

Solutions for Refrigeration and Retail



DIXELL™


EMERSON™



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- 51 ACCESSORIES - *wirings, energy analyzers, converters, developing and programming tools, ...*



Headquarters

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

Sales

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



Production

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



Training

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



Certifications

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



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

Environment

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

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





APPLICATIONS



Retail

The Retail sector is continuously evolving; the request is based on other determining factors such as simplicity of use, connectivity, energy savings, and environmental impact. Dixell, always focused on the demands and needs of the market, has addressed this issue with full availability and attention to trends, providing innovative solutions that are easy to apply and manage. Our range of products allows you to control and manage the systems in order to optimize the functions and make sure that the users can operate at best with ease and efficiency.

- Control, monitoring, and supervision systems on the web and Cloud.
- Electronic controllers with Bluetooth® technology that cover the entire spectrum of refrigerants used, especially natural ones such as CO₂ and hydrocarbons.
- Electronic controllers that easily integrate the management of new plant applications such as heat pumps and heat recovery.
- Parametric and programmable electronic controllers that allow an easy and effective management of complex applications such as transcritical CO₂ systems.

Dixell offers a series of specific solutions that ranges from thermometers to multi-function controllers, to supervisor systems, for a centralized solution in compliance with HACCP standards, which satisfies user needs for display cases and refrigerated cabinets, cold rooms, compressor racks, retrofits and large kitchens.

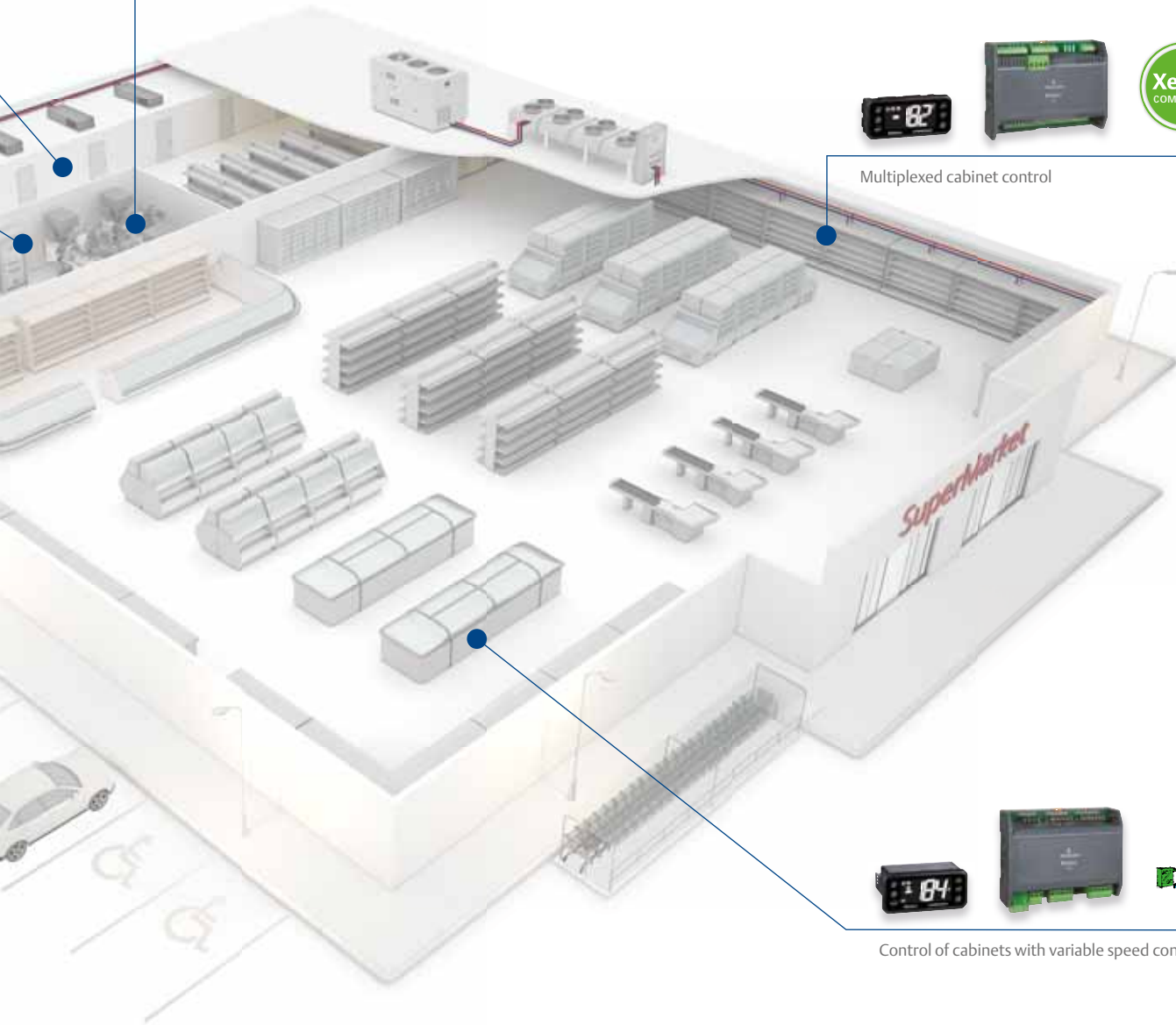




Control of compressor racks with CO₂ management



Optimized electronic system for CO₂ retail applications that comprise controllers for refrigerated cabinets and compressor racks and monitoring systems



Multiplexed cabinet control



Control of cabinets with variable speed compressors



Food service

The wide range of solutions for food service and catering allows Dixell to be the perfect partner for manufacturers of cabinets, display cases, refrigerated cabinets and ovens of ice-cream parlor, pastry shop, restaurants and canteens.

Dixell offers dedicated solutions for plant control, ensuring user-friendliness, conformity to the food regulations, efficiency and energy savings. Often, hidden behind a bottle cooler or a blast chiller, lies the electronic technology which is nowadays required, which is becoming more important and plays a decisive role, both for the designer and for the consumer. The concepts of integration, remote access, energy savings, functional aesthetics and connectivity are important considerations on which even the wholesaler can always rely on.

Dixell has years of experience in offering products with excellent performance and durability including special applications such as blast chiller processes used in freshly-cooked food conservation. Dixell's solutions to the introduction of food hygiene regulations (HACCP) offer immediate advantages in terms of cost, time and system operation.



Refrigerated cabinets control



Blast chiller control



Control, monitoring, and plant supervision



Remote control





The various needs that distinguish the world of refrigeration are answered by the solutions offered by Dixell. A complete product range consisting of controllers and monitoring systems with innovative design, highly intuitive interfaces, and the most advanced technology in terms of connectivity and processing speed. IoT, Touch Interfaces, Fully Responsive Web Design, Natural & low GWP refrigerants are some of the solutions we offer. The operating state of the system is controlled 24/7 while intelligent algorithms and innovative functions can enable high energy savings throughout the Dixell product range. A family of probes and transducers for temperature, humidity and pressure, and a series of useful accessories such as serial interfaces, programming kits, protections and more completes the solution.

Corporate and homologations

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



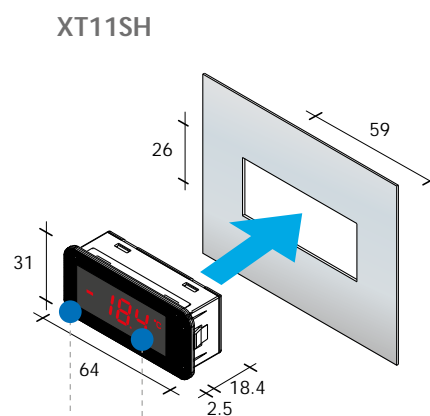
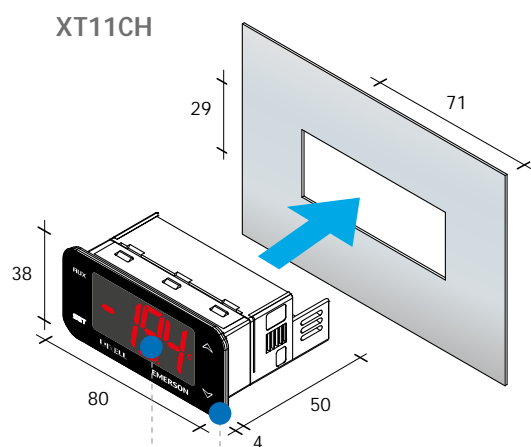
THERMOMETER

DIGITAL THERMOMETERS for TEMPERATURE DISPLAY



New digital thermometers, now available in CH format, expand the range of solutions for refrigerated cabinets and display cases, in addition to XRB, PRIME and WING controllers. They feature a refined aesthetic and a complete user interface, available in white and blue colors, on request.

- Measurement unit integrated on the display
- Hot Key or Prog Tool Kit connector for quick and easy programming (XT11CH)
- NTC or PTC probe type setting (XT11CH)
- Logging and display of the minimum and maximum measured temperature values (XT11SH)
- Setting of high and low temperature alarm thresholds
- 3VA max power absorption
- Temperature alarm (XT11CH)



XR-T - XD-T

SOLUTIONS for REFRIGERATED APPLICATIONS with FULL TOUCH TECHNOLOGY



A complete product range consisting of XR-T and XD-T are the innovative family of Full Touch controllers for commercial refrigeration and catering, which introduce a new way of interacting with your system. They provide more information at your fingertips, ease of cleaning, intuitive interaction and more are just some of the many features that characterize these new controllers. With their sleek and elegant design, they are the ideal solution for ice cream and pastry display cases, heated cabinets, refrigerated cabinets, wine bars and refrigerated counters.

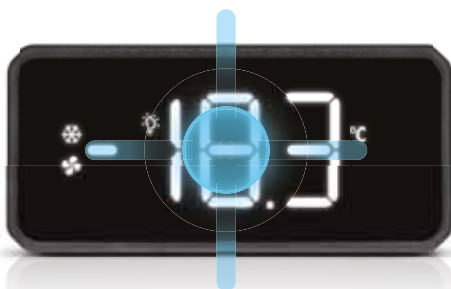
- Capacitive touch user interface
- Interactive and ultra-wide display
- Compatible with Low GWP Refrigerants
- Water and dust resistant



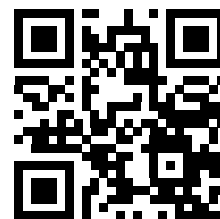
Tap and Hold
Activate/Deactivate/Save



One Tap
Load ON/Load OFF



Swipe
Change Screen/Browse/Modify



Stay tuned on www.fulltouch.info

XR-CH

SOLUTIONS for REFRIGERATED APPLICATIONS



XR-CH series is a range of Dixell products dedicated to heat and NT and LT refrigeration. This product family features new functions and an innovative and aesthetical design. 6 keys allow quick and easy access to main functions, whereas the icons show real-time status, providing an intuitive and complete user interface. All instruments contain the latest software and hardware updates with advanced technology, providing optimal performance.

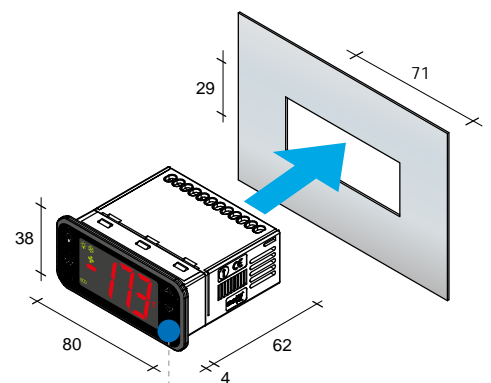
- Easy and intuitive installation
- High protection level (IP65) and hygiene
- Integrated functions for energy saving
- Food quality
- Direct access to main functions
- Quick and easy programming
- Serial connection to monitoring systems

Dedicated icon for energy saving status information

ECO

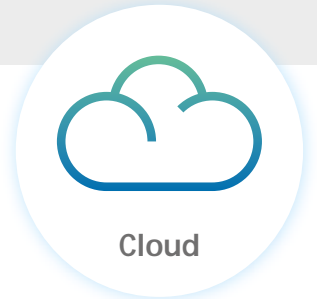


Display available in multiple colors: red (standard), white, or blue



XR-CHC

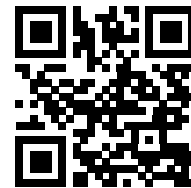
SOLUTIONS for REFRIGERATED APPLICATIONS with Bluetooth® CONNECTIVITY



Cloud

XR-CHC is the innovative solution with high connectivity for refrigeration based on the introduction of the Bluetooth® communication system. Through the new Emerson™ CONNECTED App, available both for iOS and Android, you can control bottle coolers, refrigerated cabinets, cold rooms, and more in real time. All common control tasks of the instrument are now replicated on your smartphone with all the usability of this technology. The App also gives the possibility to see functional status messages (presence of alarm conditions) related to the cabinet status. Dixell's solution is complete with the EmersonConnected Cloud that allows user authentication and access management based on related permission levels.

- User friendly interface
- Direct access to main functions
- Quick and intuitive installation
- Quick and easy programming
- Firmware upgradable
- Double parameter map
- Powerful datalogger to save data



Stay tuned on <https://dxapp.cloud/>

DISPLAY

Display available in multiple colors: red (standard), white, or blue



PROXIMITY SENSOR

X-MOD motion detector sensor for refrigerated applications



CONFORMANCE

Lots of certifications ensuring a reliable international rules conformance.

Radio approvals:

- FCC for USA and Canada
- RED for Europe
- SIG for Bluetooth®

STD approvals:

- CE
- UL
- ENEC



SECURITY

High security degree thanks to:

- Access control through user authentication managed by the Cloud
- 6-digit security PIN, randomly generated from the controller, to be used if Bluetooth® connection requires it



XRi & XWi

CONTROLLERS for APPLICATIONS with VARIABLE CAPACITY COMPRESSORS



The XRi & XWi controllers are the ideal solution for the refrigeration and retail market. They have been developed for optimal management of plug-in units with variable capacity compressors by using frequency signal command. These controllers guarantee high energy savings, increase reliability of the compressors and fans and, at the same time, ensure efficient management of the product's maintenance temperature.

- User friendly interface
- Direct access to main functions
- Double parameter map to be used in different applications
- Integrated advanced functions for energy saving
- Compressor/fan speed optimization
- Quick and easy programming
- Serial connection to monitoring systems
- Mechanical stress and noise reduction

Available also with
FULL TOUCH
technology



WING

SOLUTIONS for REFRIGERATED APPLICATIONS in COMPACT/SPLIT FORMAT



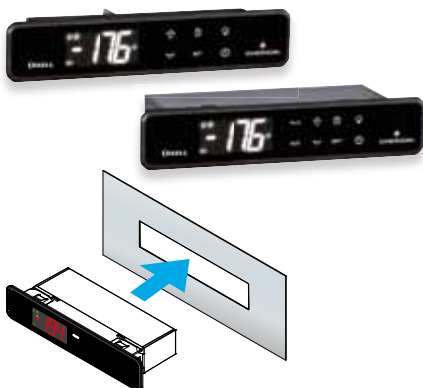
With its sleek and elegant design, the WING product family presents a series of solutions able to respond to any need in refrigeration, especially when design becomes a fundamental element. For example, cream freezers or pastry refrigerators etc... This product series, available in the Compact LH and Split (K) formats, is enriched by many highly customizable interfaces available in various shapes, colors and materials: polycarbonates, membranes and touch.

- User friendly interface
- Direct access to main functions
- High protection level (IP65) and hygiene
- Integrated functions for energy saving
- Food quality
- Quick and easy programming
- Serial connection to monitoring systems

WING LH/LHR

WING LH series is available in both standard front mounting and in back-panel mounting, providing a high level of customization. The front membrane, even in the backlight version, can be customized in shape, colors, and dimensions depending on the brand and on the application type. In addition to LH standard controllers, there are specific solutions in LRH format for all applications while occupying a reduced amount of space.

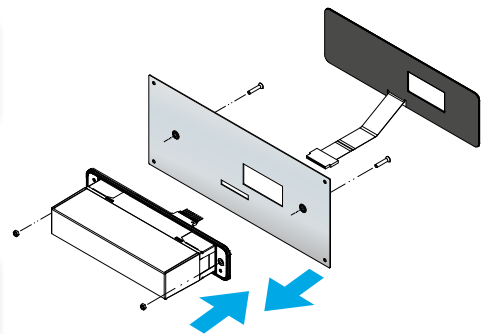
Front mounting



Standard membrane



Backlit membrane



WING K

The WING K family of controllers (with wall or DIN Rail mounting) is the ideal solution for a remote power module (up to 30m), providing the opportunity to use different keyboards: standard horizontal and vertical with LED, membrane, and full customizable, or touch.



Color touch screen displays
4,3" for improved hardware performances



Standard LED keyboards
in CH and WING (horizontal and vertical) format



Glass touch keyboard
for back panel mounting on glass or plexiglass



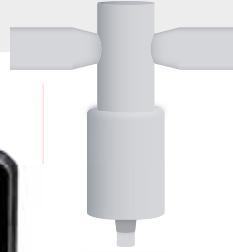
Membrane keyboard for K base

to allow greater customization of the keys, colors, shape, and dimensions



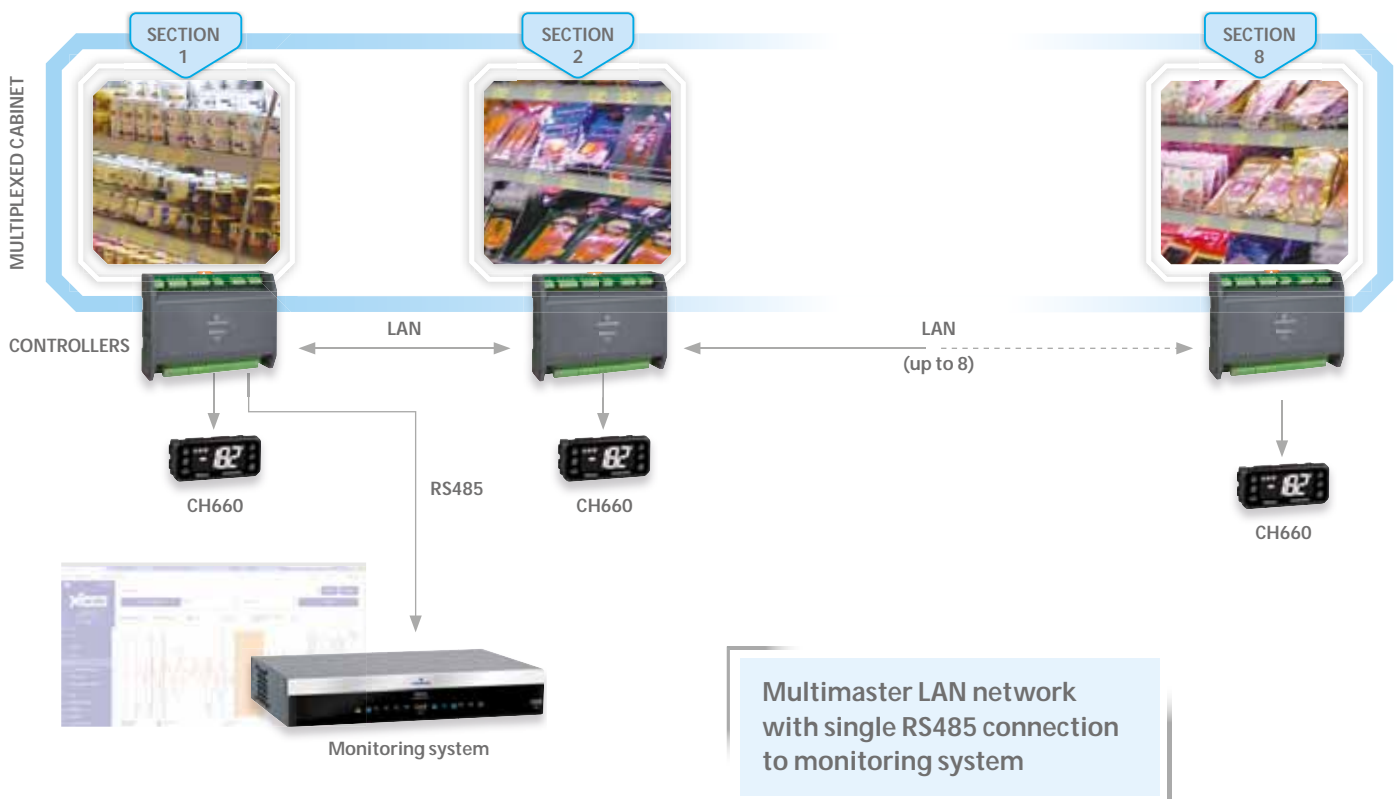
XM600

SOLUTIONS for REFRIGERATED MULTIPLEXED CABINETS



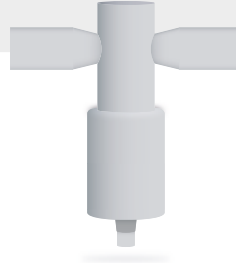
The new version of the XM600 series for multiplexed cabinets is performance enhanced, efficient and flexible to satisfy the needs of the retail market. A strength of this series is its easy installation thanks to pre-configured maps and backwards compatibility useful in existing installations. Now it's also possible to update the project directly from the field, by adding new refrigerants or updating the firmware with new functions.

- Auto-adaptive superheat to improve the cabinet performance with overfeed evaporators
- Fast communication with supervising systems allows the cabinet to be monitored in real time ensuring a prompt intervention of the service in case of alarms
- Robust performance whether using stepper or PWM valves
- Set of 2 digital inputs as probe in order to load safety monitoring of plug-in cabinets
- Dedicated function to allow the cabinet to be washed safely without disconnecting it from the monitoring system
- Advanced functions for energy saving



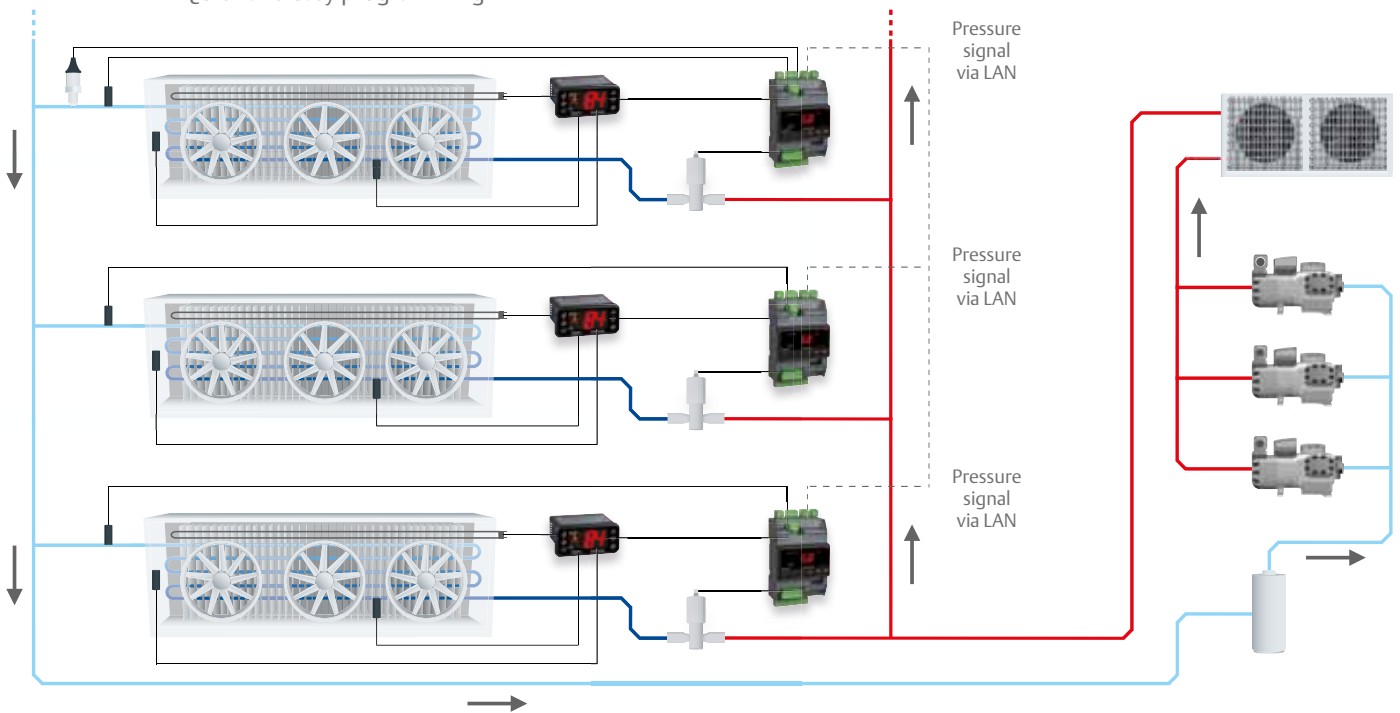
XEV

SOLUTIONS for EEV with SUPERHEAT REGULATION



The result of Dixell's vast experience in refrigeration, the XEV drivers are the optimal solution for the ON/OFF (pulsed) and stepper electronic expansion valve management. Compatibility with the most common refrigerants and the simple, intuitive, and complete interface are among the strengths of this popular product family designed for cabinets, cold rooms and refrigerated display cases.

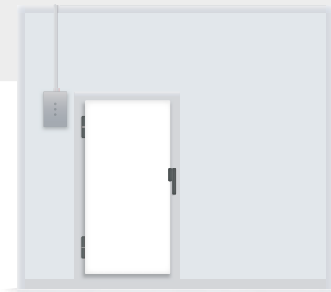
- Advanced functions for energy saving
- Low GWP (natural refrigerant compatible)
- The self-adaptive superheat control provides optimization of evaporator efficiency
- Sub-cooling management
- Quick and easy programming



The diagram shows the different ways to connect the XEV drivers to a generic application like a single cooling unit or multiplexed cabinet. The valve is driven by the XEV module that is in turn commanded, by the activation of the digital input, from the temperature controller.

XLR100

SOLUTIONS for REFRIGERATED ROOMS



The XLR100 COOLMATE series is the range of Dixell controllers dedicated to the control of single-phase static and ventilated cold rooms. This product family features a large display with LED and icons that show real-time status, providing an intuitive and complete user interface. The high degree of protection (IP65) allows installation even in particularly humid environments.

- Cooling/heating management
- Maximum and minimum temperature recording
- Clear alarm signals
- Fast and easy wiring
- Food quality
- Direct access to the main functions
- Quick and easy programming
- Serial connection to monitoring systems

MOUNTING

The mounting versatility (wall or panel), makes the XLR100 product family the ideal solution for every kind of cold room.

Wall mounting

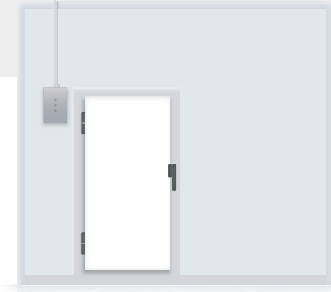


Panel mounting



XLR400

SOLUTIONS for REFRIGERATED ROOMS with DUAL TEMPERATURE MANAGEMENT

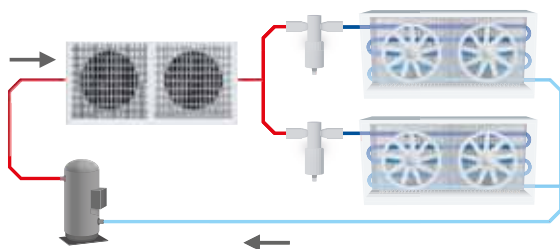


The XLR400 COOLMATE series is the Dixell electronic regulator product family dedicated to the management of cold rooms with double temperature control. This product family is characterized by an intuitive and complete user interface with its easy-to-read dual LED display and icons that indicate the status of the system in real-time. The high degree of protection (IP65) allows installation even in particularly humid environments.

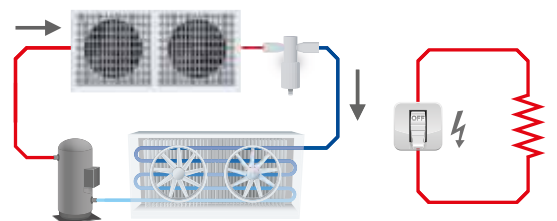
- Ideal for heating-cooling applications such as a heated bain-marie counter with refrigerated section
- Cooling or heating action selectable by user
- Fast and easy wiring
- Direct access to the main functions
- Quick and easy programming
- Wall or panel mounting
- Serial connection to monitoring systems

TYPICAL APPLICATIONS

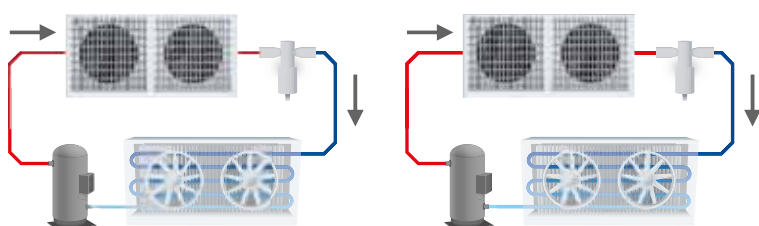
1 circuit - 2 evaporators



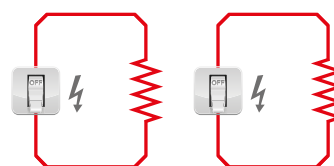
Heating and cooling application



2 independent circuits

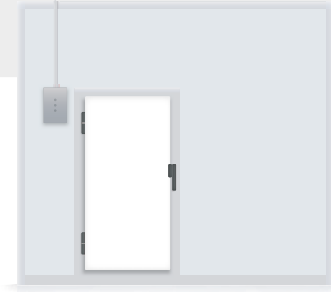


2 heating applications



XLH200/300

SOLUTIONS for MATURING ROOMS with TEMPERATURE/HUMIDITY MANAGEMENT



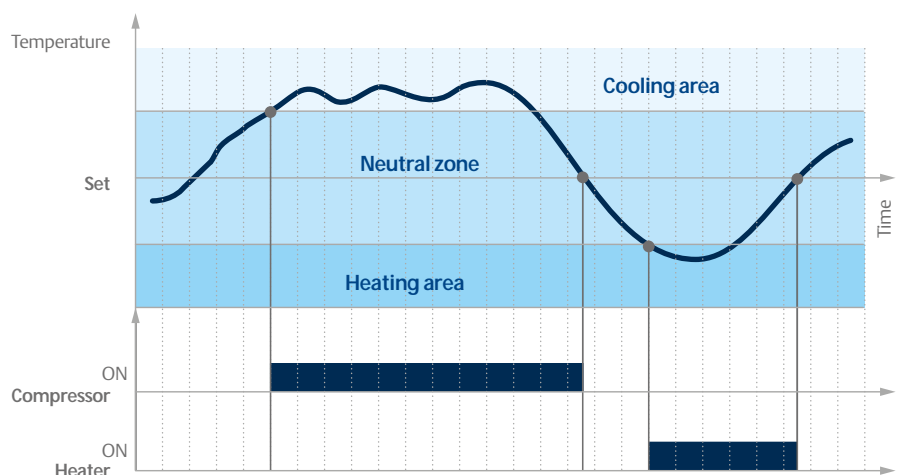
The XLH200/300 COOLMATE series is the electronic solution dedicated to the management of maturing rooms with temperature/humidity management. The product family is characterized by an intuitive and complete user interface with its easy-to-read dual LED display and the icons that indicate the status of the system in real time. The high degree of protection (IP65) allows installation even in particularly humid environments.

- Cooling and heating action for safe storage of products
- Clear alarm signals
- Dehumidifying action by cooling circuit
- Running and stopping programmable cycles with different set points
- Automatic cycles of extraction fans
- Fast and easy wiring
- Direct access to the main functions
- Quick and easy programming
- Designed to be wall or panel mounted
- Serial connection to monitoring systems

TEMPERATURE and HUMIDITY CONTROL

The adjustment for both temperature and humidity is the neutral zone. Therefore, both the compressor (with defrost) and the heating elements are managed for temperature.

The humidity is provided for both the humidifier and the dehumidifier (depending on the model). This ensures that both values are maintained inside the neutral zone band.



XRB-CH

SOLUTIONS for BOTTLE COOLERS

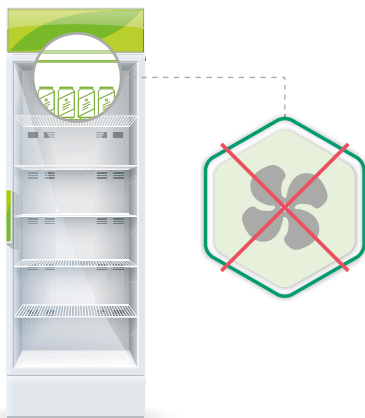


The XRB series is the high-efficiency range of products available in standard and advanced version for static and ventilated bottle coolers. The family allows a low environmental impact, as it is ready to be used with natural refrigerant applications (propane, CO₂, ...), and meets the needs of the highest-performance coolers available on the market. The controllers have an attractive design and new innovative functions especially dedicated to energy saving.

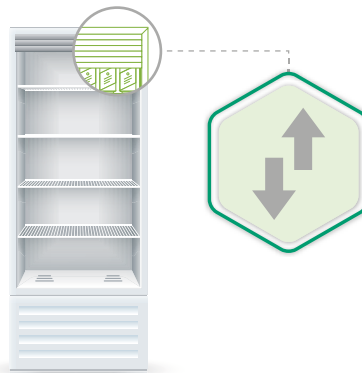
- Easy and intuitive installation
- Integrated functions for energy saving
- Smart load management to increase the equipment life and decrease the maintenance operations
- Antisweat heaters management
- Self-regulation capability according to the temperature conditions and the kind of use
- Quick and easy programming (multi map management)
- Serial connection to monitoring systems

TYPICAL APPLICATIONS

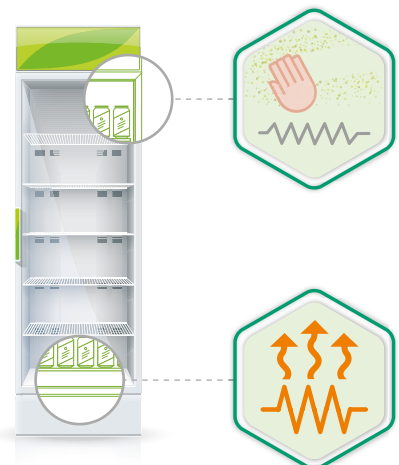
Door cabinet static coolers



Static and open cabinet with or without night curtain coolers

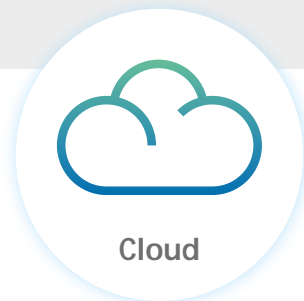


Door cabinet ventilated coolers



XRB-CHC

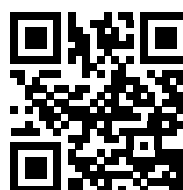
SOLUTIONS for BOTTLE COOLERS with Bluetooth® CONNECTIVITY



Cloud

XRB-CHC is the high-connectivity solution for controlling static and ventilated bottle coolers based on Bluetooth® communication systems. With the Emerson™ CONNECTED App, available for both iOS and Android, all the features of the tool are replicated on your smartphone. The App also offers a useful diagnostic tool consisting of complete reports in graphical and statistical form and allows you to see functional status messages (presence of alarm conditions) related to the cabinet status. The Dixell solution is completed by the EmersonConnected Cloud, which allows user identification and access management based on relative authorization and permission levels.

- Ideal for applications with CO₂, R290 and R600a as refrigerant
- Advanced energy saving algorithms (Patented)
- Smart load management to increase the equipment life and decrease the maintenance operations
- Antisweat heaters management
- Self-regulation capability according to the temperature conditions and the kind of use
- Quick and easy programming (multi map management)
- Powerful datalogger to save data



Stay tuned on <https://dxapp.cloud/>

DISPLAY

Display available in multiple colors: red (standard), white, or blue



PROXIMITY SENSOR

X-MOD motion detector sensor for refrigerated applications



CONFORMANCE

Lots of certifications ensuring a reliable international rules conformance.

Radio approvals:

- FCC for USA and Canada
- RED for Europe
- SIG for Bluetooth®

STD approvals:

- CE
- UL
- ENEC



SECURITY

High security degree thanks to:

- Access control through user authentication managed by the Cloud
- 6-digit security PIN, randomly generated from the controller, to be used if Bluetooth® connection requires it



XB500/800

SOLUTIONS for BLAST CHILLERS

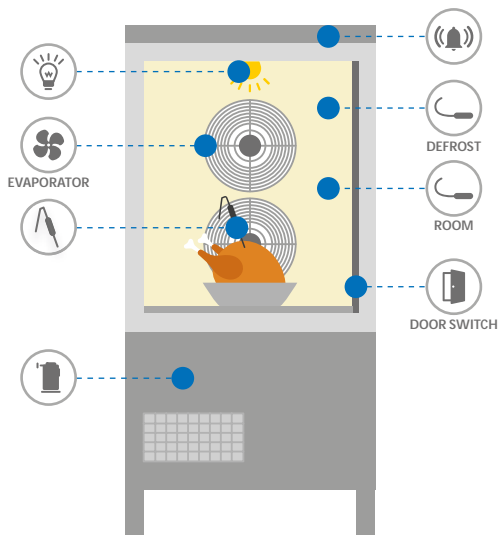


XB series is the innovative range of digital controllers and user terminals with graphic display for the optimized management of blast chillers. They are designed to manage blast chilling, quick freezing and preservation of food in the best possible way. They distinguish themselves by their configurability and the ease of use of blast chilling cycles. The highly customizable user interface and the elevated performances are only a couple of the features that allow the XB series to be fully satisfying even for the most demanding customers.

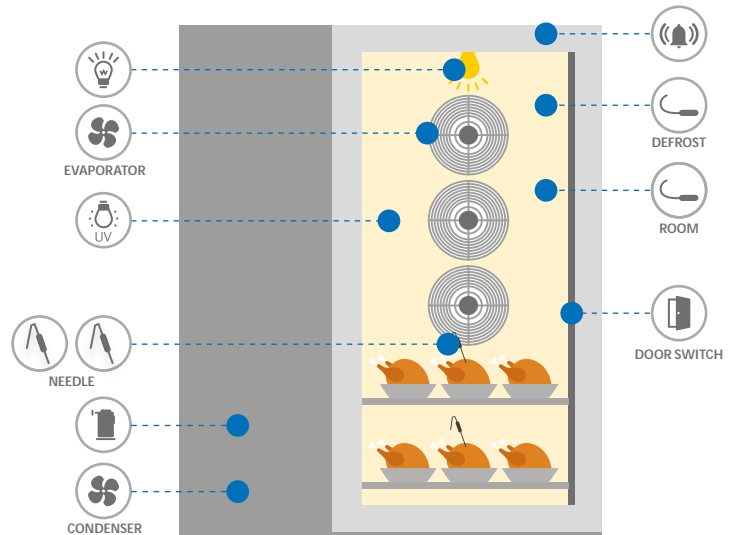
- Customizable interface
- 8 preset and editable standard cycles and possibility of creating new ones
- IP65 front protection level for a high hygiene
- Food quality
- Special functions guarantee the unit's maximum security in any situation
- Detailed menu and possibility of managing parameters from PC
- Optimized management of cycles for an energy consumption containment

APPLICATIONS

Small/medium



Medium/big



XH200/300

SOLUTIONS for MATURING ROOMS with TEMPERATURE/HUMIDITY MANAGEMENT



The XH200/300 family is a compact and split solution for the management of maturing rooms with temperature/humidity control. The family features a dual display with LED and icons that show real-time status of the machine, providing an intuitive and complete user interface. The high protection degree (IP65) allows installation even in damp environments.

- Cooling and heating action for safe storage of products
- Dehumidifying action by cooling circuit
- Running and stopping programmable cycles with different set points
- Automatic cycles of extraction fans
- Direct access to the main functions
- Quick and easy programming
- Serial connection to monitoring systems

ICON	MEANING
°C	Celsius degrees
°F	Fahrenheit degrees
❄️	Compressor
☀️	Heater control
(!)	Alarm
🌀	Fans
%RH	RH%
⏴⏵	Dehumidifying
💧	Humidifying
set	Temperature and humidity setting
⏳	Running cycle (for XH300)
⌚	Cycle duration setting (for XH300)
💡	Light



The dual display and the 14 icons show complete information about the status of the machine. Without the need to enter into the programming mode, all the main functioning of the cooling system are displayed with only one key touch.

MRLDS & XWEB/iPro

SOLUTIONS for GAS LEAK DETECTORS

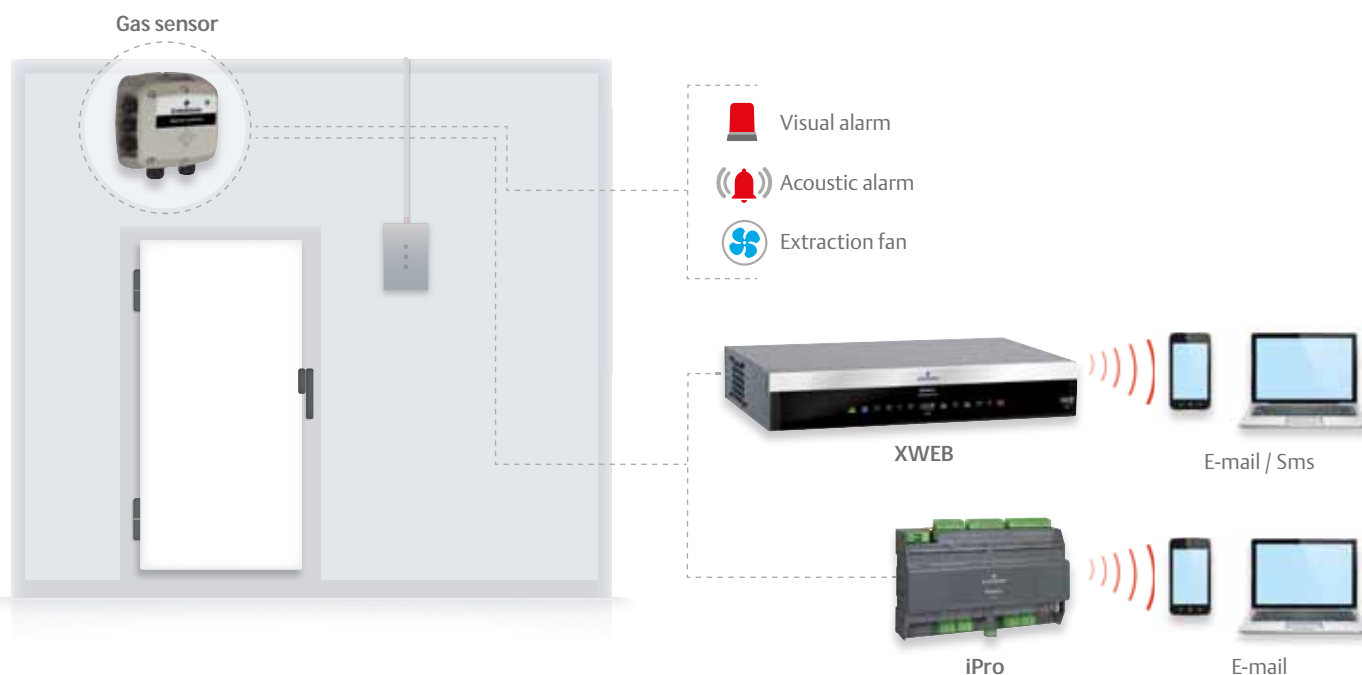


MRLDS gas leak detectors combined with XWEB systems or with iPro controllers, allow the constant monitoring of the system and, in case of gas leakage, thanks to timely reporting, to intervene immediately to prevent system blocks and reduce the greenhouse gas emissions as required by international regulations. In addition to money saving, the safety aspect is guaranteed for people who are near the leak.

- Clear alarm signals
- Internal buzzer for acoustic alarm signals
- Relay for acoustic/visual alarm signals and auxiliary safety ventilation
- Easier sensor maintenance

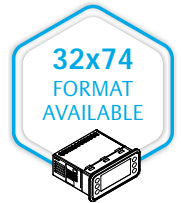
APPLICATION EXAMPLE

Example of a remote application; the detector can be positioned within the cold room and connected to the XWEB supervision system or to the iPro controller.



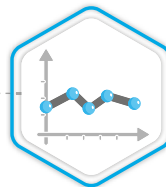
XW700

SOLUTIONS for PHARMACEUTICAL CABINETS

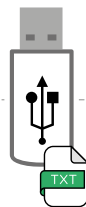


XW700 is the family of digital controllers dedicated to pharmaceutical cabinets also for applications up to -86°C. These controllers are compatible with the Visograph graphic interface and provide a clear and complete visualization of the cabinet status. It is possible to download data on USB pendrive; the format is .txt compatible with Excel®.

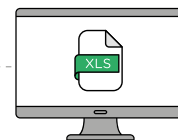
- Temperature, alarms and load status recording
- Complete alarm management
- Battery backup in case of power supply failure
- Data recording: up to 1 year with sampling every 15 minutes
- Programmable sampling time from 3 to 60 minutes
- Serial connection to monitoring systems



Last 24 hours temperature graphic display



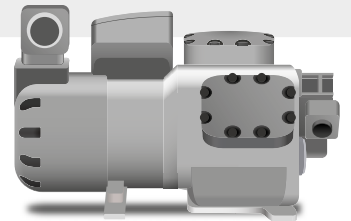
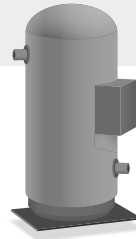
Data download on USB flash drive: txt format for easy display on a PC



The K-based membrane solution maximizes customization possibilities; the interface can be customized in terms of keys, colors, shape and dimensions.

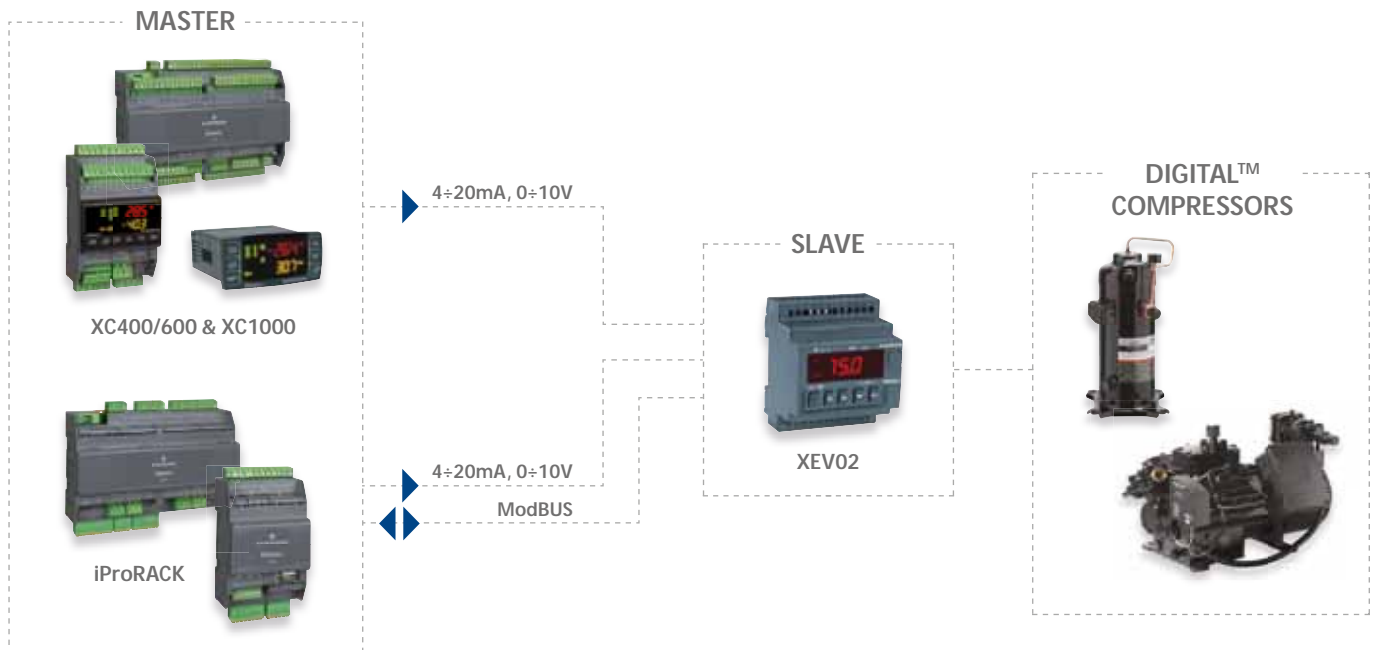
XEV02

SOLUTIONS for DIGITAL™ COMPRESSOR MANAGEMENT



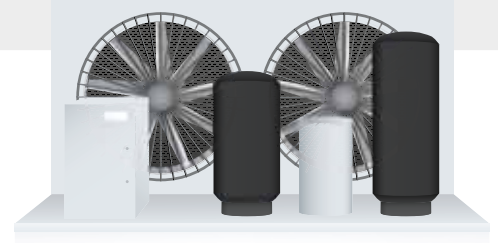
The XEV02D is the driver (slave) developed for driving Copeland Digital™ compressors, both SCROLL and STREAM. It is developed to be used in conjunction with Dixell XC400/600, XC1000, and iProRACK controllers, and is ideal for modernizing existing systems by simplifying and speeding up the installation of newly introduced compressors.

- A standardized configuration simplifies start-up operations
- Modification by streamlining parameters optimizes the system
- Optimal control of the application in any working conditions
- Complete alarm management
- Serial connection to monitoring systems



XC10/15/30/35

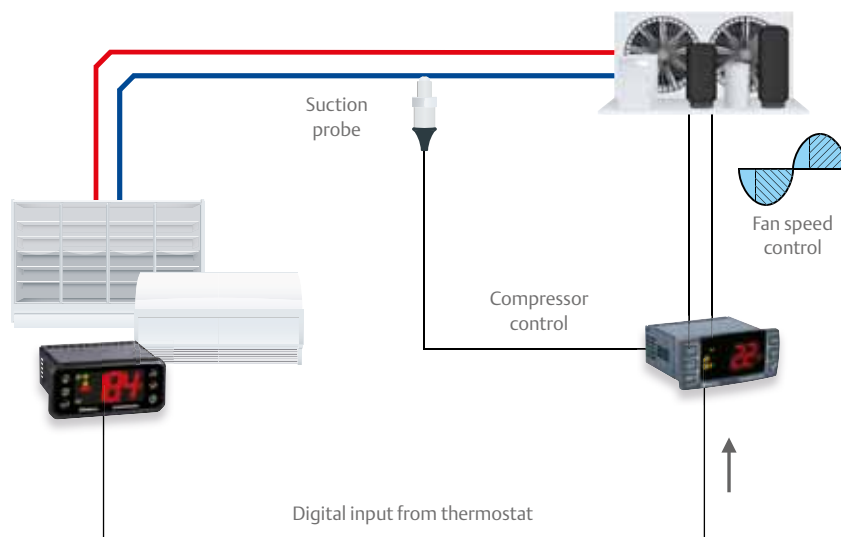
SOLUTIONS for CONDENSING UNITS



The XC10/15/30/35 series is suited to control small and medium condensing units and is able to manage up to two compressors and up to two ventilators. High versatility and specific functions for regulating optimization, including controlling malfunction status and energy savings, make these controllers the most complete and reliable solution for the customer.

- Reduced installing time and costs
- Versatility of compressor use (standard or variable capacity)
- Versatility of ventilator use (standard or modulating)
- Ventilators controlled in phase-cut mode
- Alarm recording and management
- Advanced algorithms for energy saving
- Serial connection to monitoring systems

APPLICATION



XC400/600

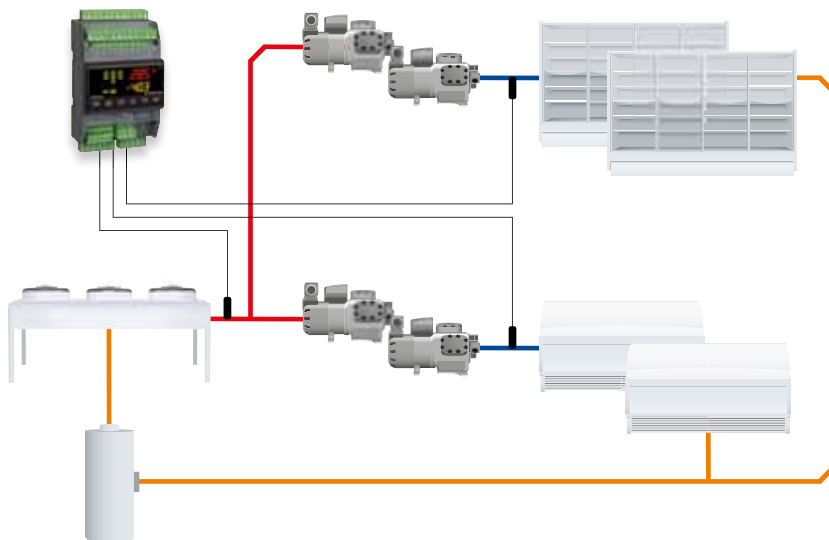
SOLUTIONS for COMPACT COMPRESSOR RACKS
also with INVERTER MANAGEMENT



The XC400/600 series is dedicated to the control of small and medium compressor racks with up to 6 compressor/fan outputs. The advanced power management allow to manage both suction and condenser inverters and the new environmental friendly gases such as R407F. The wider dual display with icons allows the user to instantly have a complete information about the status of the machine (suction and discharge pressure/temperature, loads status and alarms).

- Reduced installing time and costs
- Floating condensing pressure control depending on the external temperature
- High configurability and flexibility
- Silent mode function for fans during the night
- Correct lubrication automatic restore cycle
- Advanced algorithms for energy saving
- Serial connection to monitoring systems

2 SUCTION CIRCUITS - 1 CONDENSATION CIRCUIT



Models XC645CX and XC645D are dedicated to the management of Digital™ Scroll and Stream compressors



XC1000

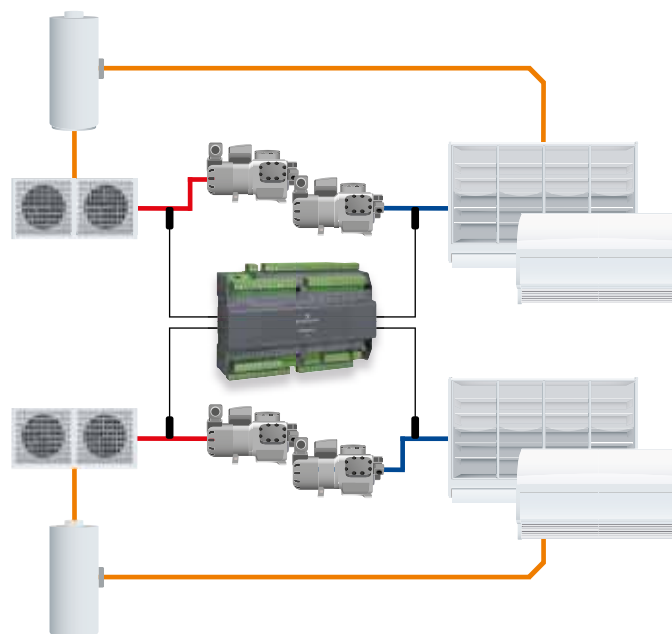
SOLUTIONS for COMPRESSOR RACKS



The XC1000 is the family of controllers for the compressor and condensing fan management of medium to large compressor racks up to 15 outputs. The series is suited for CO₂ subcritical systems and is compatible with compressors varying in power such as screw, scroll, semi-hermetic, and multi-stage compressors. The LCD graphic display provides concise information about the machine status (suction or condensing pressure/temperature, load status, and alarms).

- Reduced installing time and costs
- Sub-cooling management
- High configurability and flexibility
- Liquid injection valve activation to increase superheat
- Alarm management with absolute and relative pressure
- Advanced algorithms for energy saving
- Serial connection to monitoring systems

2 SUCTION CIRCUITS - 2 CONDENSATION CIRCUITS



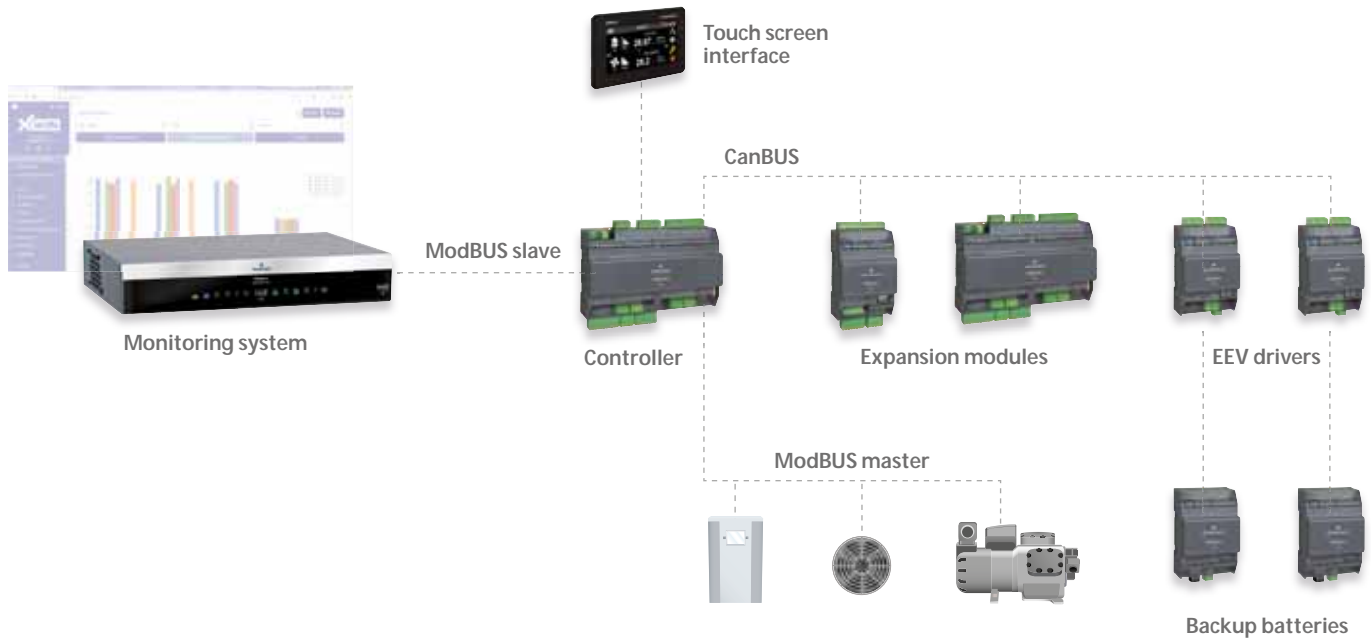
iProRACK

SOLUTIONS for TRANSCRITICAL CO₂ COMPRESSOR RACKS and CONDENSING UNITS



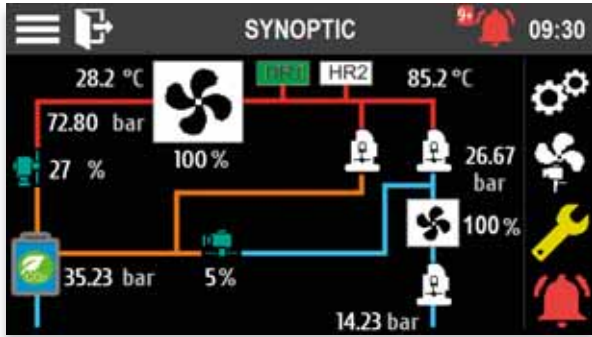
The iProRACK family is designed for the management of racks with standard refrigerants, CO₂ subcritical applications and transcritical CO₂ booster systems. It is the ideal solution for big systems managing compressor racks with up to 2 circuits and 12 compressors per circuit. It directly controls the high pressure valves, heat recovery systems, by-pass valve, parallel compression and oil injection. The touch interface provides complete information about the machine status.

- Oil injection management
- Advanced algorithms for energy saving (CRO/XeCO₂)
- High configurability and flexibility
- 3 de-superheater management
- Gas cooler optimization
- Compressor pump down
- Management of gas leak detectors
- Adiabatic function with advanced fan management



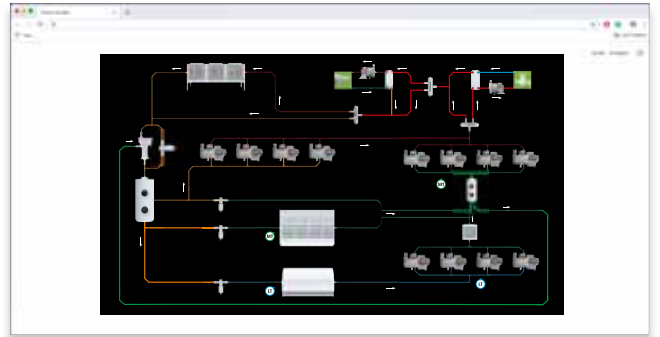
VISOTOUCH

The new touch interface with TFT display gives a clear and complete machine status; animated icons offer even more clear information about the components operation and about possible alarm situations.



INTERNAL WEB SERVER

The iProRACK controllers have an integrated web site that can be easily reached through a standard browser. This instrument is very useful to configure the controller and to display and change the machine variables.

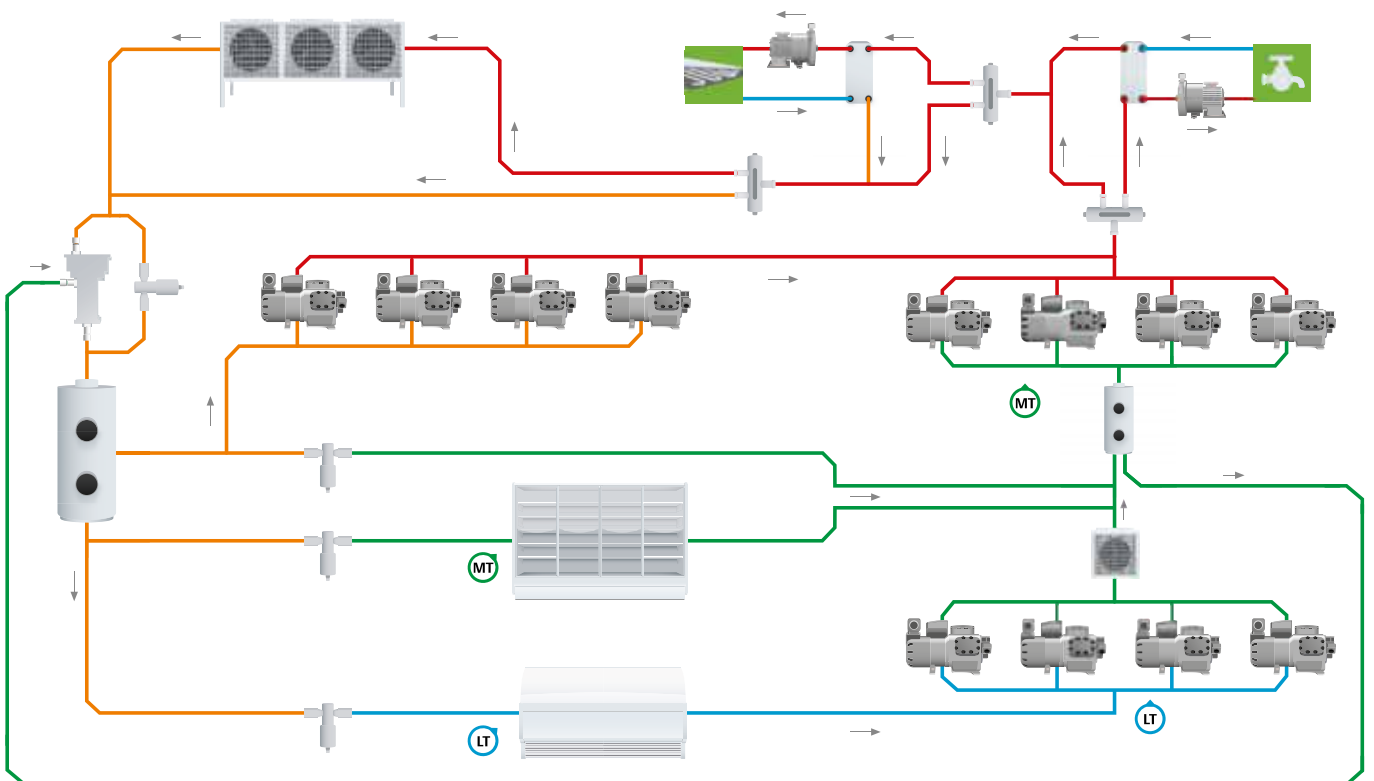


COMPRESSOR GUARD

The “Compressor Guard” function ensures compressor protection against flood infiltration. When the compressors cannot be switched ON because they are blocked due to safety times or for active alarms, the system temporarily blocks the liquid injection to the evaporators until the compressors become available again.

BOOSTER SYSTEM

Transcritical solution-booster plant with dual heat recovery, gas cooler by-pass, parallel compression, de-superheater and oil injection management.



XV - XRPW

SOLUTIONS for SINGLE-PHASE FAN SPEED CONTROL



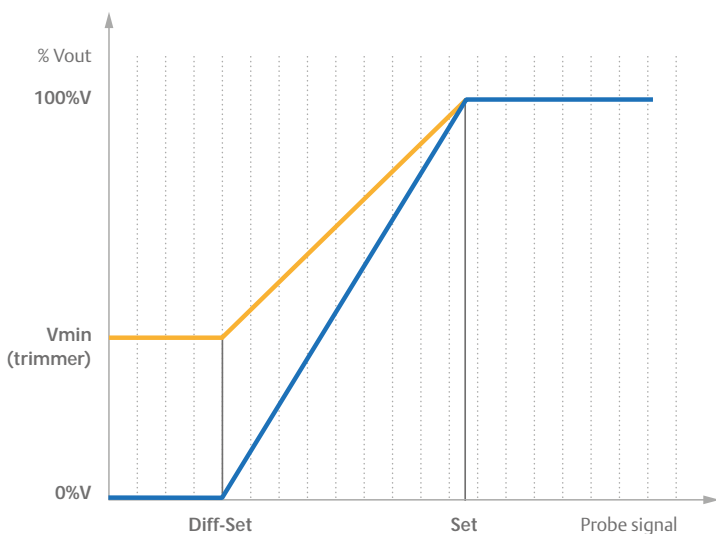
XV05/10/22/100 and XRPW chopped phase regulators are designed both for industrial and refrigerated applications, especially for the temperature or pressure control. Depending on the model, they are suited for motors up to 500W, 660W, 1000W, 2200W e 5000W. The family is compatible with Dixell controllers equipped with PWM, 4÷20mA, 0÷1V/0÷10V outputs like the iPro, XC600 and XM600 series.

- Pressure and temperature control in refrigerating systems including cooling fans
- Inputs for regulation by temperature and pressure
- Direct or inverse action for condenser or evaporator fans
- Cut off, minimum speed and max speed at start up functions
- Trigger output for managing another module
- Slave models managed by the input signal (for XV100)



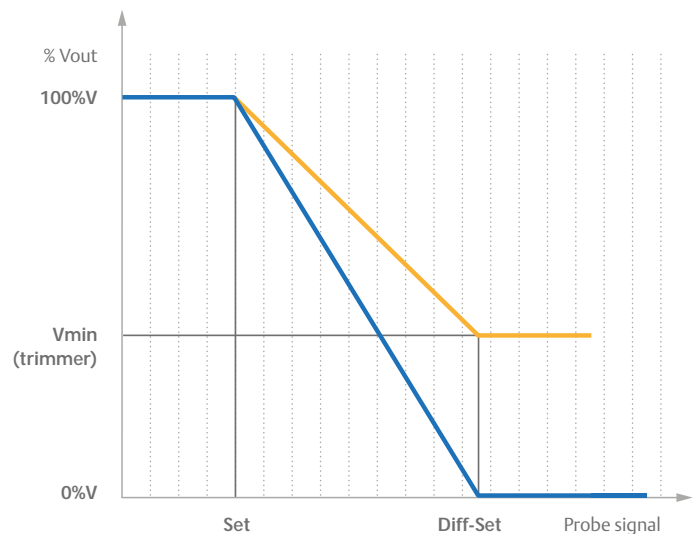
DIRECT ACTION

If the input signal increases, the voltage output proportionally increases (condensing or cooling applications)



INVERSE ACTION

If the input signal decreases, the voltage output proportionally increases (evaporating or heating applications)



XV300

SOLUTIONS for THREE-PHASE FAN SPEED CONTROL

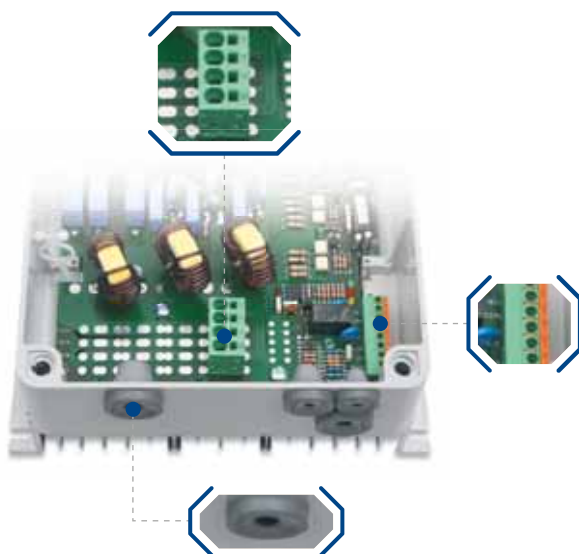


XV300K is the family of chopped phase regulators designed for 3-phase fans with adjustable voltage motors. All models, available in master and slave version, are compatible with any Dixell controllers equipped with PWM, 4÷20mA or 0÷10V outputs like the iPro, XC600 and XM600 series.

The high versatility permits the user to mount them without additional protections on the external part of the electrical cabinet, thus reducing cost and cabinet wiring complexity and avoiding problems due to heating dissipation.

- Designed for adjustable voltage motors from 8 to 40A
- Oversized heat sinks for better heat disposal
- Integrated heat protection
- Oversized power stages
- Optimized radiofrequency filters
- On board 0÷10V output to be used for testing operation
- Serial connection to monitoring systems

FAST WIRING



Less time spent for wiring operations thanks to the screwless connectors with useful cable protectors

iProGENIUS

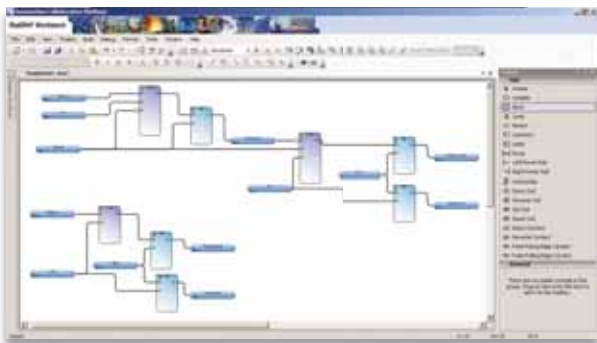
PROGRAMMABLE SOLUTIONS for GENERAL APPLICATIONS



iProGENIUS is the family of programmable controllers and its expansion modules that offers optimal solutions for all retail and food service needs. They stand out for their powerful hardware platform, for the ease of external connectivity and programmability providing simple answers for the user's needs, while offering local or remote monitoring control.

- Instant and complete visualization of the unit values thanks to the VISOGRAPH graphic display and of the plant by means of VISOTOUCH touch display
- Internal Web Server with standard and customized Web Site
- Ethernet for connection to an intranet-internet network and to other controllers for a distributed application management
- Up to 3 USB outputs that allow the download of parameters, data/alarm log and the applications and parameters upload
- Up to 4 RS485 serial outputs for the connection to XWEB supervisor and controlling systems or to applications developed by third-Party Systems
- BACnet® communications allows the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- Connection to the expansion modules to increase system capacity
- Connection to the driver for the management and control of electronic expansion valves
- Wi-Fi connection

iPro-TOOL



The iPro-TOOL is a complete and easy to use tool that allows the user to work independently to create programs for iPro controllers, taking advantage of all the programmable series potential. The package includes manuals and the ISaGRAF®, WIZMATE and VISOPROG (optional) software. In particular the ISaGRAF tool contains a modern philosophy of an open-environment characterized by:

- a modular architecture that allows the highest level of customization;
- the possibility to work on different projects at the same time;
- a reduced writing-time of the code.

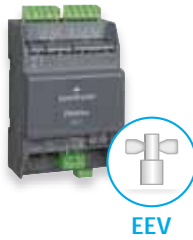
HIGH CONNECTIVITY

INTERFACES

EXPANSION MODULES



EEV DRIVER



CANbus / LAN

SMS/E-MAIL



- Alarm messages

ROUTER



- Remote connection

HTTP/FTP



- Data transfer

ETHERNET

BACnet™ / ModBUS® / TCP/IP

XWEB SYSTEM



- Supervision, analysis and alarm management

SMARTPHONE/PC/TABLET



- Configuration, supervision, data/parameter download and more

3rd PARTY DEVICES



- Easy management of 3rd party devices

ETHERNET

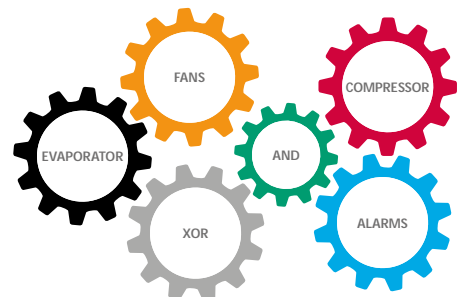
iProAcademy World: the SMART APPROACH to DEVELOP APPLICATIONS

The iProAcademy team

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 developers.

Function blocks

- New function block structure designed to create fast and easy final applications
- Multiple templates available to develop applications with preset configurations and fast time-to-market





USB

- Data download
- Upgrade
- Storage memory
- Nano Wi-Fi connection (only for 10 DIN format)
 - SMS/e-mail
 - Connection to Wi-Fi network



CHARTS

INTERNAL WEB SITE

- Customizable web pages
- HTML and Javascript supported
- CGI available for variables management



RS485 / RS232
BACnet™ / ModBUS®

ENERGY METER



- Consumption data/analysis
- Electrical data

3rd PARTY DEVICES



- Easy management of 3rd party devices

GATEWAYS



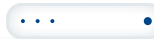
- LON

MASTER/SLAVE



- Up to 10 slave units

MODEM



- Internet connection
- SMS/e-mail

Training

We organize focused trainings depending on different levels and needs using advanced training methods: On-site (classroom), E-learning (via WebEx meeting), Self-training (video) and now also Interactive on-line training. All iPro users can attend specific online trainings directly from their desk, reducing significantly the related costs of time and travel.

- 2 hours session time
- Advanced method to check the progress using interactive software
- Tailored efficiency trainings



VISOGRAPH

LCD GRAPHIC DISPLAY



VISOGRAPH graphic displays are characterized by a high design and a membrane keyboard and are ideal for interfacing with compatible Dixell controllers (iProRACK, XC1000, and more...).

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
- VISOKEY output to upload or download the user interface application
- UNICODE character compatible (Oriental languages)
- Maximum distance from the controller: 100m
- Possibility to connect an additional external temperature probe
- Quick panel or wall mounting

PROGRAMMING TOOL

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



VTIPG

TOUCH SCREEN DISPLAY



VISOTOUCH touch screen display features a wide 4.3" and ensures a high performing hardware and full compatibility with Dixell controllers (iProRACK, WING, and more...). 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.

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

PROGRAMMING TOOL

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



XEV20

SOLUTIONS for STEPPER EEV



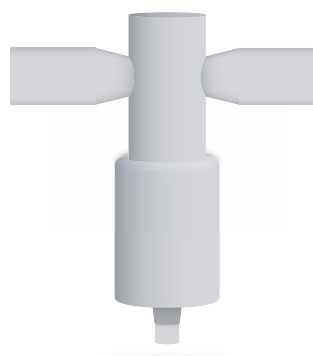
XEV20D is Dixell solution to drive stepper electronic expansion valves. Combined with iPro controllers, it allows the best superheat regulation of the unit. In this way the maximum performance of the unit is guaranteed during every weather operating condition, thus improving energy saving.

- Unipolar/bipolar stepper valve support
- Increased energy savings
- Management of up to 2 valves
- CANBus output for connection to iPro controllers in 10DIN format
- LAN output for connection to iPro controllers in 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



Xj

MODULES for I/O, RELAY and ACQUISITION MANAGEMENT



The XJ module family is the answer to refrigeration and retrofit field requirements. The versatile and the powerful hardware platform provides quick and easy monitoring for temperature, pressure and humidity values, as well as the user's ability to activate/deactivate the relays locally. Modules, depending on the needs, can be used as stand-alone or combined with XWEB monitoring systems for advanced management of the alarms.

- Lower installation costs
- Flexibility of installation and use
- Direct access to main functions
- Food quality
- Quick and easy programming
- Serial connection to monitoring systems



XJA

Alarms/status acquisition modules able to read up to 5 + 5 independent inputs (master + slave)



XJM

Multifunction module for inputs and outputs with management of up to 4 relays



XJP

Probes and alarms data acquisition modules able to read up to 9 different inputs



XJR

Relay module able to manage up to 4 independent outputs

XWEB PRO

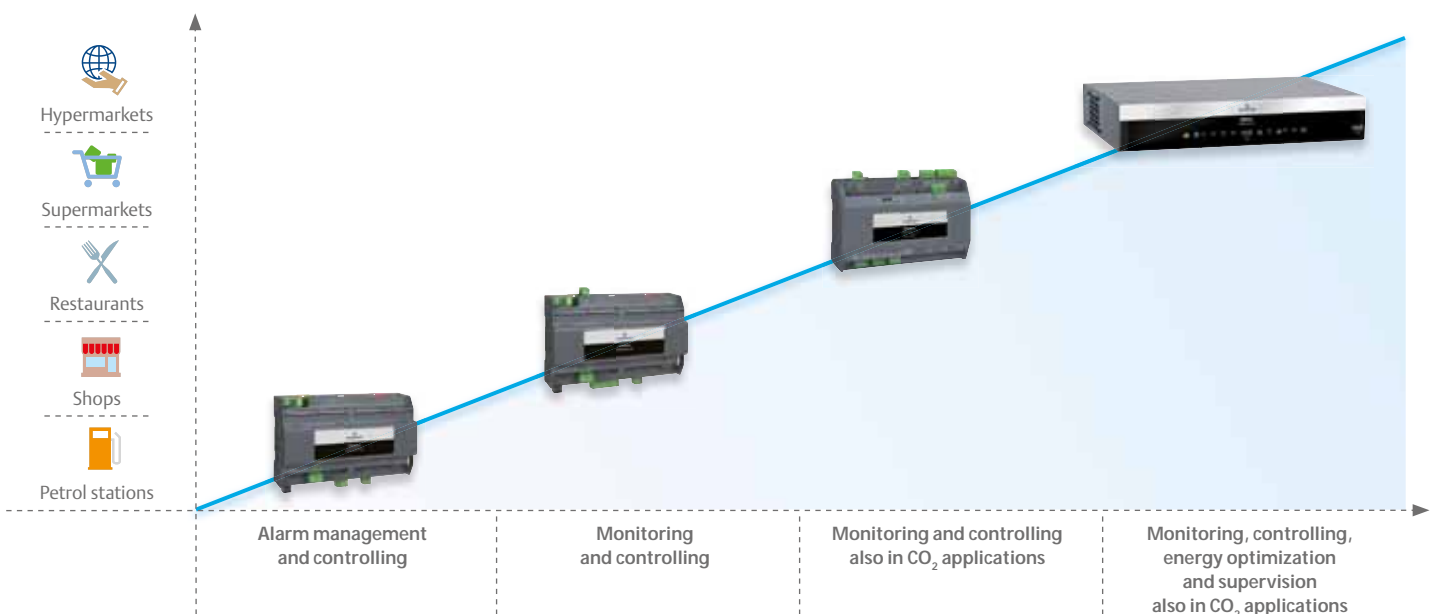
MONITORING, CONTROLLING and SUPERVISOR SYSTEMS



The XWEB PRO family is the scalable and flexible solution for the monitoring, controlling and supervision with Web user interface developed to allow an easier and faster access to the main information whether from local, remote or mobile. The series is designed to obtain energy savings, thereby reducing running costs and helping preserve the environment. The XWEB PRO is synonymous with quality, user-friendliness, and efficiency because they are focused to meet end user needs.

- Coordination between compressor rack and cabinets for efficiency and safety improvement
- One year of stored data inside the XWEB memory
- Manual and automatic data export also to USB
- Customizable user interface
- Possibility to modify the parameters of the connected devices remotely
- Alarm sending via SMS or e-mail
- HACCP report

The XWEB PRO series is extremely well suited for every application such as petrol stations, hypermarkets, big store chains and restaurants.



UNIQUE INTERFACE

The XWEB PRO web interface automatically adapts to each kind of device. The same look is available for PC, tablet, smartphone and XWEB5000 local interface, ensuring the same completeness of information for mobile devices.



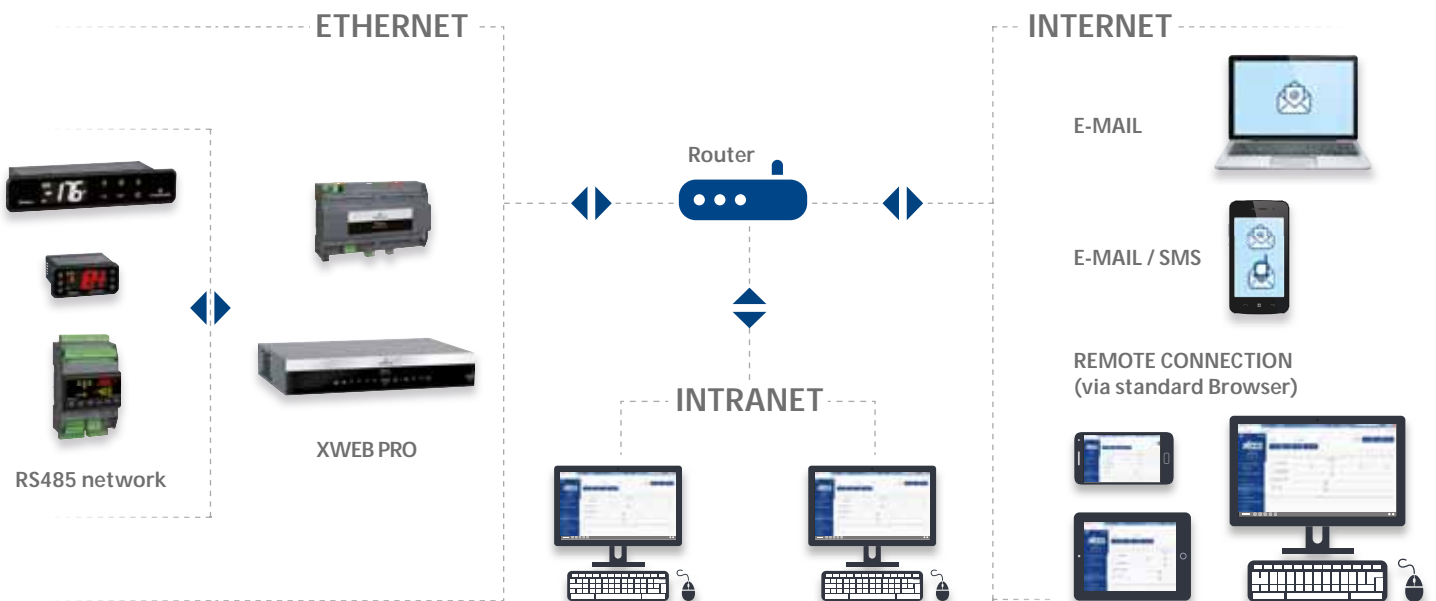
XWEB PRO CONNECTIONS

Local connection

XWEB PRO systems can be connected directly to a PC. Furthermore, XWEB5000 can be used in stand-alone mode through a monitor (also touch-screen), keyboard and mouse connection because of their complete and powerful hardware platform.

Remote connection

XWEB PRO systems servers can be remotely accessed by Internet connection, once provided a public and static IP address.

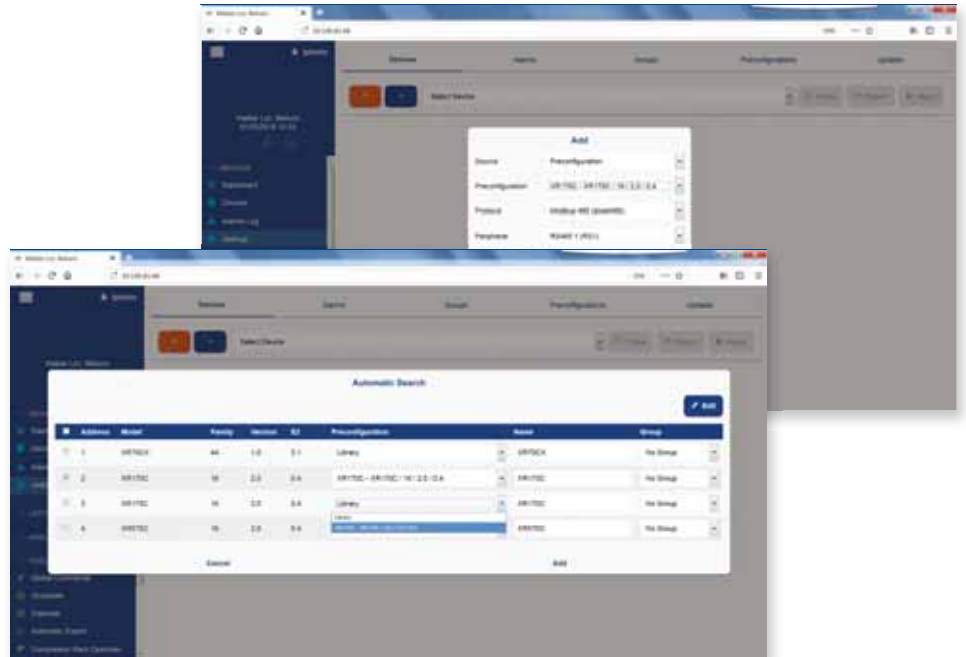


MAIN SCREENS

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

Easier instrument installation

This new function is sought after and appreciated by OEMs because it allows quick access of instrument pre-configurations during the installation time.



Layout

A powerful graphic editor makes XWEB layout the ideal solution to create tailored floorplans according to customer needs. Using this function, the user can quickly access controller data and even send a command to a controller.



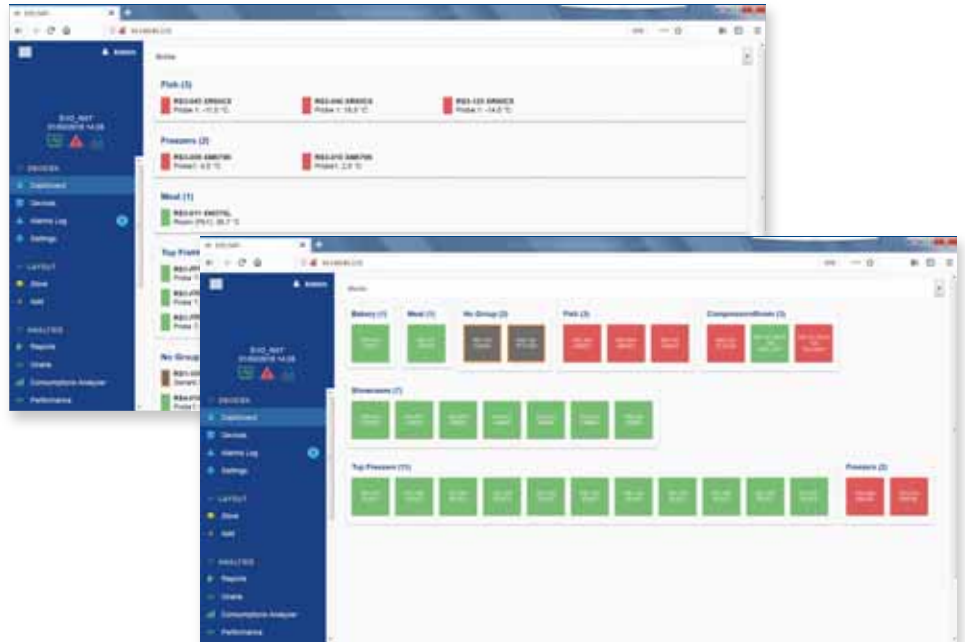
Device view

This powerful tool allows the user to have access to the recent status of the single controller updated in real time, send commands to the controller (for example, force a defrost), adjust the set point, or modify its parameters. The status of each connected device is displayed in an easy and clear way. The parameter map can be exported into various formats: CVS/XLS/WIZMATE and can be reused with other controllers within the same system or a different system.



Dashboard

The Dashboard allows the user to choose among different layout options that are available on XWEB PRO for an easier and even more responsive navigation.



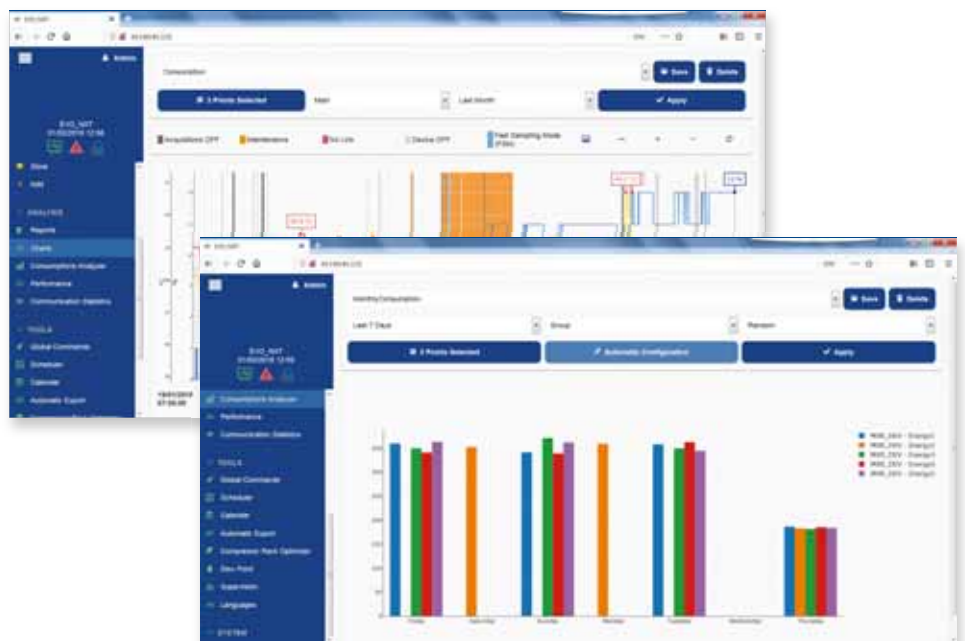
Performance meter

This highly appreciated function allows users to verify the right temperature for single devices (wall cabinets, rooms, and more). The graphical layout offers a complete view of the plant operating mode. The new automatic configuration makes the use of this function faster and easier.



Consumption analysis

This function allows to display consumption data on a bar chart and to quickly analyze the energy efficiency of the plant.



iProLINK

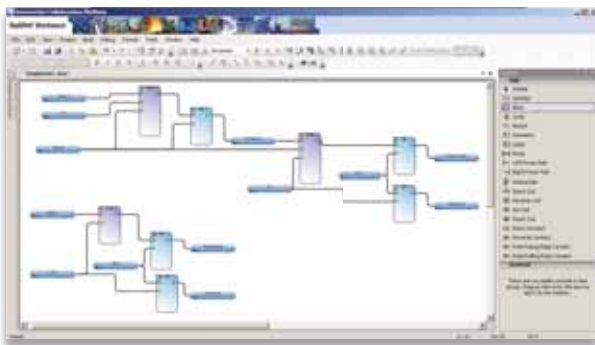
HIGH CONNECTIVITY and PROGRAMMABILITY MODULE



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

- Internal web server with a standard or customized web site
- 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

iPro-TOOL



The iPro-TOOL is a complete and easy to use tool that allows the user to work independently to create applications for iPro controllers, taking advantage of all the programmable series potential. The package includes manuals and the ISaGRAF®, WIZMATE and VISOPROG (optional) software. In particular the ISaGRAF tool contains a modern philosophy of an open-environment characterized by:

- a modular architecture that allows the highest level of customization;
- the possibility to work on different projects at the same time;
- a reduced writing-time of the code.

HIGH CONNECTIVITY



ENERGY METER



- Consumption data/analysis
- Electrical data

3rd PARTY DEVICES



- Easy management of 3rd party devices

GATEWAY



- LON

MASTER/SLAVE



- Up to 10 slave units

MODEM



- Internet connection
- SMS/e-mail

SENSORS



An advanced series of sensors ensures that for every application the end user has the right level of accuracy and the appropriate lead time. This range includes gas leak detectors and probes/transducers for temperature, humidity, and pressure ensuring the compatibility with all Dixell controllers.

- Easy and intuitive installation
- High versatility to meet the market needs
- Compatibility with all Dixell controllers and with the most common world standard

The family of sensors and protection devices is composed of:

TEMPERATURE PROBES

- NTC probes
- PTC probes
- Pt1000 probes
- NTC/Pt1000 product probes
- PTC/NTC insert probes
- Pt100 thermoresistors
- TC thermocouples

TEMPERATURE/HUMIDITY PROBES

HUMIDITY PROBES

PRESSURE PROBES

- Pressure transducers
- Ratiometric pressure transducers

GAS LEAK DETECTORS

ACCESSORIES



A useful series of accessories including modems, wiring, serial interfaces, and programming kits provide easy, quick and safe use of all controllers in varying situations, especially remote connection or energy analysis.

- Easy and intuitive installation
- High versatility to meet the market needs
- Compatibility with all Dixell controllers and systems

The family of sensors and protection devices is composed of:

CABLES

WIRINGS and CONNECTORS

DEVELOPING and PROGRAMMING TOOL

PROGRAMMING KEYS

PROGRAMMING KEYBOARD

ENERGY ANALYZERS and TRANSFORMERS

MODEM and ANTENNA

SERIAL INTERFACES

USB CONVERTER

REMOTE DISPLAY

CABLES for REMOTE DISPLAY

PRINTER

ADAPTERS

FILTERS

GASKETS and PROTECTIONS

FIXING SYSTEMS

TRANSFORMERS

LIGHT SWITCHES

SUPERCAP BATTERY

POWER SUPPLIERS

USB KEY

SIMULATOR

PROXIMITY SENSOR

EmersonClimate.eu

Emerson Commercial & Residential Solutions

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