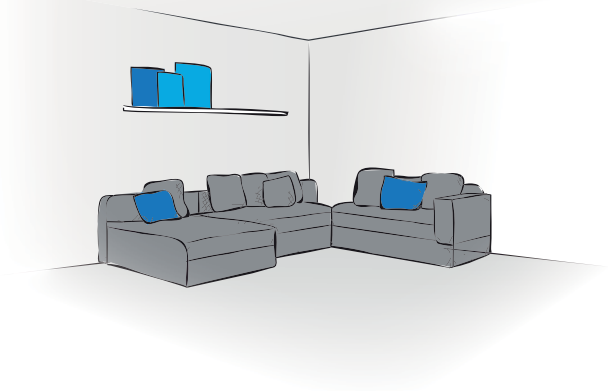
MAIN APPLICATIONS

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

CHILLERS and HEAT PUMPS



ROOM TERMINALS



HIGH CUSTOMIZATION POSSIBILITIES

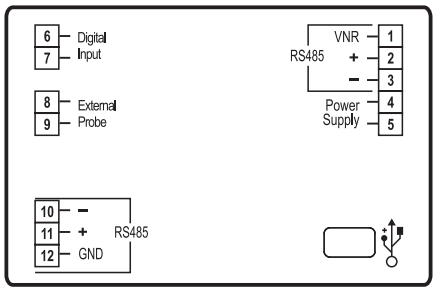
The graphic TFT color display stands out thanks to its great brightness and provides real-time information in a clear and detailed way. Thanks to its many features available, you can quickly create user interfaces dedicated to specific customer's needs.

PROGRAMMABLE TOUCH SCREEN DISPLAY

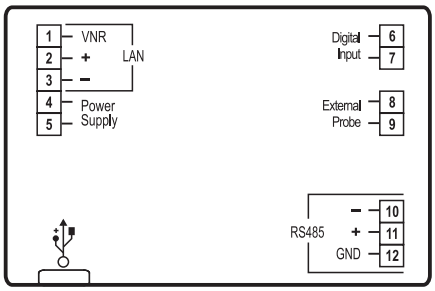
VTIC20	TFT touch screen display for IC200 evo controllers
VTIPC	TFT touch screen display for iProCHILL controllers
VTIPG	TFT touch screen display for iProLINK controllers
VTIPM	TFT touch screen display for IPM500D controllers

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

Panel mounting version



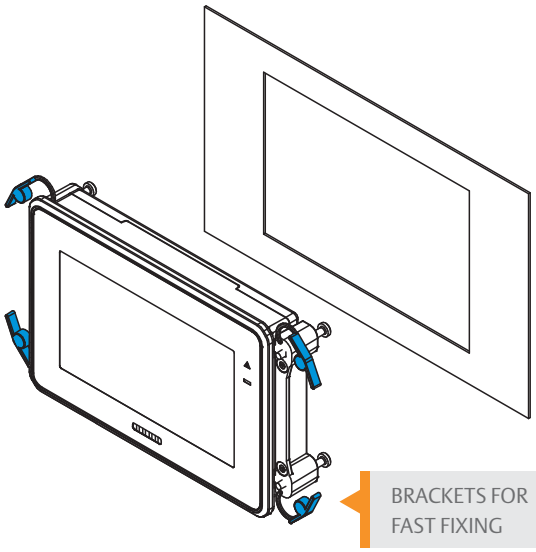
Wall mounting version



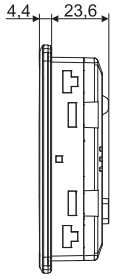
TECHNICAL DATA

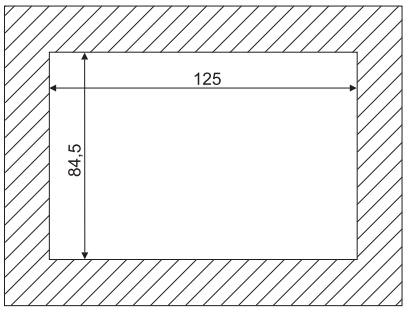
Housing	self-extinguishing ABS
Touch screen	resistive
Format	4:3 frontal 93x134mm; depth 23,6mm for panel mounting and 30,6mm for wall mounting
Display	480x272pixels TFT, 256 colors
Mounting	panel mounting in a 84,5x125mm cut-out or wall mounting
Front protection	panel: model without built-in probes: IP54 model with built-in probes: IP30 wall: IP20
Connections	panel version: STELVIO 90° screw connectors wall version - wires section: min 0,5mm^2 - max 2,5mm^2
Power supply	12, 24Vac/dc ±15%
Power absorption	5W - 5VA
Operating temperature	-20÷60°C (-4÷140°F)
Storage temperature	-25÷70°C (-13÷158°F)
Measuring and regulation range	internal temperature probe: -10÷50°C (14÷122°F) internal humidity probe: 20÷85% external temperature probe: -50÷110°C (-58÷230°F)
Relative humidity	20÷85% (non condensing)
Resolution	0,1°C or 1°F or 1RH%
Accuracy (at ambient temperature)	temperature: ÷1% humidity: ±3% (20÷80%) / ±5% (elsewhere)

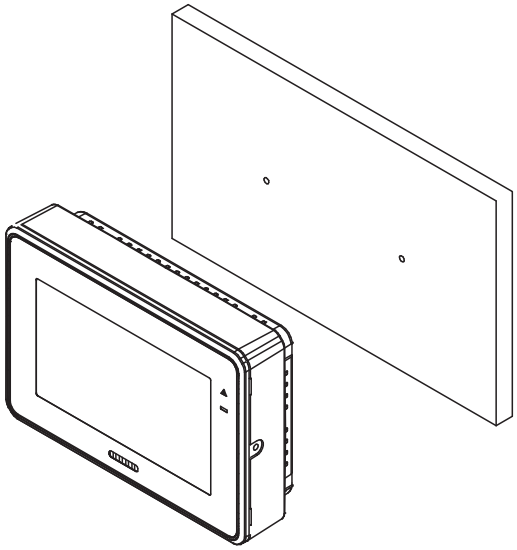
DIMENSIONS & CUT-OUT

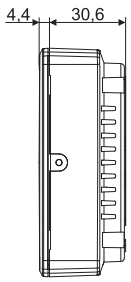


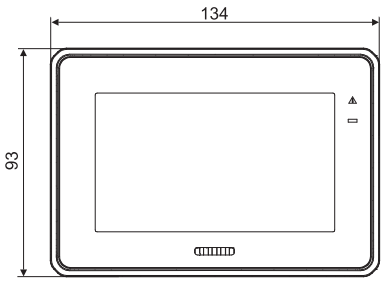
BRACKETS FOR
FAST FIXING











HOW to ORDER

V	T	I	C	2	0	-	A	B	0	0	E
V	T	I	P	C	-	A	B	0	0	E	
V	T	I	P	G	-	A	B	0	0	E	
V	T	I	P	M	-	A	B	0	0	E	

VTIC20

VTIPC

VTIPG

VTIPM

A	B	E
Probes	**Type of Mounting/Format**	**RS485**
0 = No	**0** = Panel/Horizontal	**0** = No
1 = Yes	**1** = Wall/Horizontal	**1** = Yes
	2 = Panel/Vertical	
	3 = Wall/Vertical	

INDEX

EEV DRIVER

IEV & XEV SERIES

DRIVER for STEPPER ELECTRONIC EXPANSION VALVES MANAGEMENT

IEV & XEV represent Dixell solution for stepper electronic expansion valves management. **XEV20D** (combined with iPro controllers), **IEV22/24D** (stand-alone functioning or combined with **IC200 evo** 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 IC200 evo controllers
- Programming via HOT KEY or PC (WIZMATE PROG TOOL KIT)

XEV

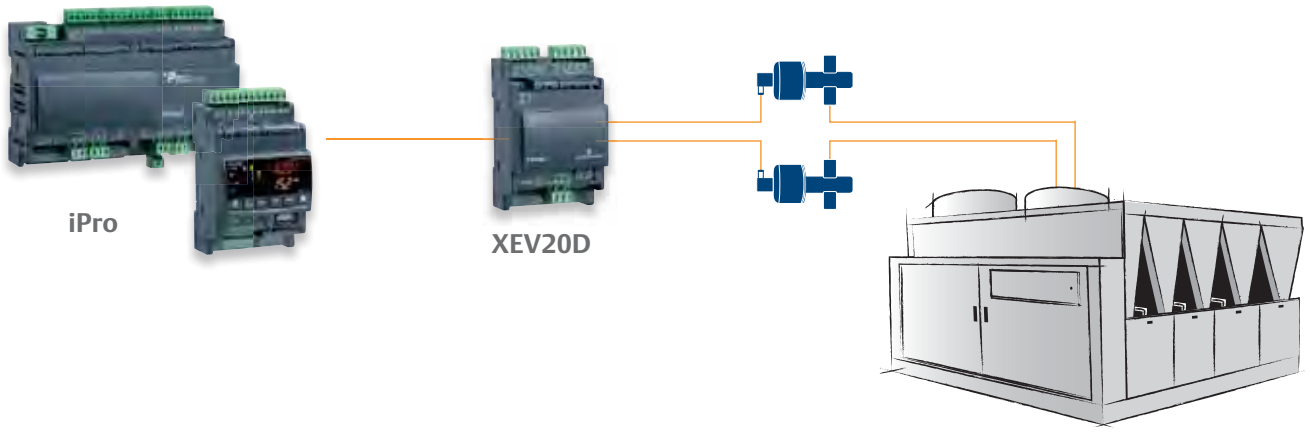
- CANBus output for connection to iPro controllers (10DIN format)
- LAN output for connection to iPro controllers (4DIN format)
- 4 position DIP Switch to set the address

BACK-UP MODULE

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

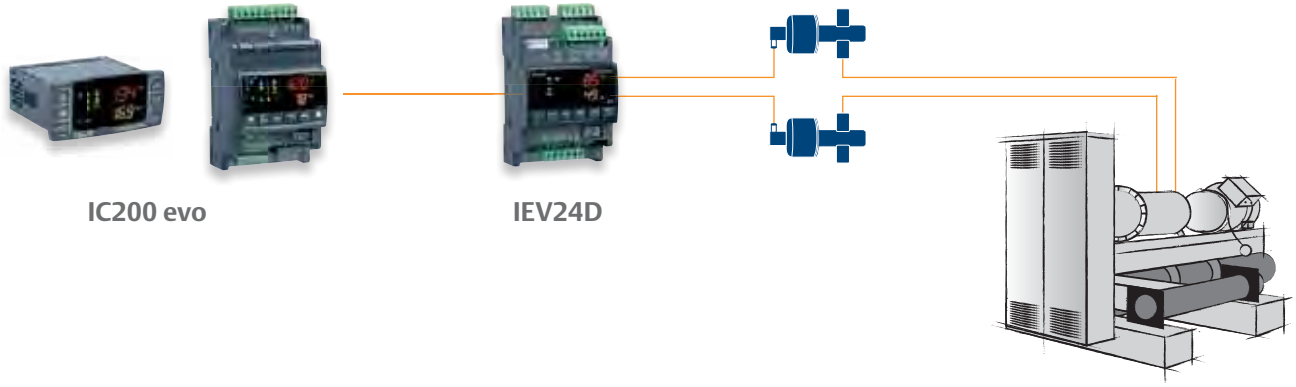
EXAMPLE of APPLICATION with XEV20D DRIVER

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

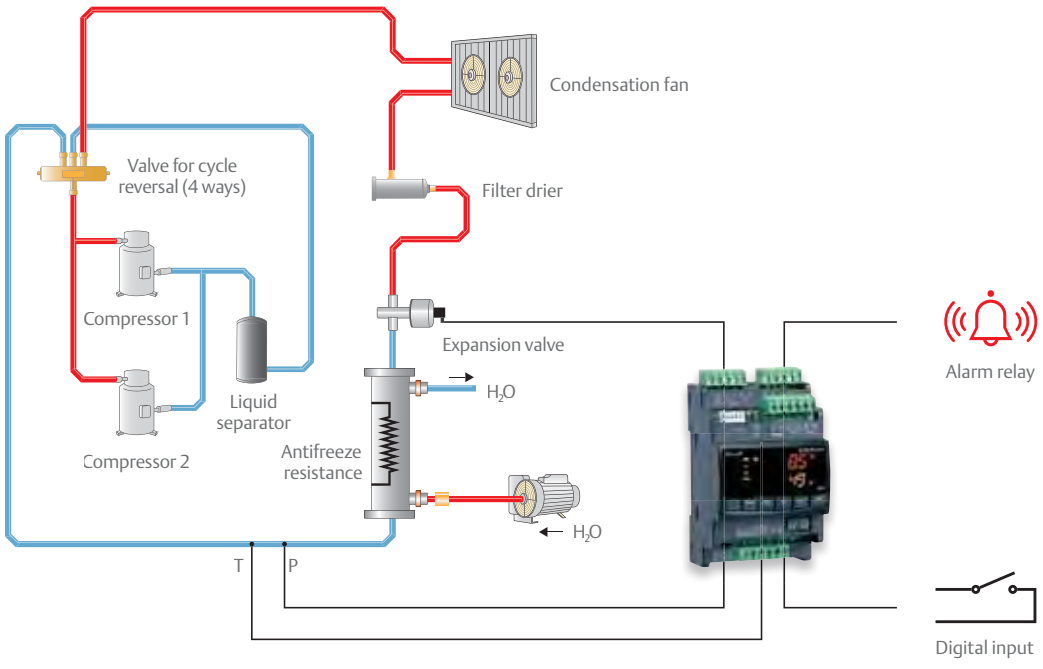


EXAMPLE of APPLICATION with IEV22D and IEV24D DRIVER

IEV drivers are designed to be combined with IC200 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

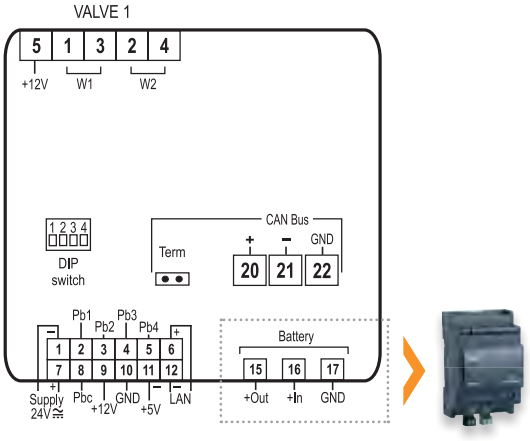


DRIVER for EEV MANAGEMENT COMPATIBLE with iPro CONTROLLERS

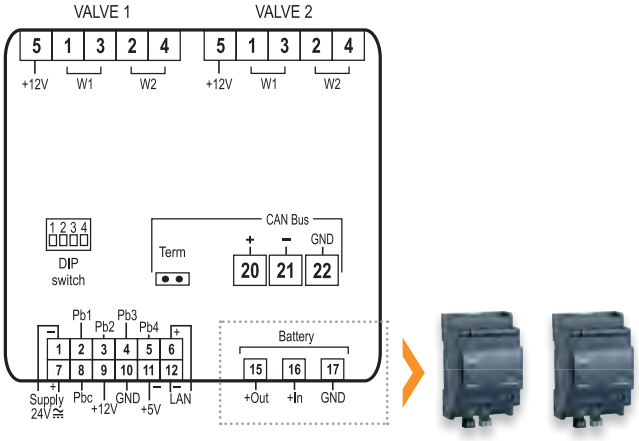
XEV20D Driver for 1 or 2 unipolar and bipolar stepper electronic expansion valves for iPro controllers

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

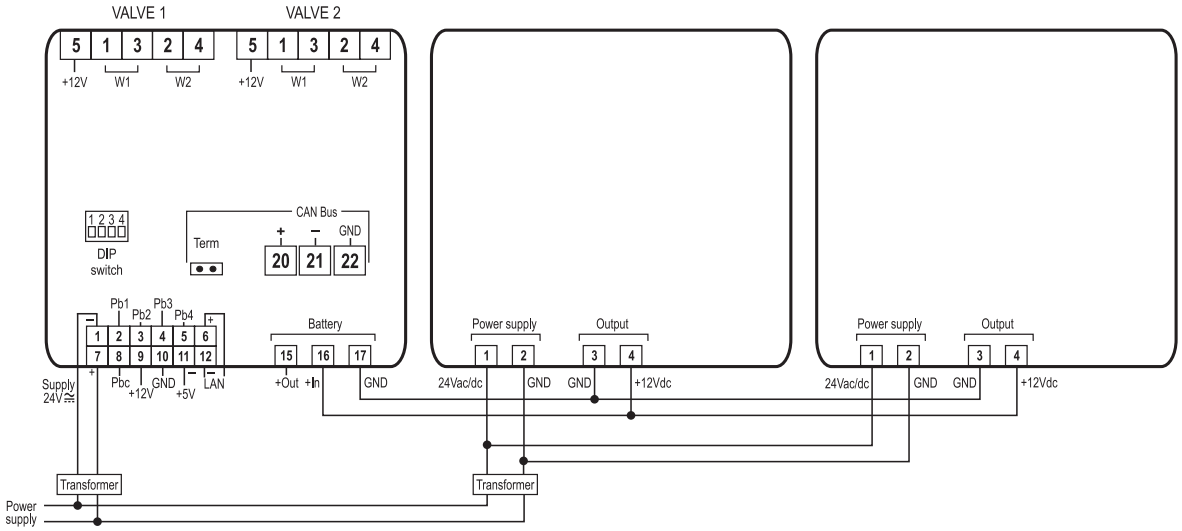
XEV20D - 1 valve



XEV20D - 2 valves



XEV20D - 2 valves and XEC back-up modules

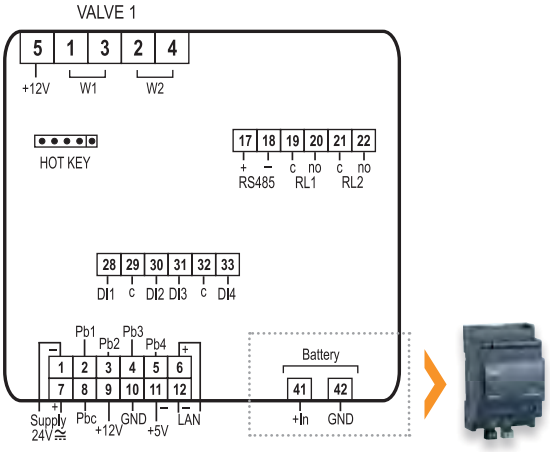


DRIVERS for EEV MANAGEMENT with STAND-ALONE FUNCTIONING and COMPATIBLE with IC200 evo CONTROLLERS

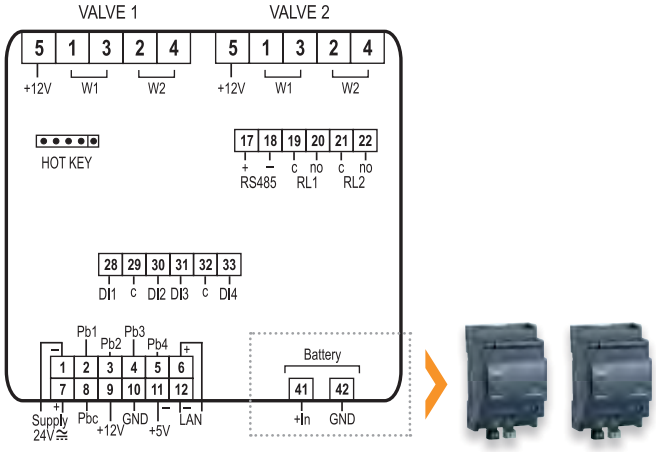
IEV22D	Driver for 1 unipolar and bipolar stepper electronic expansion valve with stand-alone functioning or in combination with IC200 evo controllers
IEV24D	Driver for 2 unipolar and bipolar stepper electronic expansion valves with stand-alone functioning or in combination with IC200 evo controllers

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

IEV22D



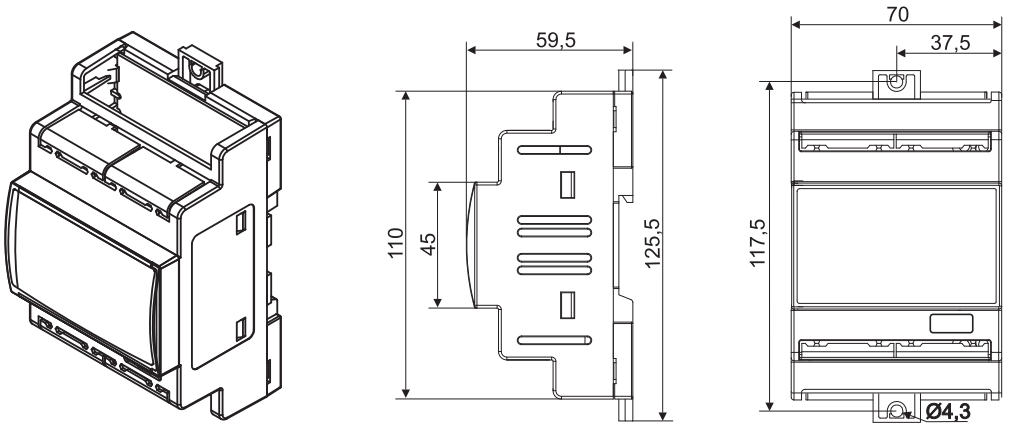
IEV24D



TECHNICAL DATA

Housing	self-extinguishing ABS
Format	frontal 110x70mm; depth 59,5mm
Display	IEV: 4 digits red LED + 4 digits yellow LED + icons
Mounting	DIN Rail or wall mounting through integrated brackets
Connections	disconnectable connectors
Power supply	24Vac/dc ±10% 50/60Hz
Power absorption	20VA max (40VA max with 2 valves)
Data storing	non-volatile memory (EEPROM)
Operating temperature	IEV: -10 ÷55°C (14°F ÷131°F) XEV: -10 ÷60°C (14°F ÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Resolution	0,1°C or 1°F or 0,1bar or 1PSI
Accuracy (at ambient temperature)	±0,8°C (±1°F)

DIMENSIONS



HOW to ORDER

X	E	V	2	0	D	-	1	1	C	0	0

XEV

C
N° valves
0 = 1 valve
1 = 2 valves

I	E	V	2		D	-	1	B	C	D	0

IEV

B	C	D
Temperature probe	**Pressure probe**	**Measurement unit**
P = Pt1000	**0** = 0÷5V	**C** = °C/bar
N = NTC	**1** = 4÷20mA	**F** = °F/PSI

INDEX

FAN SPEED CONTROLLERS

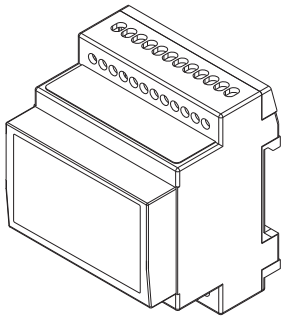
XV05/10/22 SERIES

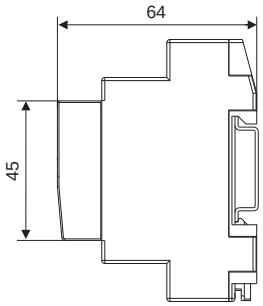
SINGLE-PHASE FAN SPEED CONTROLLERS

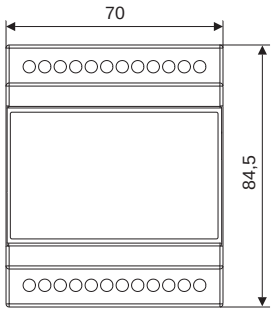
XV05/10/22 is the range of cut phase controllers dedicated to condenser fans speed control.

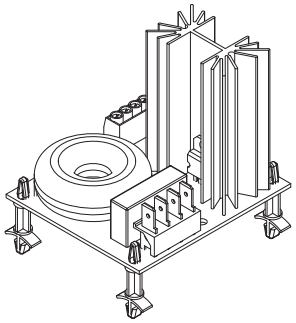
- Compatibility with all iCHILL controllers
- Compatibility with iProCHILL controllers
- Trigger output to drive up to 2 modules

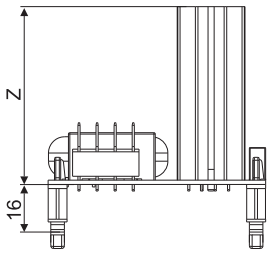
DIMENSIONS

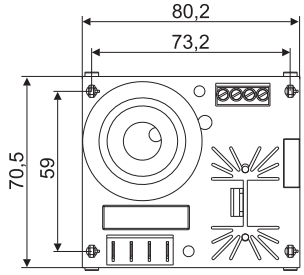






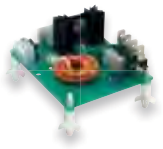






XV05PK Z = 26,5 **XV10PK** Z = 43,5 **XV22PK** Z = 65,5

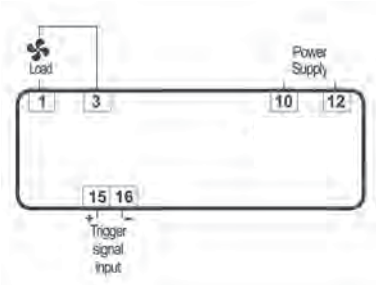
SINGLE-PHASE FAN SPEED CONTROLLERS



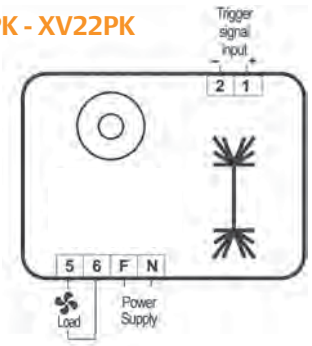
XV05PD **XV05PK**	Fan speed controllers designed for single-phase A.C. motors up to 500W, 2A, PWM input
XV10PK	Fan speed controller designed for single-phase A.C. motors up to 1000W, 4A, PWM input
XV22PK	Fan speed controller designed for single-phase A.C. motors up to 2200W, 9,5A, PWM input

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



TECHNICAL DATA

Housing	open board or self-extinguishing ABS
Format	XV05PD: frontal 84,5x70mm; depth 64mm XV05PK: frontal 80,2x70,5mm; depth 26,5mm XV10PK: frontal 80,2x70,5; depth 43,5mm XV22PK: frontal 80,2x70,5; depth 65,5mm
Mounting	PD: DIN Rail PK: with plastic spacers
Front protection	PK: IP00 PD: IP20
Connections	screw-terminal block ≤ 2,5mm² for signals 6,3mm faston (7,3mm for PK) for loads
Power supply	230Vac ±10% 50/60Hz
Operating temperature	0÷60°C (32÷140°F)
Storage temperature	-25÷60°C (-13÷140°F)
Relative humidity	20÷85% (non condensing)
Regulation range	0÷100%

HOW to ORDER

X	V	0	5	P	D	-	5	0	0	0	0

XV05PD

X	V			P	K	-	5	0	0	0	0

XV05/10/22PK

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.

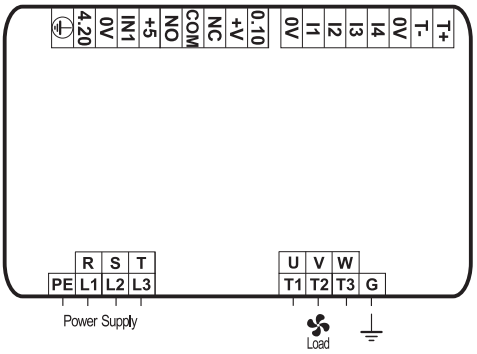
- Designed for adjustable voltage motors from 8 to 60A
- Oversized heat sinks for better heat disposal
- Integrated heat protection
- Oversized power stages
- Optimized radiofrequency filters
- Time and costs reduction of wiring
- 0÷10V output to be used for testing operations
- Compatibility with all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

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
Power supply	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac
Protection grade	IP55	IP20	IP55	IP20	IP55, IP20 opt	IP55, IP20 opt	IP55, IP20 opt	IP55	IP55
Maximum load	8A	10A	12A	16A	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	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	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc
Auxiliary output	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc
Supply LED	pres	pres	pres	pres	pres	pres	pres	pres	pres
Alarm LED	pres	pres	pres	pres	pres	pres	pres	pres	pres
ModBUS-RTU	pres	pres	pres	pres	pres	pres	pres	pres	pres

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



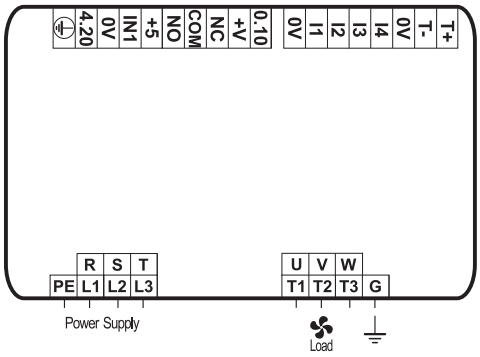
THE TERMINAL POSITION CAN VARY DEPENDING ON THE MODEL

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

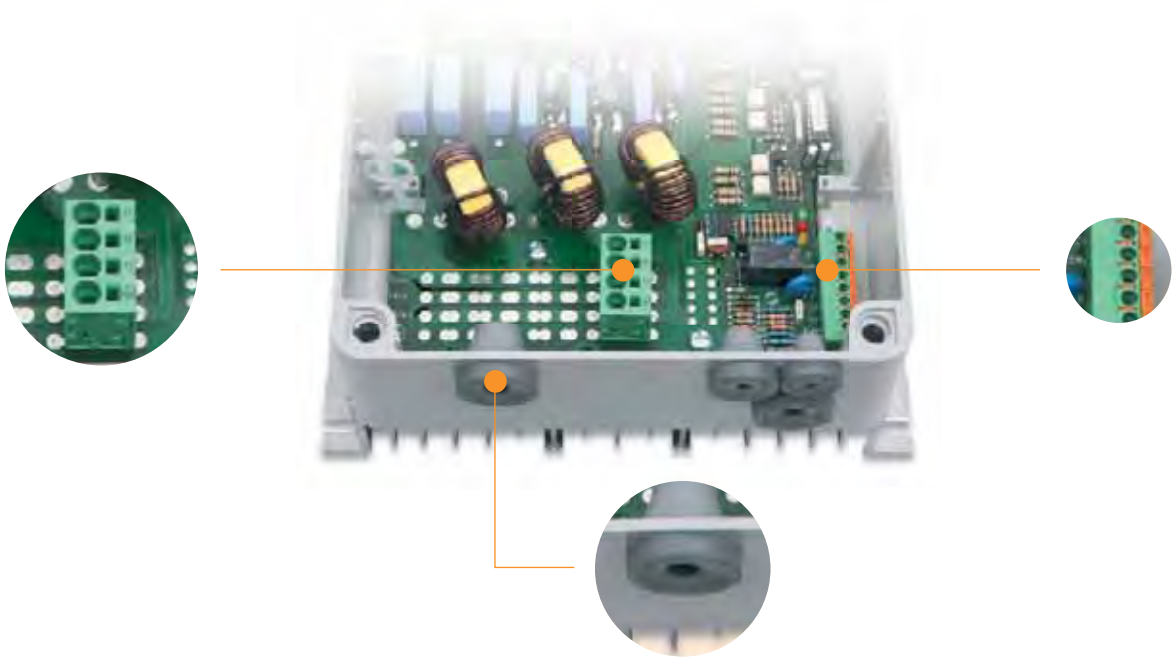
XV308K - XV312K - XV320K - XV328K - XV340K - XV350K - XV360K



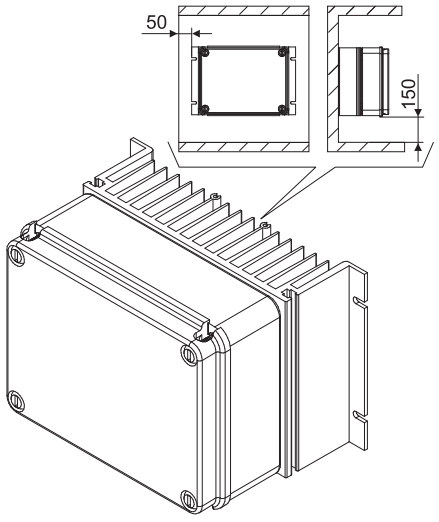
THE TERMINAL POSITION CAN VARY DEPENDING ON THE MODEL

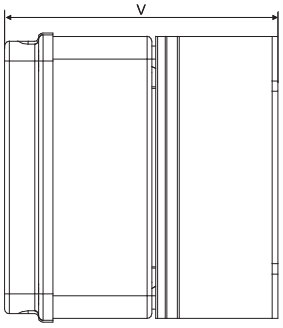
EXAMPLE of XV300 BOARD

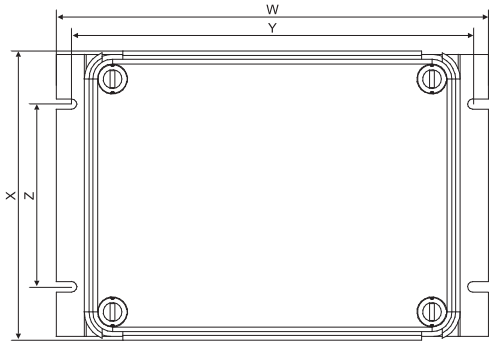
The IP55 protection, the screwless spring connectors and the useful feed-through wires ensure a quick and safe set up in every situation.



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

TECHNICAL DATA

Housing	metallic or self-extinguishing ABS
Format	XV308K: frontal 165x230mm; depth 150mm XV310K: frontal 165x230mm; depth 150mm XV312K: frontal 230x265mm; depth 165mm XV316K: frontal 230x265mm; depth 165mm XV320K: frontal 230x265mm; depth 230mm XV328K: frontal 270x340mm; depth 235mm XV340K: frontal 270x340mm; depth 235mm XV350K: frontal 340x440mm; depth 235mm XV360K: frontal 340x440mm; depth235mm
Weight	XV308K: 2,5Kg XV310K: 3Kg XV312K: 4Kg XV316K: 4Kg XV320K: 4,8Kg XV328K: 7Kg XV340K: 9Kg XV350K: 17Kg XV360K: 18Kg
Mounting	wall
Front protection	IP20 (metallic cover) IP55 (plastic cover)
Connections	spring terminal block
Power supply	XV300 slave: 400Vac ±10% 50/60Hz XV300 master: 230/400Vac +10%/-15% 50/60Hz
Power dissipation	XV308K: 30W XV310K: 40W XV312K: 60W XV316K: 70W XV320K: 80W XV328K: 120W XV340K: 155W XV350K: 180W XV360K: 250W
Operating temperature	metallic cover: -25÷60°C (-13÷140°F) plastic cover: -25÷50°C (-13 ÷122°F)
Storage temperature	-40÷80°C (-40÷176°F)
Relative humidity	20÷85% (non condensing)
Regulation range	20÷100%

HOW to ORDER

X	V	3			K	-	7	0	C	2	0

XV300K - SLAVE VERSION

C
Protection grade
0 = IP20
1 = IP55

X	V	3			K	-	6	1	1	D	E

XV300K - MASTER VERSION

D
RTC
1 = Yes
2 = No

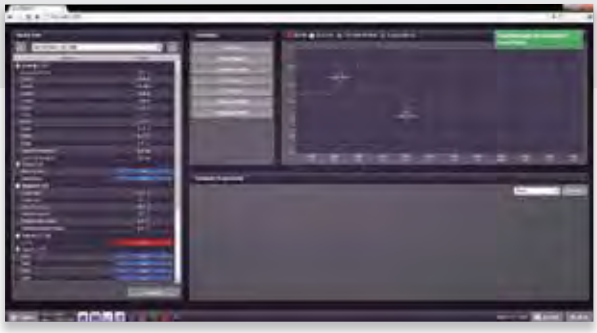
E
Display
1 = LCD
2 = OLED LCD

INDEX

SYSTEMS

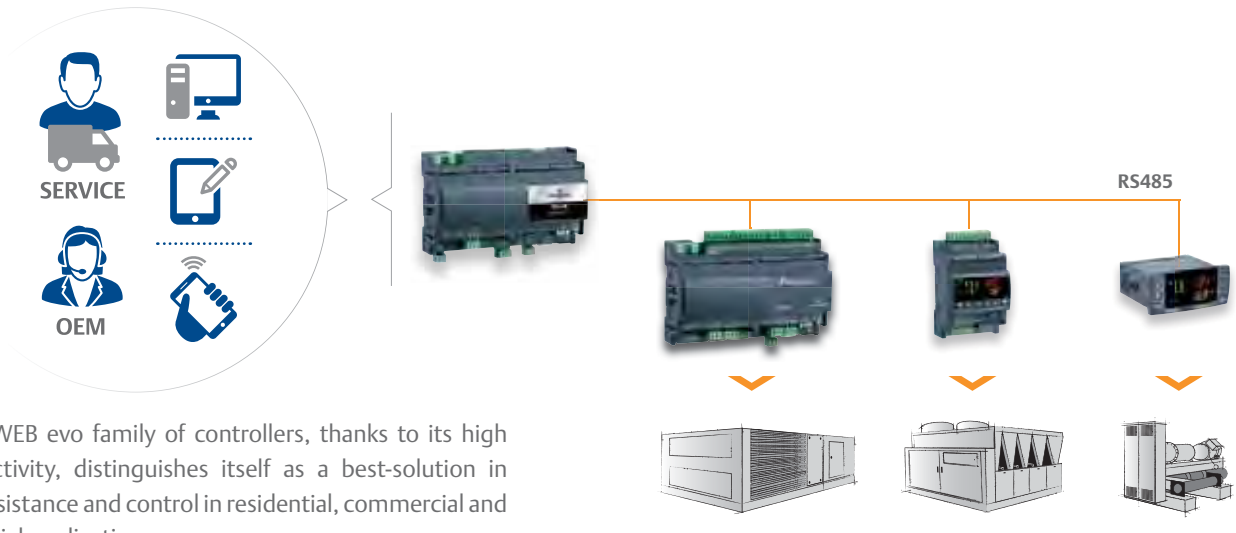
XWEB evo

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 browsers such as Microsoft Internet Explorer®, Firefox®, etc...
- 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)



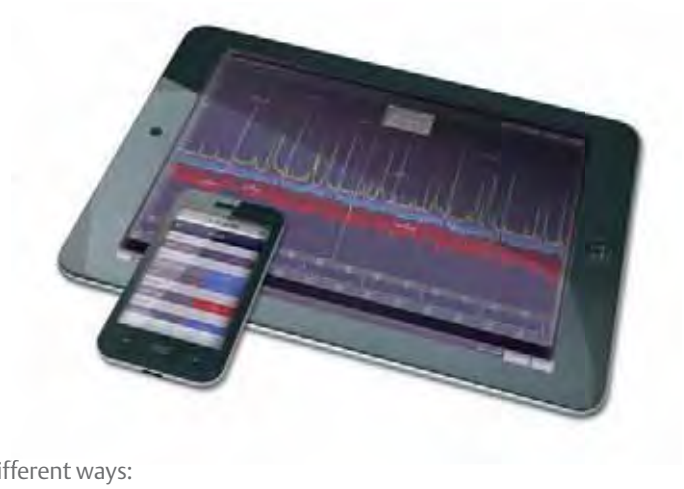
The XWEB evo family of controllers, thanks to its high connectivity, distinguishes itself as a best-solution in tele-assistance and control in residential, commercial and industrial applications.

XWEB evo CONNECTIONS

Among the highlights of the XWEB evo family, stands out the high degree of integration with other systems by HTTP/FTP/XML protocols. Here below there is an overview of the different connection methods available.

CONNECTION via TABLET and SMARTPHONE

The user can access the revolutionary XWEB evo user interface via tablet and smartphone simply using web browsers already installed.



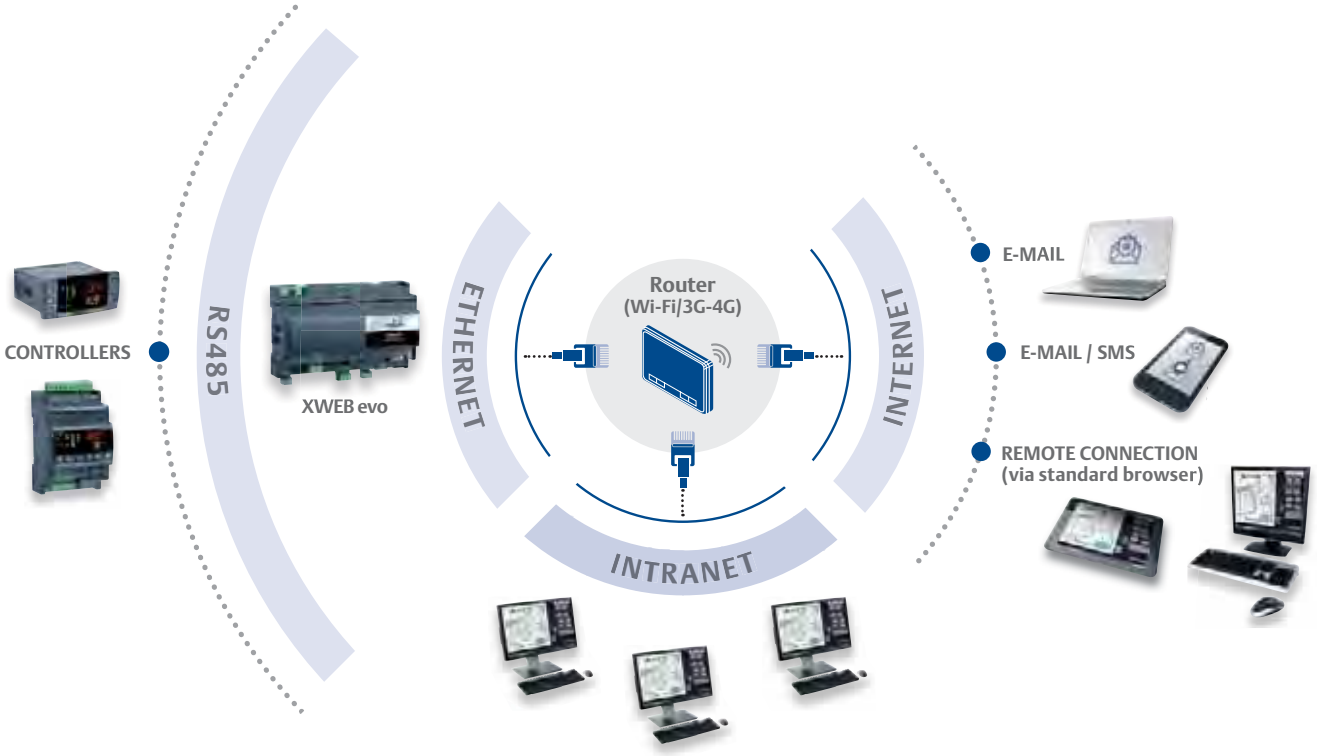
LOCAL CONNECTION

XWEB evo servers, installed in the plant, can be reached from local simply connecting the system to a PC.

REMOTE CONNECTIONS

XWEB evo servers, installed in the plant, can be reached remotely in different ways:

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

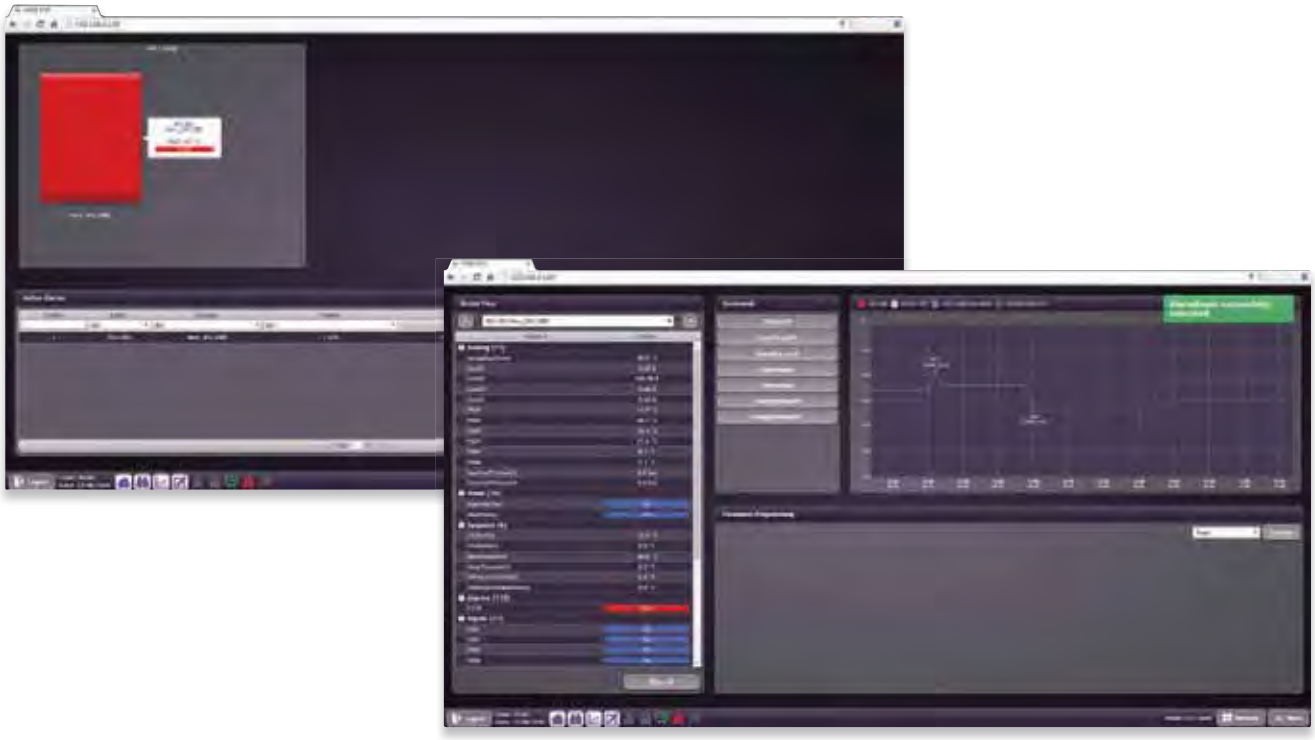


FUNCTIONS

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

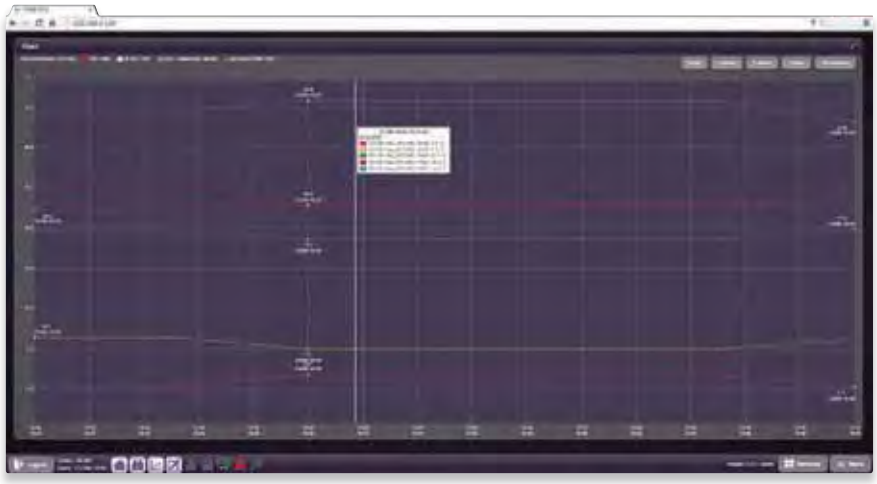
ALARM MACHINE STATUS

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...



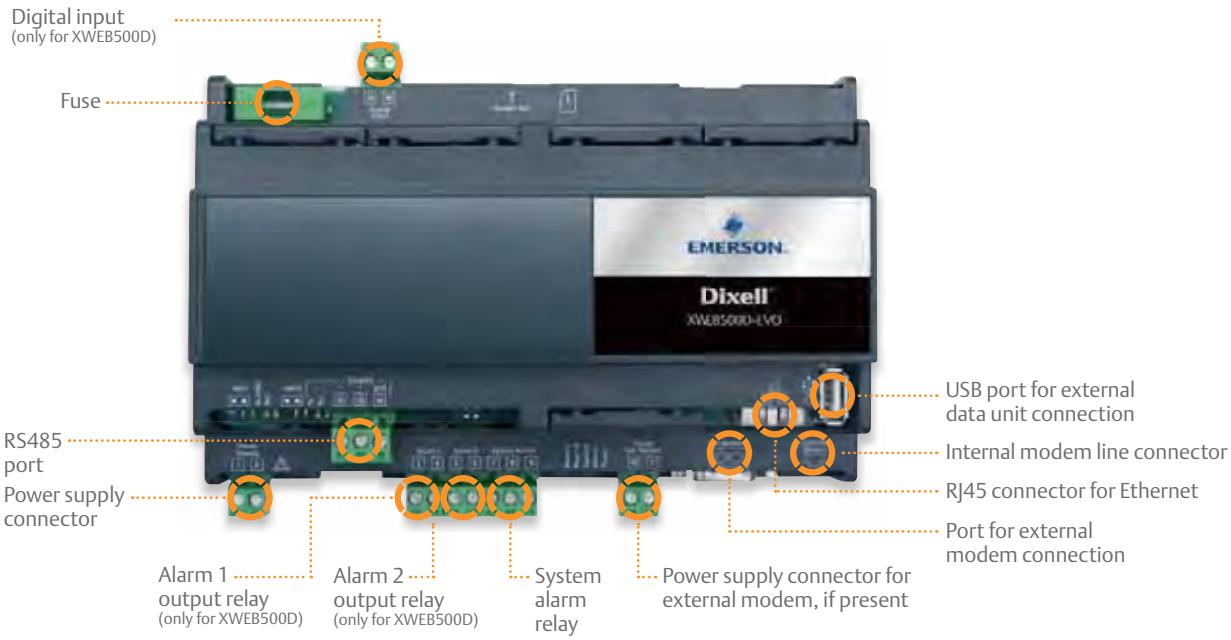
VIEW OF DEVICES

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).

HARDWARE



WEB SERVER for MONITORING, CONTROLLING and ALARM MANAGEMENT

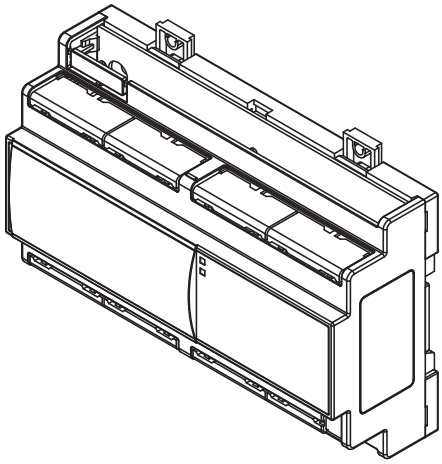
XWEB300D evo	Web server for control and alarms management with the possibility to connect 6 or 18 instruments
XWEB500D evo	Web server for monitoring and control with the possibility to connect 36 or 100 instruments

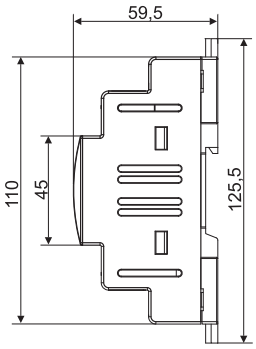
FEATURES	XWEB300D evo	XWEB500D evo
Applications	small and medium	medium and big
Hardware		
Power supply	24Vac or 100÷230Vac	24Vac or 100÷230Vac
N° of instruments	6-18	36-100
Peripheral USB output	pres	pres
Relay outputs	1	3
Digital input		pres
LAN output		pres
RS485 output	pres	pres
External modem	2G/3G opt	2G/3G opt
Internal modem	analog opt	analog opt
Functions		
Sampling time	from 1 to 60 minutes	from 1 to 60 minutes
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	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
Back-up/restore	pres	pres
Runtime function	pres	pres
Start data-log	pres	pres
Daily export module	pres	pres
Languages management	pres	pres
HACCP report		pres
Scheduler function		pres
Layout function		pres
Global commands		pres
Performance meter		pres

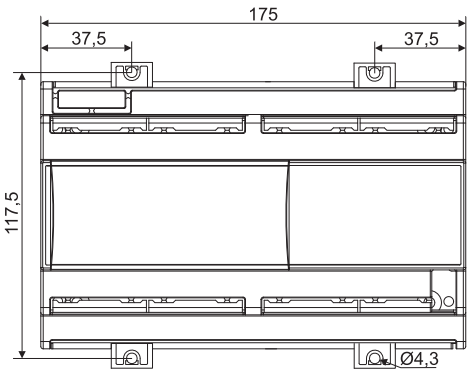
TECHNICAL DATA

Housing	self-extinguishing ABS
Format	frontal 110x175mm; depth 59,5mm
Mounting	DIN Rail or wall mounting through integrated brackets
Connections	disconnectable connectors Ethernet LAN USB RS485 RS232
Power supply	24, 110÷230Vac ±10% 50/60Hz
Digital input	1 (for XWEB500D evo)
Relay outputs	SPDT 8(3)A, 250Vac (3 for XWEB500D evo)
Power absorption	10VA max
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)

DIMENSIONS







HOW to ORDER

X	W	E	B	3	0	0	D	-	A	B	0	0	E

XWEB300D evo

A	B	E
Power supply	**N° of instruments**	**Internal modem**
2 = 24Vac	**C** = 6	**0** = No
8 = 110÷230Vac	**D** = 18	**1** = Analog

X	W	E	B	5	0	0	D	-	A	B	0	0	E

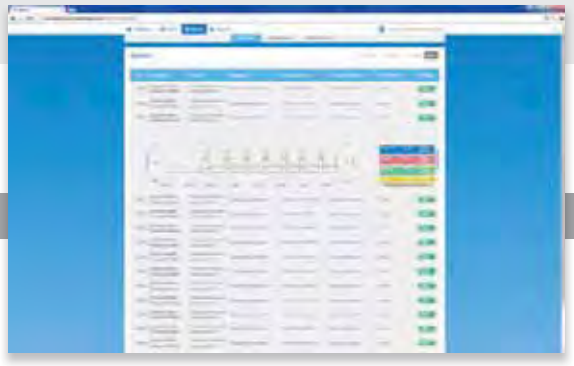
XWEB500D evo

A	B	E
Power supply	**N° of instruments**	**Internal modem**
2 = 24Vac	**G** = 36	**0** = No
8 = 110÷230Vac	**K** = 100	**1** = Analog

EMERSON CONNECTED

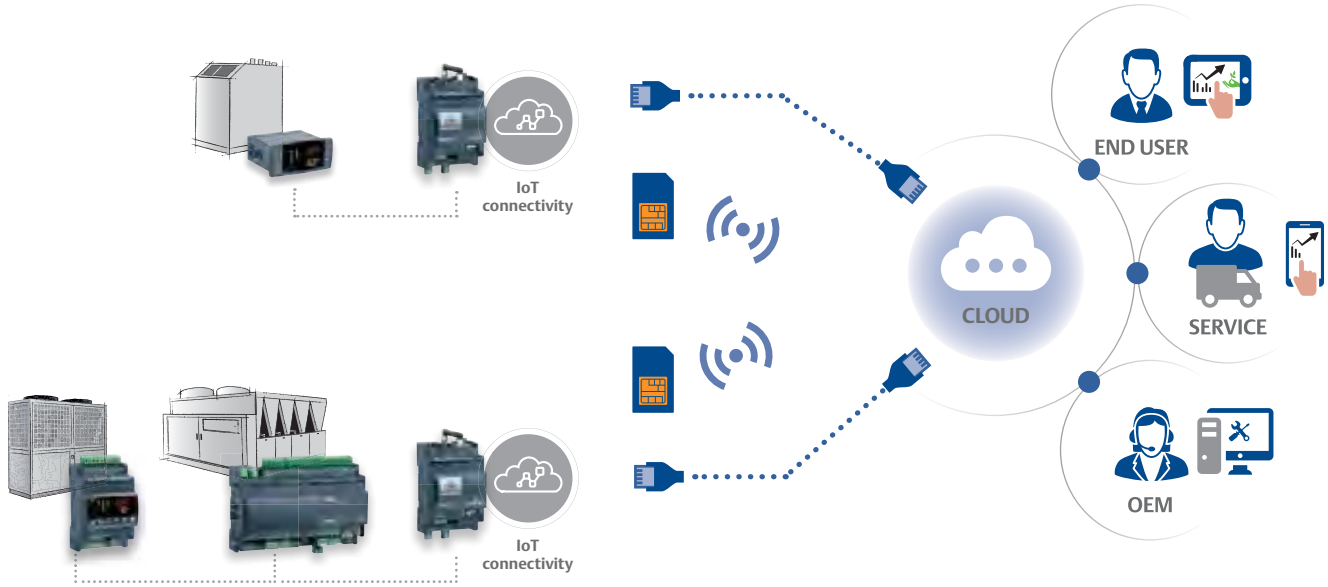
IoT HIGH CONNECTIVITY SYSTEM for MONITORING, CONTROLLING and ASSISTANCE

www.emersonconnected.com



Emerson Connected is the new connectivity solution for monitoring, control and assistance designed for food service and HVAC systems. It is easily accessible from PCs, tablets and smartphones via standard browser with no need to install any additional software. Authorized personnel can easily manage and analyze the installation and the machines because of the user-friendly interface.
High efficiency, energy saving and cost reduction are only some of the strong points of this revolutionary system.

- Plug and play internet connection (wireless or ethernet)
- Web browser U.I. (no software required)
- Immediate access to the information
- Multi-site maintenance portal
- Multi-site alarm management
- Easy and quick installation
- QR code registration

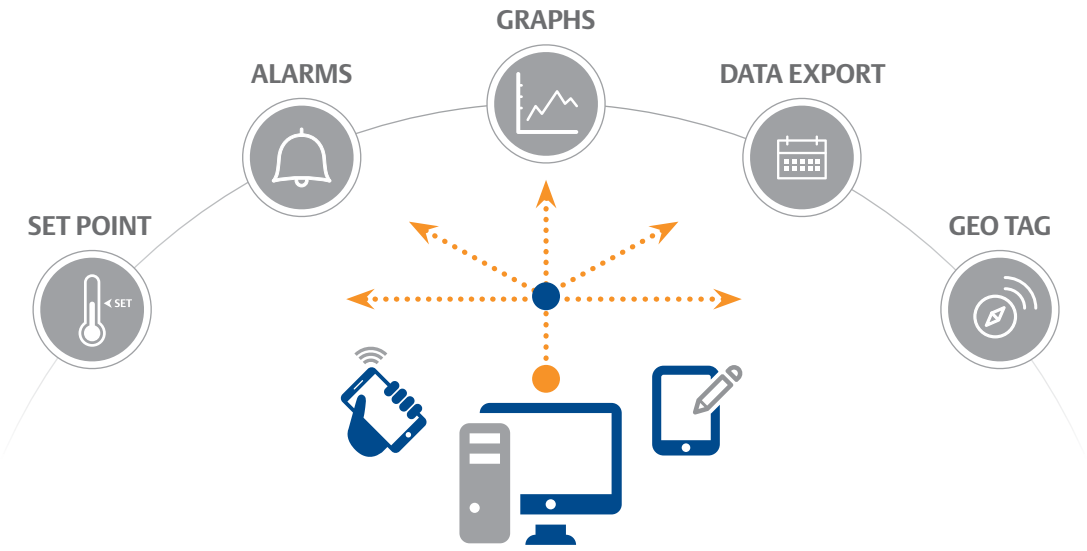


In addition to the IoT DCG connectivity module, a solution is available with IoT Agent directly on board of the iPro standard controller; contact Dixell for more information.

IoT CONNECTIVITY GATEWAY

DCG IoT Connectivity gateway in 4 DIN format

FEATURES	DCG
Power supply	24Vac
N° of instruments	6
Peripheral USB output	pres
LAN output	pres
RS485 output	pres
Internal modem	3G opt
SIM card slot	pres
Languages management	pres
SMS/email notifications	pres
Graphs management	pres
24/7 Historical data	pres
Data export in Excel format	pres
QR code	pres



HOW to ORDER

D	C	G	0	0	1	D	-	2	B	1	0	0

DCG

B
Internal modem
0 = No
1 = 3G

NOTE: SIM card is not included; for information on data service, please contact Dixell.

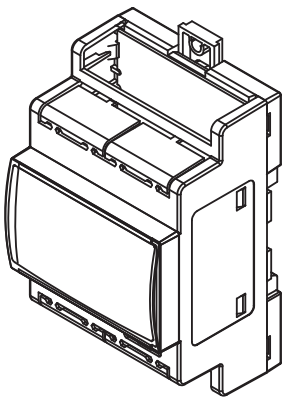
iProLINK

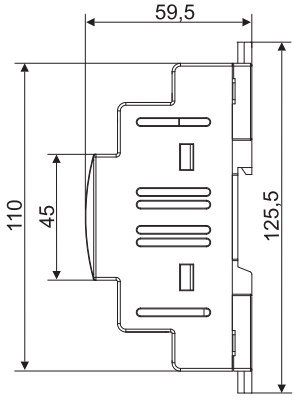
HIGH CONNECTIVITY and PROGRAMMABILITY MODULE

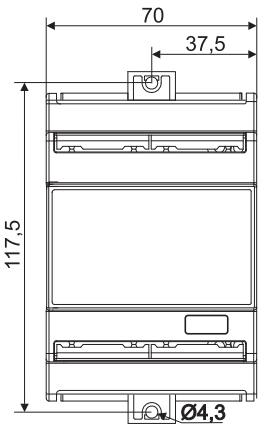
iProLINK is the connectivity module designed to meet the different requirements of the HVAC world thanks to the many communication ports available. This device can be used as a collector of data from other devices, Dixell or third parties, for data storage and management and for Supervision actions processing and planning. Since it has been developed on a programmable platform, it is compatible both with hardware and software of the iPro family controllers and applications can be downloaded directly into it for data processing or for the management of other devices.
Optionally a GPRS modem is available to establish connections in the network and to be able to query the device (web site, debugging), send and receive SMS and emails.

- Powerful platform characterized by LINUX operating system based on ARM9 (200MHz/32bit) microprocessor
- Internal Web Server with standard and custom website
- 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

DIMENSIONS

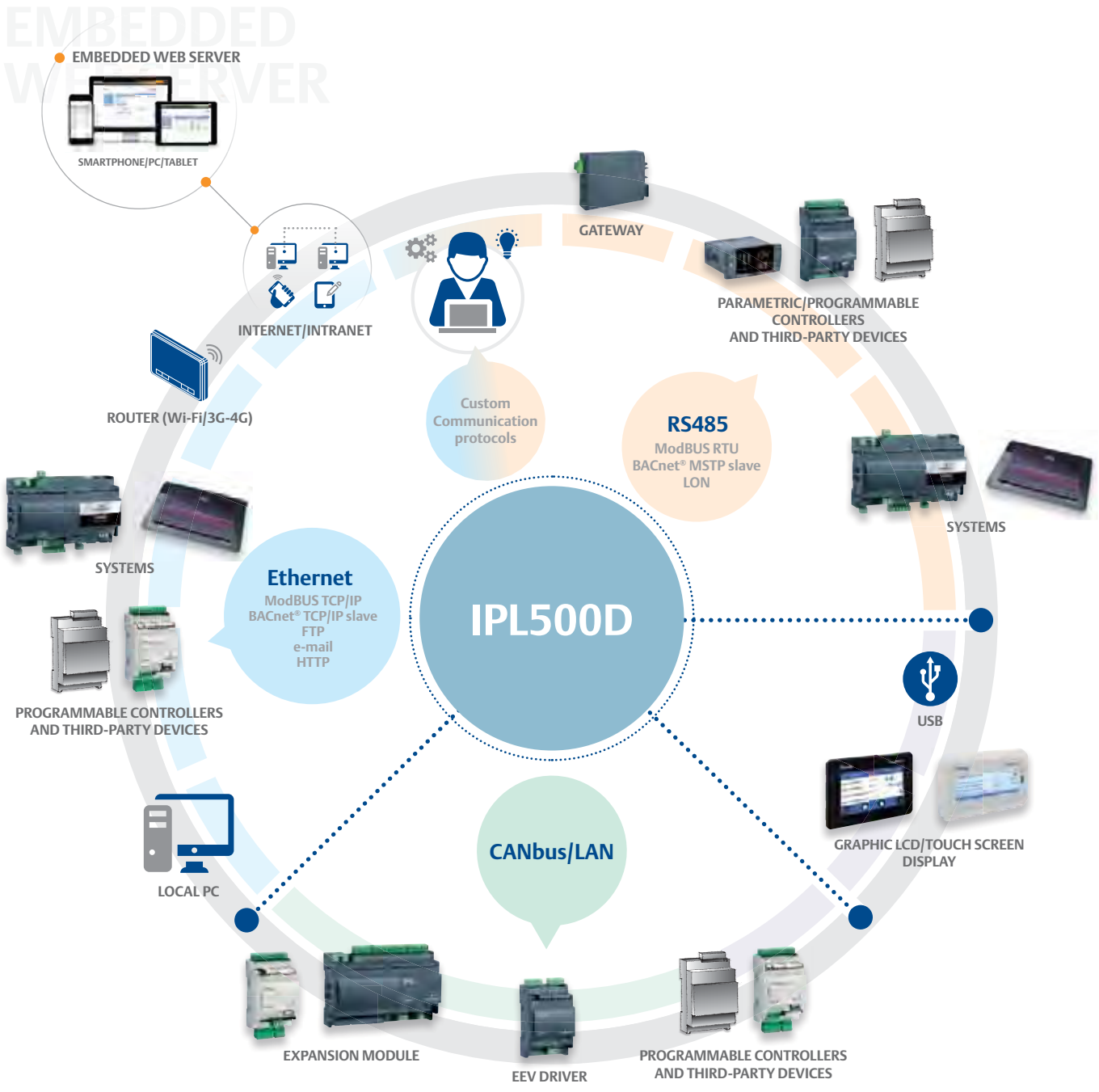






CONNECTIVITY

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.

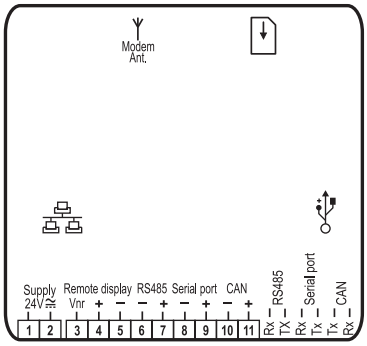


CONNECTIVITY MODULE

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
Internal modem	GPRS opt
Real time clock	pres
Flash memory	128MB
Connections	screw
Connection kit	IP-FC500
BACnet protocol	opt



TECHNICAL DATA

Housing	self-extinguishing ABS
Format	frontal 110x70mm; depth 59,5mm
Mounting	DIN Rail or wall mounting through integrated brackets
Power supply	24Vac/dc ±10% 50/60Hz
Power absorption	20VA max
Data storing	on 128MB Flash memory
RAM memory	64MB
Processor	32bit
CPU	200MHz
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Resolution	0,1°C or 1°F

HOW to ORDER

I	P	L	5	0	0	D	-	1	B	C	D	0

IPL500D

B	C	D
Modem	**Protocol**	**Serial port**
0 = No	**1** = ModBUS	**1** = LAN
1 = Internal GPRS	**3** = BACnet	**2** = RS485 master

INDEX

SENSORS

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

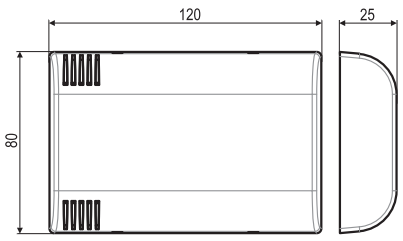
TEMPERATURE/HUMIDITY PROBES

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.

- Available in 2 versions: XH50P (without knob)
  XH55P (with knob for comfort sensor)
- LED to display the device status
- Wall mounting (503 box dim. compatible)
- Self-extinguishing ABS housing
- 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

TECHNICAL DATA

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

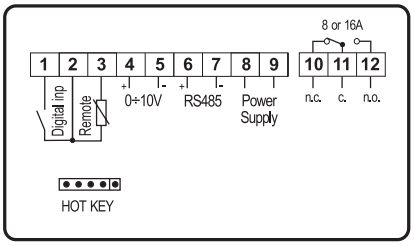


HOW to ORDER

X	H	5		P	-	0	N	C	D	E

XH50/55P

C	D	E
Analog output	**Measurement unit**	**Relay output**
0 = No	**C** = °C	**1** = 8A
1 = Yes	**F** = °F	**2** = 16A



PRESSURE TRANSDUCERS

PRESSURE TRANSDUCERS

Pressure transducers supply a standard output current signal (4÷20mA). 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÷20mA output and measurement range -0,5÷7bar (male or female fitting)
PP11	2 wires transducer with 4÷20mA output and measurement range -0,5÷11bar (male or female fitting)
PP30	2 wires transducer with 4÷20mA output and measurement range 0÷30bar (male or female fitting)
PP50	2 wires transducer with 4÷20mA output and measurement range 0÷50bar (male or female fitting)

TECHNICAL DATA

Power supply	8÷28Vdc
Dimensions	male fitting: 20x52,5mm female fitting: 20x48mm
Output	4÷20mA
Protection	IP65
Operating temperature	-40÷135°C (-40÷275°F)
Storage temperature	-40÷135°C (-40÷275°F)
Accuracy	1% F.S.

RATIOMETRIC PRESSURE TRANSDUCERS

Pressure transducers supply a standard output ratiometric signal (0÷5V). 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÷5V output and measurement range 0÷15bar
PPR30	3 wires ratiometric transducer with 0÷5V output and measurement range 0÷35bar
PPR45	3 wires ratiometric transducer with 0÷5V output and measurement range 0÷45bar

TECHNICAL DATA

Power supply	4,5÷5,5Vdc
Dimensions	20x48mm
Output	0,5÷4,5Vdc
Protection	IP65
Operating temperature	-40÷135°C (-40÷275°F)
Storage temperature	-40÷135°C (-40÷275°F)
Accuracy	1,2% F.S.

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

TECHNICAL DATA

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)
Accuracy	1,2% F.S.

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

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

TECHNICAL DATA

Format	IP41: 86x142x53mm IP66: 175x165x82mm
Mounting	wall
Power supply	12÷24Vac/Vdc ±20% 50/60Hz
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
Operating temperature	IP41: -20÷50°C (-4÷122°F) IP66: -40÷50°C (-40÷122°F)
Relative humidity	0÷95% (non condensing)

HOW to ORDER

G	D	S	4	1	-	0000	0		**GDS41**
G	D	S	6	6	-	0000	0		**GDS66**
G	D	S	4	1	M	-	0000	0	**GDS41M**
G	D	S	6	6	M	-	0000	0	**GDS66M**
G	D	I	4	1	M	-	0000	0	**GDI41M**
G	D	I	6	6	M	-	0000	0	**GDI66M**

0000	
Gas type	
7440	= CO_2
2900	= R290
134A	= R134A
404A	= R404A
407A	= R407A
407C	= R407C
407F	= R407F
410A	= R410A
448A	= R448A
449A	= R449A
450A	= R450A
507A	= R507A
5130	= XP10/513

INDEX

WIRING & ACCESSORIES

WIRING & ACCESSORIES

WIRING

ETHERNET PATCH CABLES

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

WIRING for iCHILL

CF-KIT	For IC100	2 disconnectable female connectors and faston
CAB/CJ15	For IC100	Connector, 2 pins with 1,5m wires for remote keyboard, PB4 probe, open collector alarm and 4÷20mA output for condensing control
CAB/CJ30	For IC100	Connector, 2 pins with 3m wires for remote keyboard, PB4 probe, open collector alarm and 4÷20mA output for condensing control
CW15-KIT	For IC100	2 disconnectable female connectors, with 1,5 wires
CW25-KIT	For IC100	2 disconnectable female connectors, with 2,5 wires
CWC15-KIT	For IC100 + triac module	2 disconnectable female connectors, with 1,5 wires for module with internal triac

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

DWDE15-KIT	For IC205D and IC207D	2 disconnectable female connectors, with 1,5m wires
DWDE30-KIT	For 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 iProCHILL

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
DWX115-30KIT	For IPX115D	3 + 3 disconnectable female connectors, with 3m wires
DWEX70-30KIT	For IPX125D	5 + 3 disconnectable female connectors, with 3m wires
DWB315-KIT	For IPC315D	3 disconnectable female connectors, with 3m wires
DWX315-30KIT	For IPX315D	3 disconnectable female connectors, with 3m wires

IP-FC108	For IPC108D and IPC108E	1 + 1 screw female connectors

IP-FC315	For IPC315D	1+8 screw female connectors

IP-FCX315	For IPX315D	5 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

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.

How to order:
WIZMATE PROG-TOOL KIT 110V (with 110Vac power supply)
WIZMATE PROG-TOOL KIT 230V (with 230Vac power supply)

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. How to order: • KIT MODEM GT-HE910-EUD (for EMEA, APAC and Brazil) • KIT MODEM GT-HE910-NAD (for North America)	

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 including 0,2m	

USB CONVERTER

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

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 XEV20D, IEV22D, IEV24D. How to order: XEC-00000	

SIMULATOR

KIT SIMULATORE	The simulator of inputs and outputs is suitable to test the applications developed for IEV/XEV drivers and iCHILL and iProCHILL controllers. Thanks to a resistant frame, its compact dimensions, a complete series of wiring and a versatile suitcase, the use is facilitate 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; please contact Dixell for more information.	

EmersonClimate.com

Emerson Commercial & Residential Solutions
Dixell S.r.l. - Z.I. Via dell'Industria, 27 - 32010 Alpago (BL) ITALY - Tel. +39.0437.9833 r.a. - Fax +39.0437.989313
EmersonClimate.com - Dixell@Emerson.com

release 2.0 - 1582300101-GB

EMERSON. CONSIDER IT SOLVED.™