

What's new?

Innovation
& Efficiency
for a better
Environment



Dixell[™]


EMERSON[™]
Climate Technologies

NEW INNOVATION CENTER




DixellTM

125 
EMERSON

EMERSON CLIMATE TECHNOLOGIES
RETAIL SOLUTIONS

A Global Team With More Than 1000 Strong At Your Service



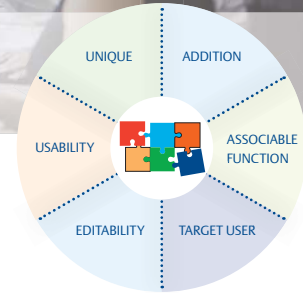
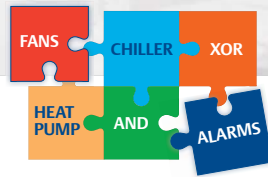
- **Manufacturing**
 - Belluno (ITALY)
 - Suzhou (CHINA)
- **Global Service Centers**
 - Belluno (ITALY)
 - Atlanta (GEORGIA)
 - Manila (PHILIPPINES)



Dixell expands its building facility with nearly 2,000 square feet of new office space! The new Innovation Center represents the unification of Technology and Engineering to create solutions.

A completely new structure connected to the main Dixell building with new offices, an innovative new application laboratory and testing area, and several technologic conference and training rooms that will support growth and increase interactions with customers and distributors.

NEW APPROACH TO DEVELOP APPLICATIONS



Worldwide developer network and new and advanced training customized to reduce application development time.

New development suite and 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.

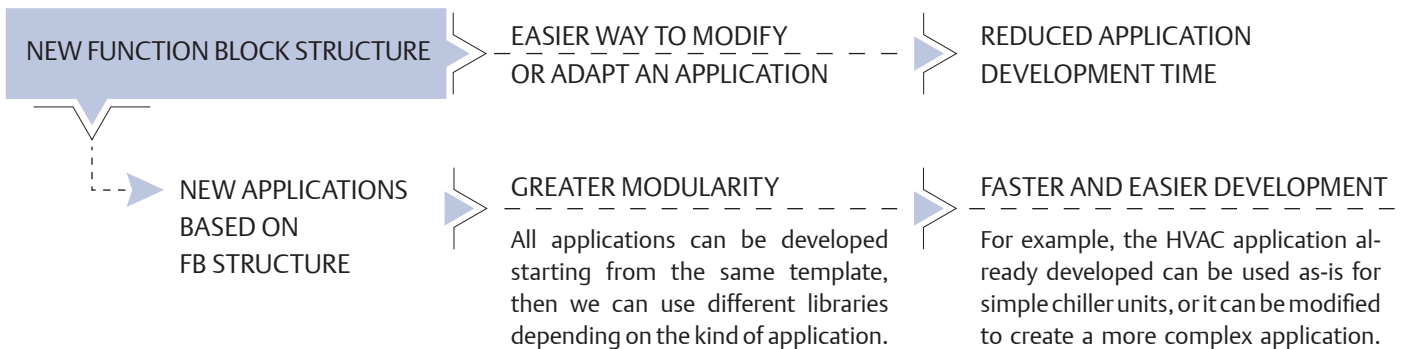
...our team

The iPro Academy is a Center of Excellence that combines **INNOVATION REQUESTS** received from the market combined with **TECHNOLOGICAL OPPORTUNITIES**, guaranteeing continuous iPro Platform growth. 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:

- **On-site (classroom)**
- **E-learning (via WebEx meeting)**
- **Self-training (video)**

...a new structure



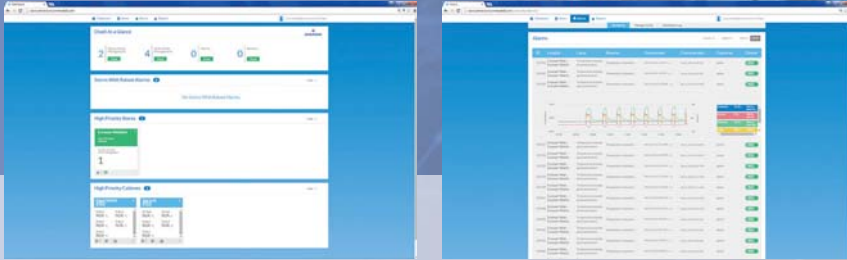
...a new application

Your application can be developed starting from a defined library. We've developed different **FUNCTION BLOCK LIBRARIES** for the following sectors:

- **HVAC**
- **AHU**
- **GENERAL PURPOSE**
(alarm management, standard regulation, logical functions)
- **REFRIGERATION**
(thermoregulation/humidity, defrost control)
- **REFRIGERATION for rack controllers**
(coming soon)

Emerson Connected

IoT CONNECTIVITY SOLUTION

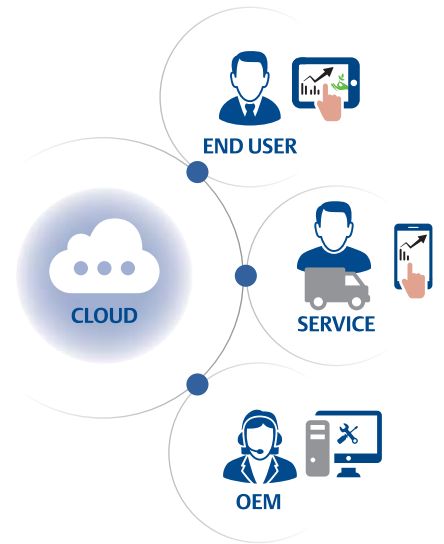


Emerson Connected is the new connectivity solution for monitoring, control and maintenance designed for food service and HVAC/R systems.

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.

The system promotes high efficiency, energy savings, and cost reduction.

- Multi-site Maintenance Portal
- Easy and Quick Commissioning
- Plug and Play Internet Connection
- Multi-site Alarm Management
- Pay As You Use
- Immediate Access to Information



www.emersonconnected.com

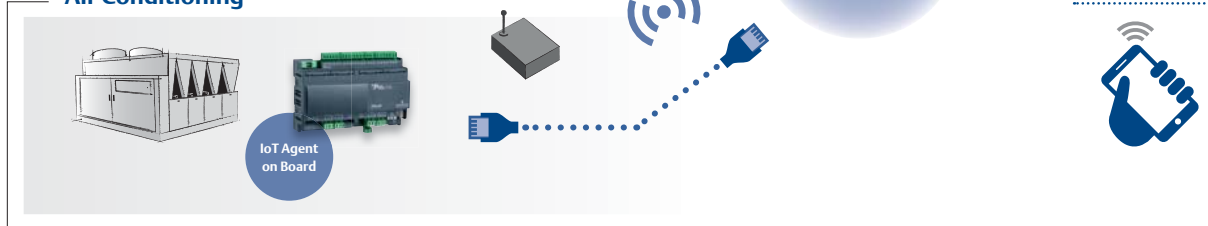
▶ The system is available in two different solutions

- Dedicated IoT Connectivity Module available in 4 DIN format
- Standard iPro controllers with the IoT Agent on board

Refrigeration & Food Service



Air Conditioning



IC200 EVO

CHILLER, HEAT PUMPS & SANITARY HOT WATER MANAGEMENT SOLUTIONS



The **IC200 EVO** family features flexibility. This allows usability in several types of machines, from simple single circuit chillers up to double circuit heat pumps with domestic hot water production.

Compactness, extreme flexibility, external driver control for the electronic expansion valves, and advanced functions such as free cooling and sanitary hot water production are just some of the main elements that make the series complete and suitable for the majority of plants.

Controlled units can be up to 6 compressors such as: air/air, air/water, water/water, motor-condensing, geothermal heat pumps and dryers.



MODULARITY

2 DIFFERENT FORMATS, 1 EXPANSION MODULE and 1 IEV DRIVER

ICHILL200 EVO parametric controllers are available in 32x74mm for panel mounting, and 4 DIN, designed to be placed directly inside the machine's panel board.

The **ICHILL200** family features an **expansion module** in 4 DIN format. This module makes it possible to use **ICHILL200 EVO** in complex applications where the resources available in the controller (probes, digital inputs, relays) are not enough. The series is also completed with **IEV driver** (through LAN connection) for electronic expansion valve management, and with **LED, LCD and touch remote keyboard** recommended both for on-board mounting and for domestic environments.



FLEXIBILITY

DIFFERENT CONFIGURATION DEPENDING ON THE APPLICATION'S NEEDS

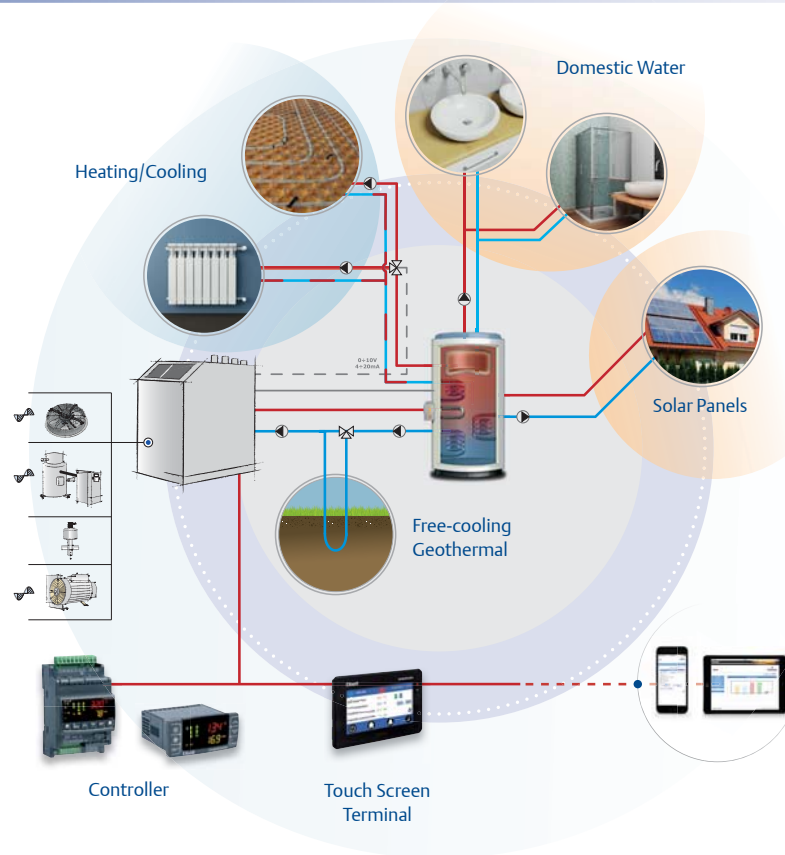
Parameters can be user-configured, making it possible to use the controller in many applications, from a simple single-circuit chiller to double-circuit heat pump with domestic water heating.

Every input and output can be conveniently user-configured as needed in order to satisfy the application's needs and make the installation in the switchboard easier.

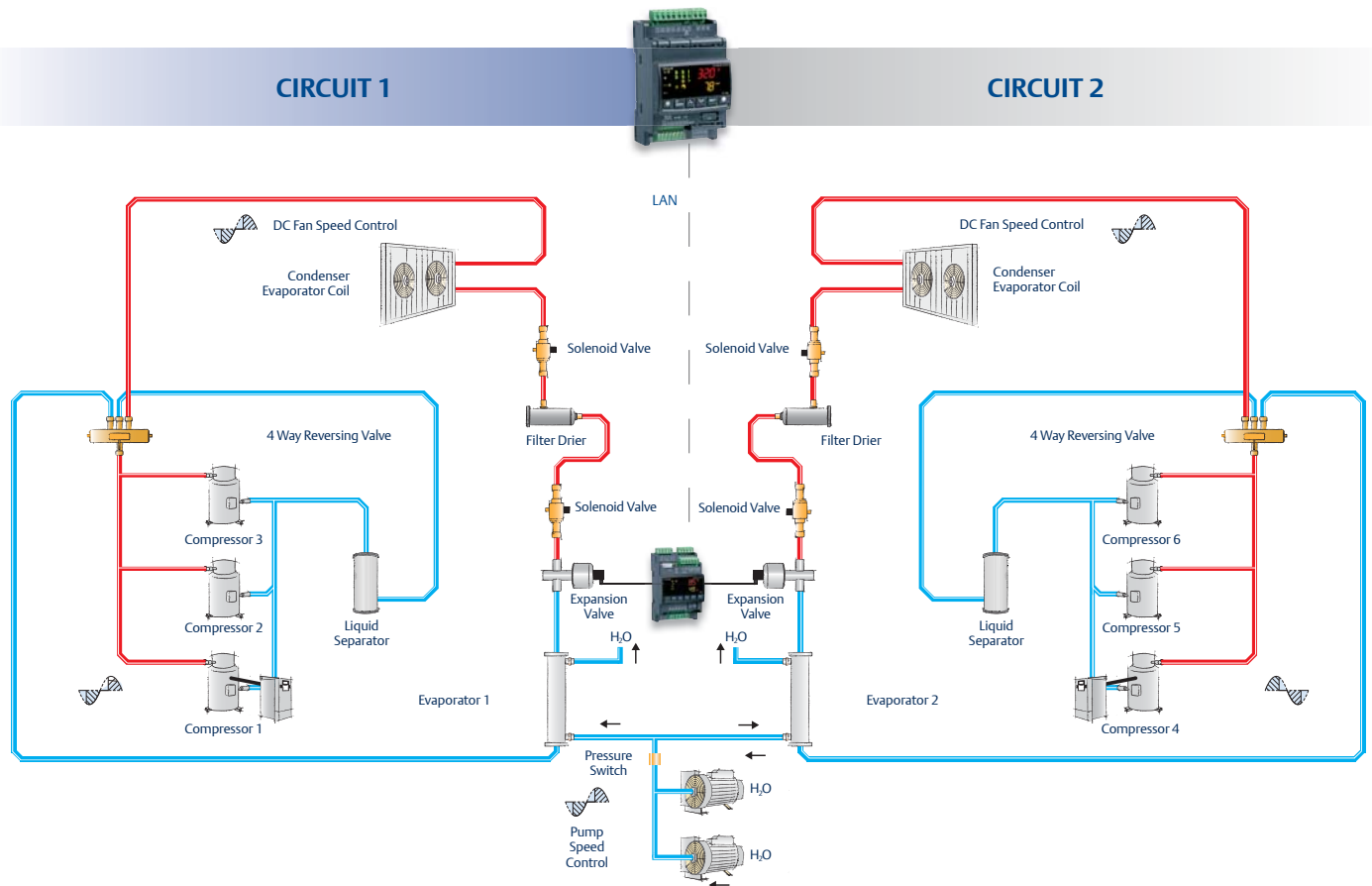
IC200 EVO

▶ Main applications

IC200 EVO controllers can be used in applications such as chillers or heat pumps for cooling or heating of residential or commercial buildings, and for industrial applications.



▶ Management of 2 circuits up to 6 compressors



IC200 EVO

High connectivity

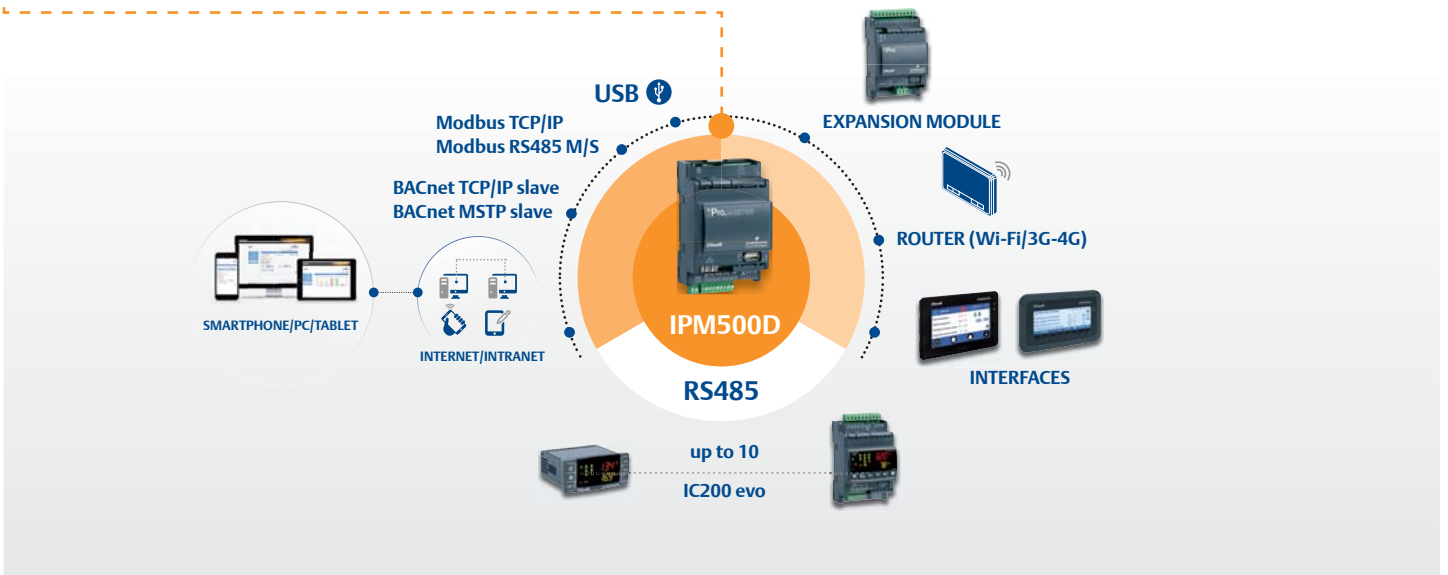
The high connectivity featured in these controllers simplifies communication with the most important devices of the HVAC world such as drivers for the electronic expansion valve management, modules for fans speed control, monitoring systems, and more.



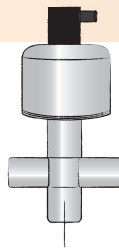
INTERNET/INTRANET



Master/Slave function through the IPM500D module



DRIVER FOR STEPPER ELECTRONIC EXPANSION VALVES MANAGEMENT



IEV features Dixell solutions for stepper electronic expansion valves management. **IEV22/24D** models (for 1 or 2 unipolar/bipolar valves) allow for optimum superheat regulation of the unit. In this way the maximum performance of the unit occurs for varying working conditions and environments to improve energy savings.

▶ **KIND OF REGULATION**
Stand-alone or through LAN connection with IC200 EVO

▶ **OPERATION MODE**
Possibility to set cooling, heating, or both modes. By setting dedicated PID parameters, it is also possible to optimize the regulation according to the operation mode

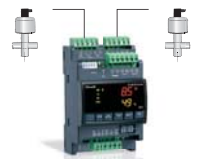
▶ **INTERFACE**
Easy control and programming through a dual digit display and five-key keyboard

▶ **ENERGY SAVING**
Reduced energy consumption through auto-adaptive control of superheat

▶ **VALVE MANAGEMENT**
Complete management of 1 or 2 unipolar/bipolar valves. Conveniently features valve selection using parameters for pre-configured valves that are mainstream in the market

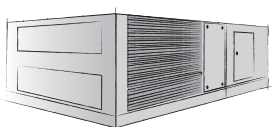
▶ **REFRIGERANTS**
Main gases are available to calculate the superheat

▶ **SUPERCAP BATTERY MODULE**
XEC battery backup module for valve closure in case of power failure

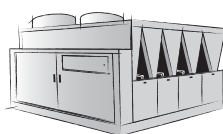


▶ Available for

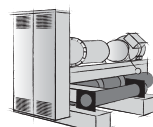
Roof-top air/air



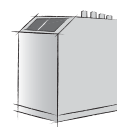
Air/water chillers & heat pumps



Water/water chillers & heat pumps



Chillers - sanitary hot water & geothermal heat pumps



VISOTOUCH

PROGRAMMABLE TOUCH SCREEN DISPLAYS

The new **VISOTOUCH** programmable touch screen display features a wide 4.3" touch screen color display.

The **VTIPG** is designed to make Dixell controllers' user interface even easier, more complete, and intuitive. It is extremely versatile and perfect for any environment thanks to its elegant design, its compact and solid structure and the possibility of wall and panel mounting. VTIPG is available in horizontal and vertical versions and comes with or without the integrated board probe.



- High connectivity level through LAN and USB ports
- The new VISOPROG 5 features high programmability
- High versatility (panel or wall mounting, horizontal, and vertical models)
- Provides comprehensive information to the user



Icons with "animation"



Library with standard geometrical shapes available

Library with icons and pictures available



Completely customizable font and backgrounds

A1b\$



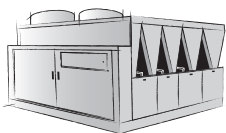
High resolution picture management



Optimized management of objects (a black and white object can be visualized in color with reduced memory usage)

Available for

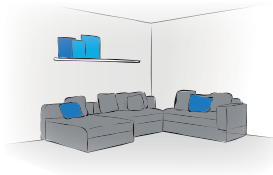
Chiller and heat pumps



Compressor racks



Room terminals



Medical cabinets



Blast chillers



VISOGRAPH 2.0

REMOTE KEYBOARDS WITH LCD GRAPHIC DISPLAYS



The new **VISOGRAPH 2.0** remote keyboards with LCD graphic display (240x96pixels) are the versatile solution that make connection with IC200 EVO and iPro controllers easier. They instantly provide complete information about the machine status, have an intuitive interface, and are easy to mount, therefore customized to every plant's needs.

- **VISOPROG tool enables high programmability**
- **Great versatility and extensive customization opportunities**
- **Complete integration with IsaGRAF projects (for programmable controllers)**
- **Powerful internal memory**
- **Up to 2 keyboards connectable with iPro controllers (1 for IC200 EVO controllers)**
- **Maximum distance from the controller: 100m**



Temperature/humidity integrated probe



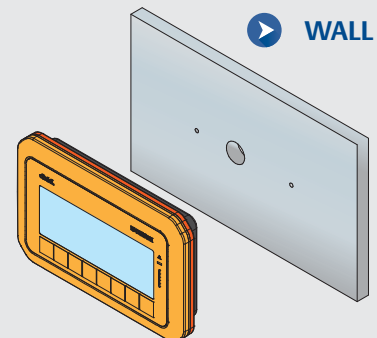
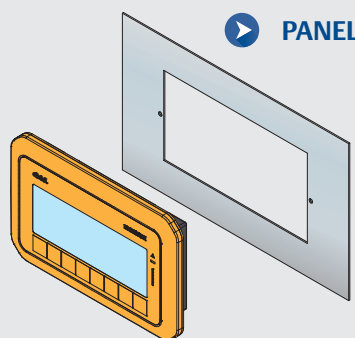
Front alarm and power supply LEDs



Membrane keyboard



Quick panel and wall mounting



iProRACK

SOLUTIONS FOR ADVANCED COMPRESSOR RACKS



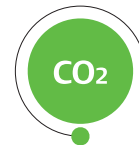
The iProRACK family is designed for the management of compressor racks with up to 2 circuits and 12 compressors per circuit. It manages racks with standard refrigerants, CO₂ subcritical applications and transcritical CO₂ booster systems. iProRACK directly controls the high pressure valves, heat recovery systems and parallel compression.

An intuitive and useful HMI is given by the Visograph 2.0 graphic display, which gives concise information about the variables of the compressor rack. The series comprises one model in 4 DIN format (IPR208D) and one in 10 DIN format (IPR215D), and two expansion modules, the IPX206D and the IPX215D. There is also the possibility to connect up to two XEV20D drivers for the stepper EEV management.



▶ New functions

- Heat recovery for transcritical CO₂ rack
- Parallel compression for COP optimization
- Safety conditions for MT
- Liquid and hot gas injection valve management



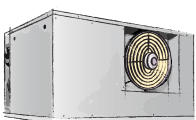
▶ New features

- Management of gas leak detectors
- Management of electronic fans or fans with inverter via Modbus
- Coresense™ integration via Modbus connection

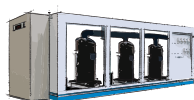


▶ Available for

Condensing units



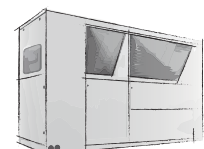
Compressor racks



Advanced compressor racks



Compressor packs



CO₂ Solution

TRANSCRITICAL SOLUTION-BOOSTER PLANT WITH HEAT RECOVERY & PARALLEL COMPRESSION

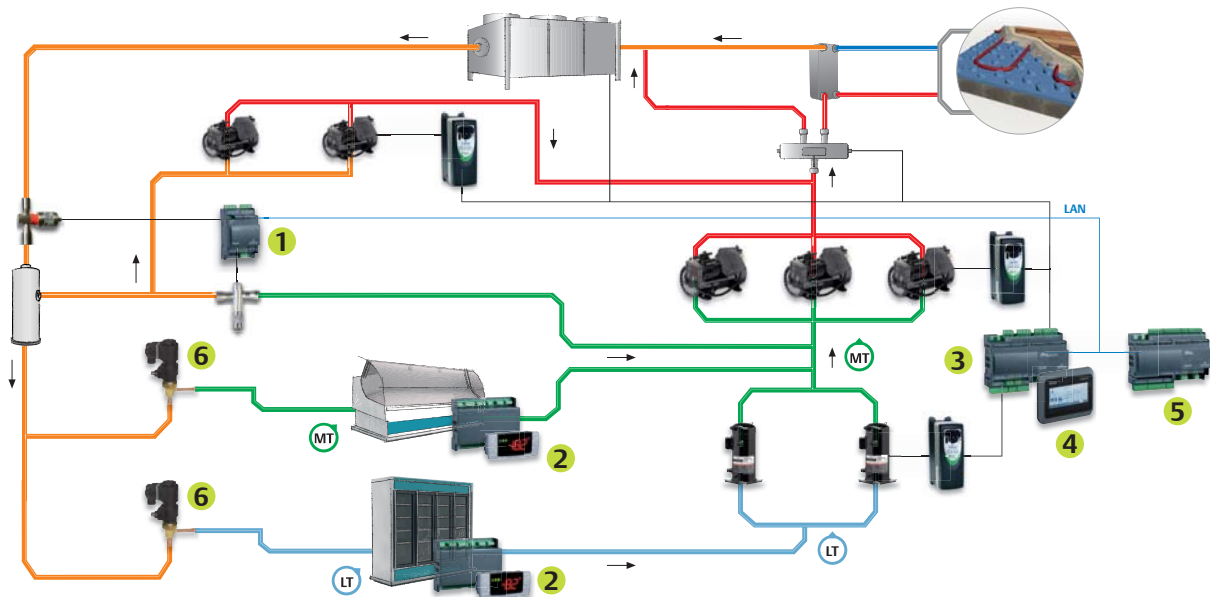


CO₂ advantages

- Natural gas (OPD=0 – GWP=1)
- Nonflammable
- Non-toxic
- Compatible with most common materials
- Cost effective
- High energy efficiency

Dixell solution advantages

- Easy to install
- Easy to adjust
- Cost effective
- High efficiency
- Complete for LT and MT



- 1 XEV20D: electronic expansion valve driver
- 2 XM600: cabinet controller
- 3 iProRACK: compressor rack controller

- 4 Visograph 2.0: remote keyboard
- 5 IPX215D: expansion module
- 6 EX3: electronic expansion valve

XB

BLAST CHILLER & FREEZER CONTROLLERS



The **XB** series is an innovative range of digital controllers and user-terminals for the optimized management of blast chillers. They are designed to manage blast chilling, quick freezing and preservation of food efficiently and effectively. Distinguished by high-configurability and ease-of-use of blast chilling cycles, the highly customizable user interface and elevated performance are only a couple of the features that allow the XB series to fully satisfy even the most demanding customers.

▶ HIGH CUSTOMIZATION LEVEL OF THE



INTERFACE

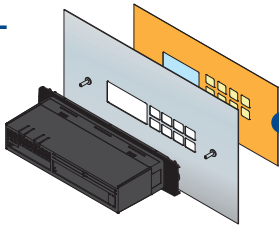
2 highly customizable interfaces (Polycarbonate LED and Touch Screen Graphic Display) ensures perfect integration between the device's aesthetic and design of the application



BLAST CHILLING CYCLES

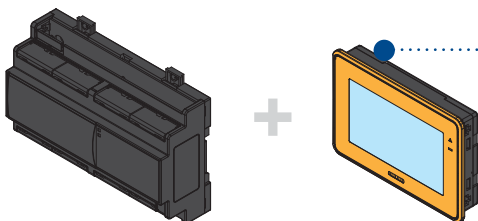
4 preset and editable standard cycles, and the flexibility to create new cycles enable the user to optimize and reduce working time, ensuring the optimum processing technique for each product

▶ XB500L



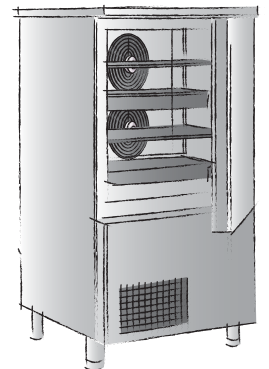
Dimensions
Colors

▶ XB800D



Touch user interface

CUSTOMIZABLE



▶ Key features



▶ PROTECTION AND CULINARY HYGIENE

The flat surface is easy to clean and features IP65 front protection for a high degree of culinary hygiene



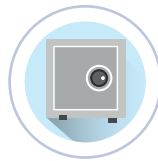
▶ HACCP CONFORMITY

HACCP reports are easily accessible for complete and immediate control of food management. The internal database enables all events (high temperature alarms, power fail, and maximum cycle time exceedance) to be saved



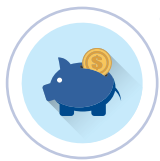
▶ REMOTE ACCESSIBILITY

It is possible to connect controllers to XWEB systems and therefore monitor and analyze the functioning of the blast chiller remotely



▶ SAFETY

Special functions, such as compressor crankcase heating delay or minimum/maximum condenser temperature management, ensures the unit's maximum security in any situation



▶ ENERGY SAVING

The optimized management of cycles with the possibility of personalization promotes maximum energy consumption containment, therefore contributing to cost reduction and environmental awareness



▶ USER FRIENDLINESS AND SIMPLICITY

The icon display, the detailed menu, and user-management of parameters from a PC ensures fast and safe usability of the XB series

▶ Probes

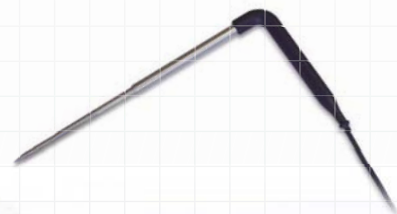


A complete series of insert probes for measuring product inner-temperature ensures the ideal level of precision for each application.



● PTC/NTC

Insert probe, one point with plastic/inox steel handle, steel cap and silicone cable (also alimentary).



● PTC/NTC 90°

Insert probe, one or three points with plastic/inox steel handle, steel cap, and silicone cable for a more accurate measurement of the product's temperature.

XRB

BOTTLE COOLER CONTROLLERS



Display with Red, Blue or White color



R290

CO₂

R600a

The XRB series is an innovative range of controllers particularly suitable for bottle cooler applications. It can be installed in static or ventilated refrigerators with either frontal door or night curtains.

They are equipped with advanced energy saving features. The larger display in CH format with bigger digits improves readability and gives complete information about the machine status.

Useful for

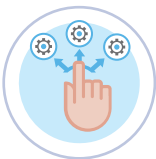
...OEM

- High flexibility
- Reducing CO₂ emissions
- Simplified commissioning operations
- Improved reliability

...END USER

- Few parameters to manage
- Replacement of existing devices
- Less programming time

Special functions



Multi map



Pull down time



Smart defrost



Self-regulation capability



Extra cooling for filling

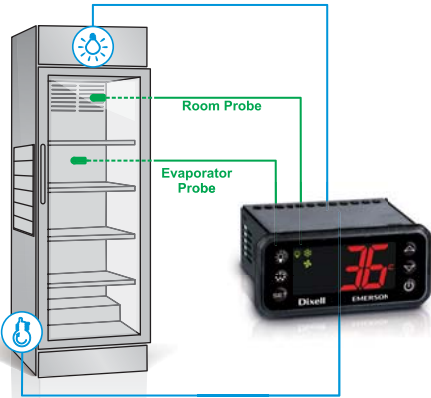


Service & production

Applications

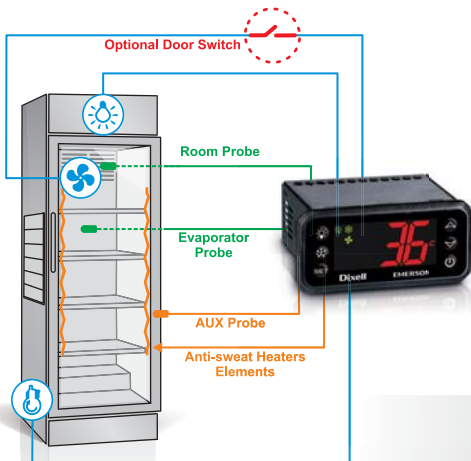
Depending on the kind of application, Dixell has designed 3 different controllers that ensure the highest standards of performance of the cooler.

DOOR CABINET - static coolers



- Room probe
- Evaporator probe (optional)
- Compressor management
- Light management
- Timed defrost by compressor stop

DOOR CABINET - ventilated coolers

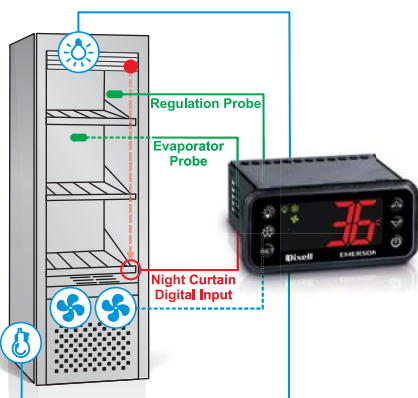


- Room probe
- Evaporator probe
- AUX probe (optional)
- Compressor management
- Fan management
- Light management
- Timed defrost by compressor stop
- Electric or hot gas defrost (if available)
- Anti-sweat heater management

Designed also for "STREET COOLER" applications thanks to the heating function



OPEN CABINET - with or without night curtain coolers



- Room probe
- Evaporator probe (optional) for heating elements, condenser temperature, etc...
- Compressor management
- Light management
- Digital input for night curtain management
- Timed defrost by compressor stop

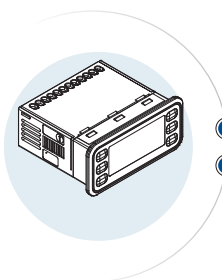
XRi & XWi

CONTROLLERS for PLUG IN UNITS with VARIABLE SPEED COMPRESSORS

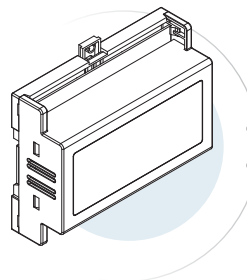


XRi and XWi controllers offer the optimum solution for controlling plug-in units with variable speed compressors. The controllers, available in compact and split versions, maximize high-energy savings, extended appliance reliability, and efficient management of the product maintenance temperature.

An important feature is the reduction of plant handling costs due to reduction in reactive power demand. They are designed for plug in, open islands, cabinet with refrigeration systems, bottle and wine coolers.



- Single compressor
- Frequency control



- Single/double compressor
- Frequency/serial control

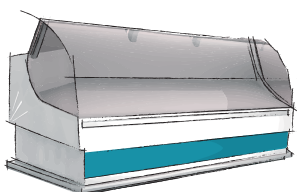


**INVERTER
COMPRESSOR
MANAGEMENT**

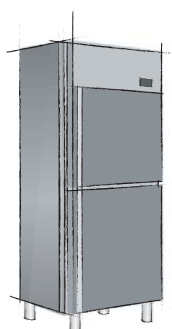
R290

Available for

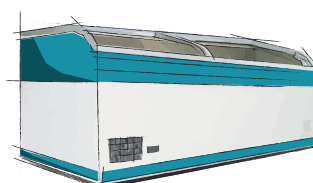
Service over counter



Vertical open or closed

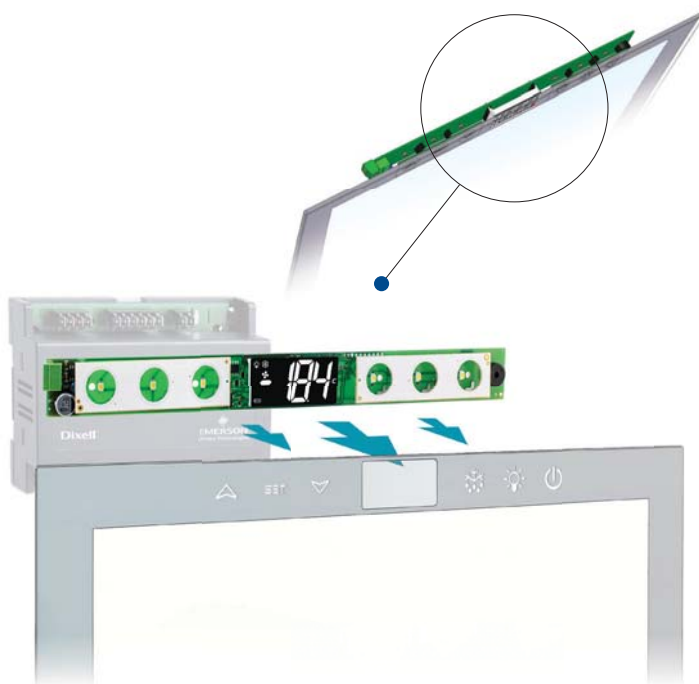
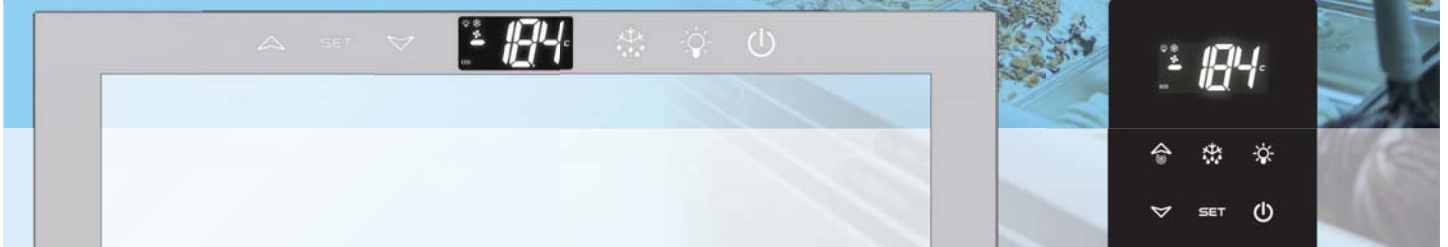


Horizontal open or closed



Glass Touch & Soft Touch

*CUSTOMIZABLE SOLUTIONS
for COMMERCIAL REFRIGERATED
APPLICATIONS*



- High customization level
- IP65 protection
- Easy to clean
- Back panel mounting
- 6 touch keys

Capacity
Touch
Technology

T620T is the new keyboard with touch keys integrated into the unit.

It works in combination with WING controllers in K format (split version) and features a visually aesthetic design. The keyboard is the ideal solution for pastry and ice-cream refrigerated showcases.



- High customization level
- IP65 protection
- Easy to clean
- Back panel mounting

Display with Red, Blue or White color



Dixell's new membrane solution maximizes user-configurability. Combining WING controllers in K format (split version) with the new **D60K** remote display enables customers to choose the ideal aesthetic solution for every cabinet. Interface modification is available depending on the cabinet model in terms of keys, color, shape and dimensions.

The remote display is available with or without mechanical buttons; the version containing buttons is used with polycarbonate frontal and has up to 6 buttons.

EmersonClimate.com/Dixell

Dixell™

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