What's new

Future-proof solutions for a smarter world

DIXELL™

EMERSON™

XWEB EVO
v. 5.3

New web interface for supervisor and monitoring systems

The well-known XWEB EVO family for the optimum management of Retail field and HVAC/R applications, is even more enhanced today thanks to the new web user interface developed to allow easier and faster access to information.

The new look displays immediate and clear information; the unique interface allows the user to have the same rich user experience even for local (XWEB3000/5000), remote (via PC) or mobile (via tablet and smartphone) access.

Furthermore, systems are provided with a customizable web user interface for navigation without any additional software. XWEB EVO is designed to obtain energy savings, thereby reducing running costs and helping preserve the environment. Our solutions are synonymous with quality, user-friendliness, and efficiency because they are focused to meet end user needs.

Unique interface

The new XWEB EVO web interface automatically adapts to each kind of device. The same look is available for PC, tablet, smartphone and XWEB3000/5000 local interface, ensuring the same completeness of information for mobile devices.

REMOTE   REMOTE

REMOTE   LOCAL

Only for
XWEB3000 EVO
XWEB5000 EVO
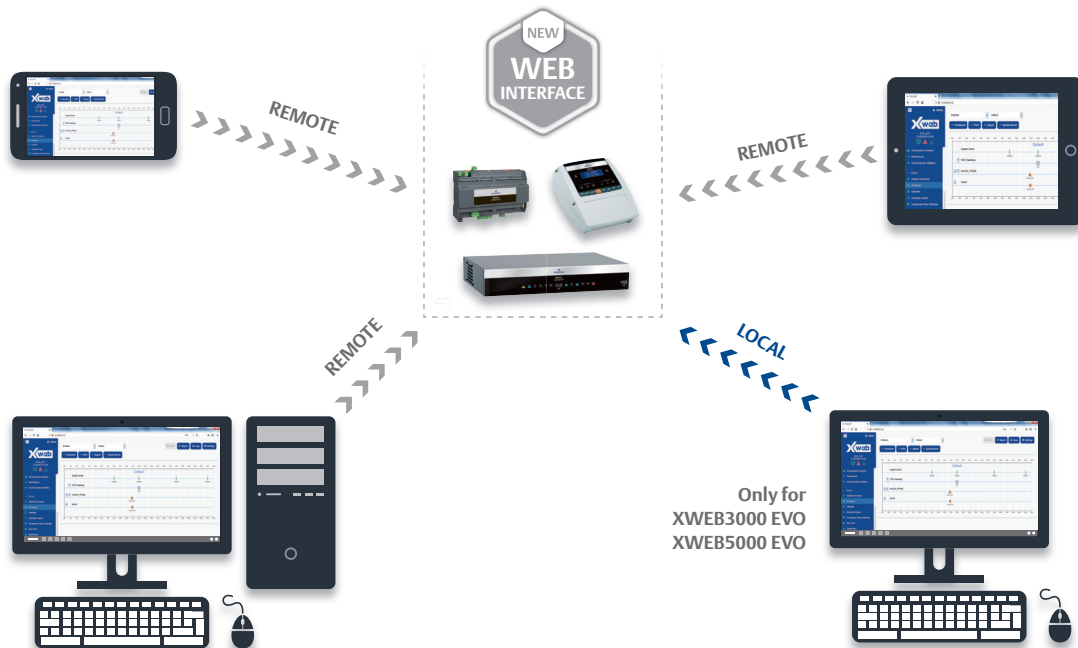
Easier instrument installation

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

The main screens

LAYOUT

A new 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.
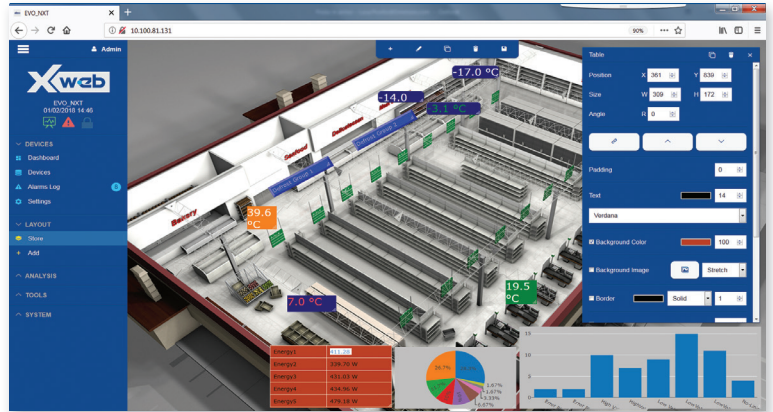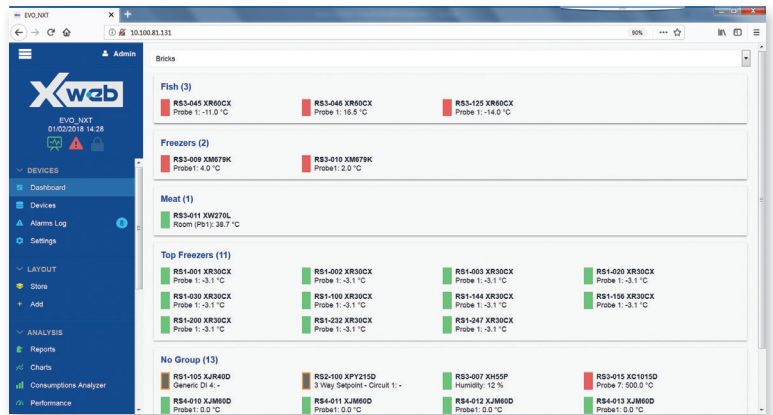

DEVICE VIEW

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 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.
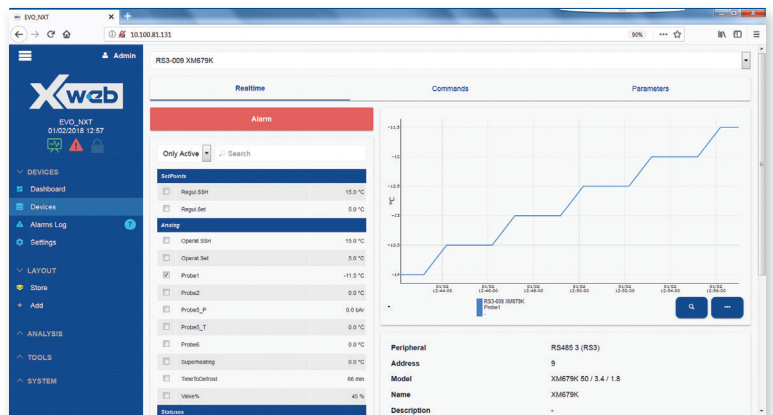
DASHBOARD

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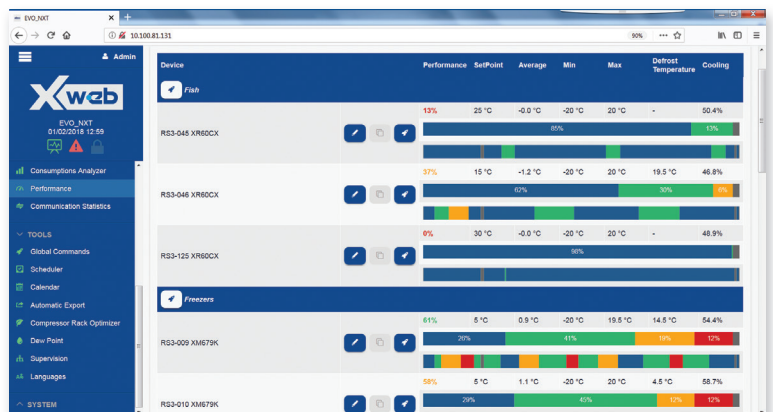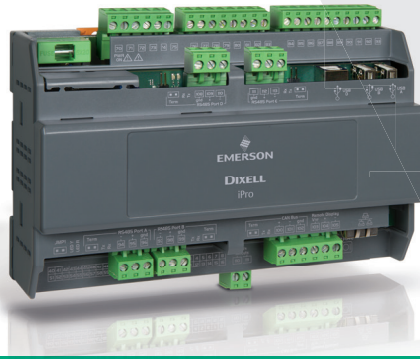

PERFORMANCE METER

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.

iPro
v. 2.0

NEW HARDWARE

Enhanced programmable controllers with more connectivity options

The new iPro programmable controller family has been extended with new, high-level hardware that increases the performance and connectivity capabilities in order to allow users to create even larger applications for both HVAC/R and general purpose markets. The new controller, one of the most current and innovative on the market, allows you to develop your own applications for any type of system thanks to the new ISaGRAF® development environment.

Powerful CPU
- New CPU to increase the application size and performances
- RAM memory increased 64MB
- Flash memory increased 512MB (10DIN and iProLINK) and 128 MB (4DIN)

Up to 3 USB ports
The 10DIN controllers have 2 USB (host) ports for managing upgrades, external converters, or nano devices.
1 USB (device) port is available for PC connection.

Up to 4 RS485 ports
The 10DIN controllers allow the OEMs to enlarge this application through the flexibility of the 2 additional RS485 communication ports. They can be used to connect additional ModBUS actuators (probes, fans, transducers and more) in order to extend the application I\O capability for larger solutions.

Wi-Fi connectivity
For the 10 DIN format is available the useful nano Wi-Fi connection that is the ideal solution in case of SMS/e-mail sending and connection to Wi-Fi network.

HMI range extension
Now the 4DIN controllers can also support the new IPCH keyboard.
This new interface is completely programmable via iPro and is designed for small units for the HVAC/R world.

iPro APPLICATION for HVAC

Advanced applications for air handling units & dry coolers

Thanks to our extensive experience gained by developing the Chiller and Heat Pump applications, Dixell has developed new applications based on iPro platform for the HVAC field. The new AHU & DRY COOLER applications, with their high configurability, made easy by the new user interface and the integrated web server, makes it usable both by machine builders and installers. The new applications with the Dixell controller can be easily integrated into a system network thanks to native connectivity to the proposed hardware.

AHU APP

The application for AHU ensures optimal control of the temperature, humidity, pressure, air quality and flow, for accurate regulation both in conditioning and in process.
The complete management of the most advanced construction technologies (heat exchanger, variable flow rate, and more...) ensures high energy efficiency performance.

DRY COOLER APP

The new application for the control of DRY COOLER units add to the regulation of ventilation a high-performing management of pump stations, adiabatic cooler, and heat exchanger. The flexibility of the application allows to use it in several application combinations.

Optimized management of the unit

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

USB to download data and update the application

Remote accessibility for:
- Configuration
- Supervision
- Control
- Maintenance

It is possible, for more advanced users, to customize the product by adding special features, changing logics, or simply adapting it to family business feeling

The control application has all the main functions grouped into intelligent function blocks placed in an editable library available to the programmer

IC100 EVO

NEW CH FORMAT

Solutions for chillers and heat pumps with domestic hot water management

IC100 EVO is the new series of controllers dedicated to chiller and heat pump with one gas circuit, availables now also in CH format. Compactness, extreme flexibility, the possibility to control electronic expansion valves (connection to an IEV driver is required) and advanced features such as free cooling and domestic hot water, are the main characteristics of this new series. Air/air, air/water, water/water, motor-condensing, geothermal heat pump, and dryer units with a maximum of three compressors can be controlled by the new IC100 EVO.

High connectivity

SMARTPHONE/PC/TABLET

INTERNET/ INTRANET

MASTER/SLAVE MODULE
- Up to 10 slave units

CONNECTIVITY MODULE
- ModBUS® (M/S or TCP/IP) BACnet® TCP/IP slave

XWEB SYSTEMS
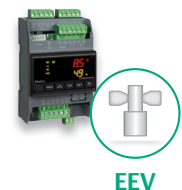- Supervision, analysis and alarm management

GATEWAY
- LON

RS485 ModBUS®

INTERFACES

TOUCH

LAN

EEV DRIVERS

EEV

Main features

- The new IC100 EVO series greatly improves the already remarkable performance of the current IC100 series.
- Main type of compressors (scroll, screw, and inverter) can be managed, fan and water pump can be controlled in ON/OFF or modulation mode, and several new functions have been added to optimize the regulation and the management of the heat pump.
- With the large number of input and outputs and the possibility to connect the electronic expansion driver IEV, it is possible to manage optimally one circuit chiller and heat pumps.
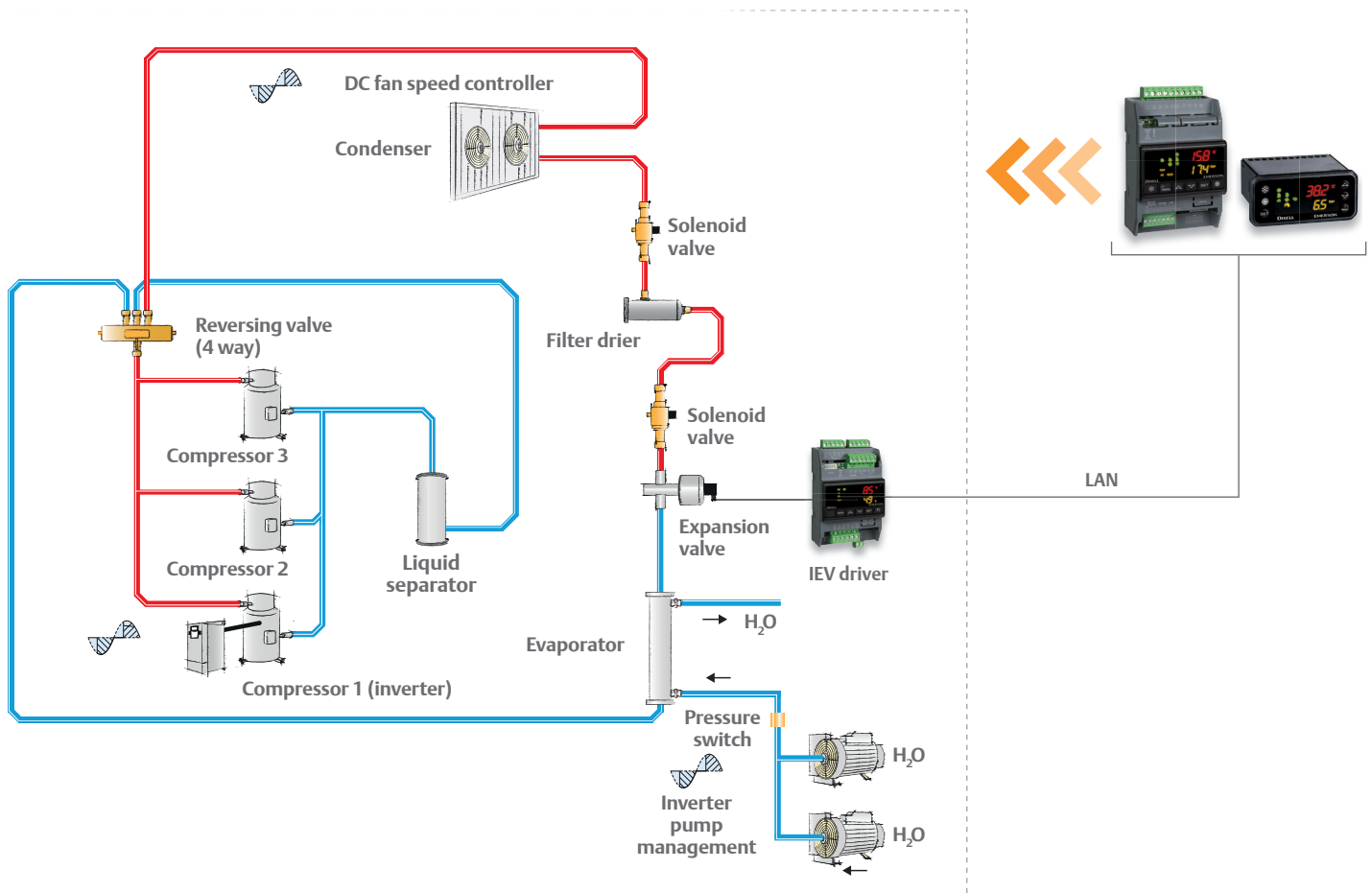
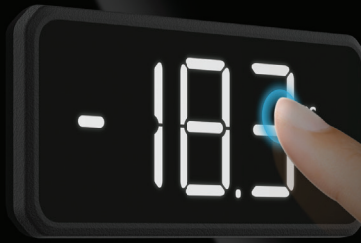INVERTER COMPRESSOR

Special functions

- Power reduction on critical working conditions (detected by temperature or pressure sensors)
- Power reduction via digital input (to reduce consumption during high cost time band)
- Compressor management to equalize working hours or starts-up
- Humidity control
- Pump down
- Heat recovery
- Geothermal free cooling
- Second set point (by scheduled time band or digital input)
- Dynamic set point
- Data logger up to 100 alarms (alarm code, date, hour/min, machine status)
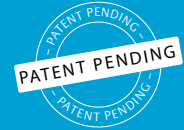- Easy parameters programming via Wizmate software

1-circuit up to 3-compressors

DC fan speed controller

Condenser

Solenoid valve

Filter drier

Reversing valve (4 way)

Solenoid valve

Expansion valve

IEV driver

Compressor 3

Compressor 2

Liquid separator

Compressor 1 (inverter)

Evaporator

H_2O

Pressure switch

H_2O

Inverter pump management

H_2O

LAN

XR-T

NEW FULL TOUCH technology

Compact touch screen solutions for commercial refrigeration, food service and catering

PATENT PENDING

XR-T is the revolutionary family of Full Touch controllers that introduce a new way to interact with your system. More available info, high level of elegance, easy to clean, intuitive interaction and more, are only few of the several features that characterize these new controllers. They are particularly appreciated for their sleek design and elegant style and are the ideal solution for: ice cream freezers, pastry refrigerators, warming cabinets, refrigerated cabinets, wine cellars, showcases, refrigerated counters.

- Capacitive touch user interface
- Ultra wide interactive display
- Natural refrigerants ready
- Water and dust resistant

- Visit
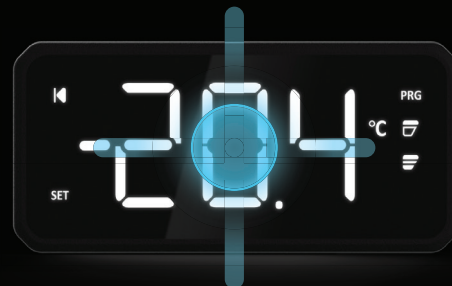 **www.fulltouch.info**

Experience the new touch sensation

Tap and Hold
Activate / Deactivate

Double Tap
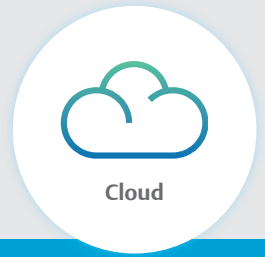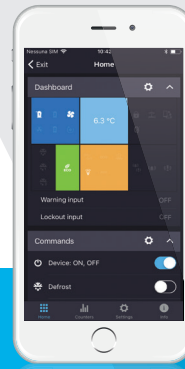Change Scree /Save

One Tap
Switch ON / Switch OFF

Swipe
Browse / Modify

XR-CHC & XRB-CHC

Bluetooth® communication for refrigeration

Dixell presents a useful connectivity solution for XR-CHC & XRB-CHC refrigeration controllers with the introduction of the Bluetooth® communication system. Through the new Emerson™ CONNECTED App, available both for iOS and Android, you can control bottle coolers (XRB-CHC), refrigerated cabinets and cold rooms (XR-CHC) 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. Last but not least, the Emerson™ CONNECTED App features a complete report by graphs and statistics: a very useful diagnostic tool for all "service operations". The App also gives the possibility to see functional status messages (presence of alarm conditions) related to the cabinets status. The EmersonConnected Cloud instead, allows the user identification and the management of accesses with the related permission levels.

- X-MOD proximity sensor for light control and sales performance indication

- Visit **https://dxapp.cloud**

Our connectivity solution

CONTROLLER	APP	CLOUD
XR-CHC & XRB-CHC	Emerson™ CONNECTED	• Authentication • Authorization
		EmersonConnected Cloud
Designed for: • Food service • Mini markets • Ice-creams • Caffetteries • Retail	• Remove the distance between user and equipment • Simplified maintenance • Continuous monitoring	Standard browser

USER   SERVICE   OWNER

Cloud

XRi & XWi

INVERTER

R290 & R600a COMPATIBLE

Solutions for 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 cabinets 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.

- Double parameter map to be used in different applications
- Advanced defrost control
- Compressor speed optimization
- Improved reliability of the application
- Integrated advanced functions for energy saving
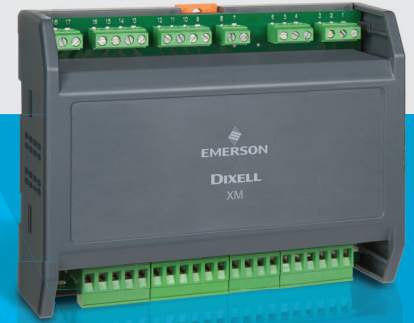- Mechanical stress and noise reduction

ONLY FOR XWi CONTROLLERS

- 2 analogue outputs to supply a 0÷10Vdc or 4÷20mA output signal
- Variable speed fan management
- Compatibility with all Dixell keyboards: vertical and horizontal, membrane and glass touch

The scalable solution

x 2   x 2

XWi72K

XWi70K

XRi77CH

x 1

XRi60CH

XRi20CH
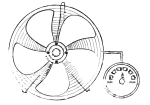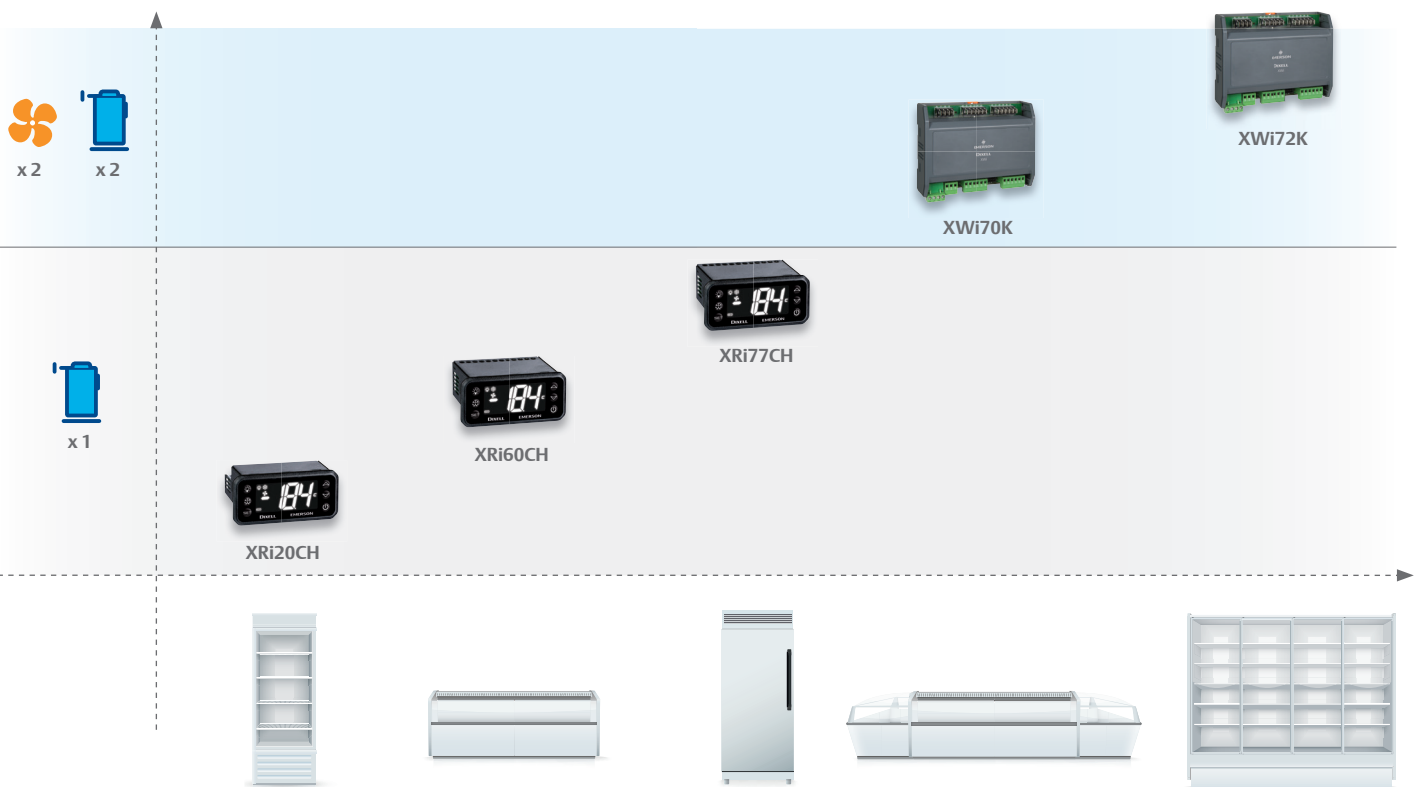
XM600
v. 5.3

Enhanced case controllers for multiplexed cabinets

The new version of the XM600 series for multiplexed cabinets is performance enhanced, efficient and flexible to satisfy the needs of the market. A strength of this new version 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.

EASY & PERFORMANCES
All models have the same firmware platform to ensure the same robust performance whether using a stepper or a PWM valve. Ease of use and maintenance are guaranteed by common parameters and functions.

QUICK UPDATE
Today it's possible to easily reprogram all XM600 controllers directly in the field; new gas, advanced solutions, and more... they are always available for your controllers even if already installed.

CLEAN MODE FUNCTION
This new function allows the cabinet to be washed safely without disconnecting it from the monitoring system.

FAST COMMUNICATION
A faster communication between controllers and supervising systems allow the cabinet to be monitored in real time ensuring a prompt intervention of the service in case of alarms.

MULTI MAP
The customer can choose the most suitable solution among different kinds of applications: low temperature, normal temperature, plate heat exchanger, subcooler and more.

HIGH FLEXIBILITY
The flexibility of the XM600 series allows to set 2 digital inputs as 2 probes in order to load safety monitoring of plug-in cabinets.
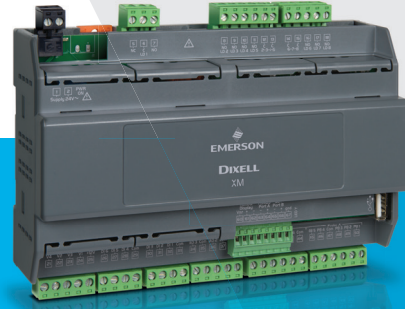
AUTO-ADAPTIVE SUPERHEAT
This algorithm for the superheat management improves the cabinet performance in terms of ease of use and energy savings.
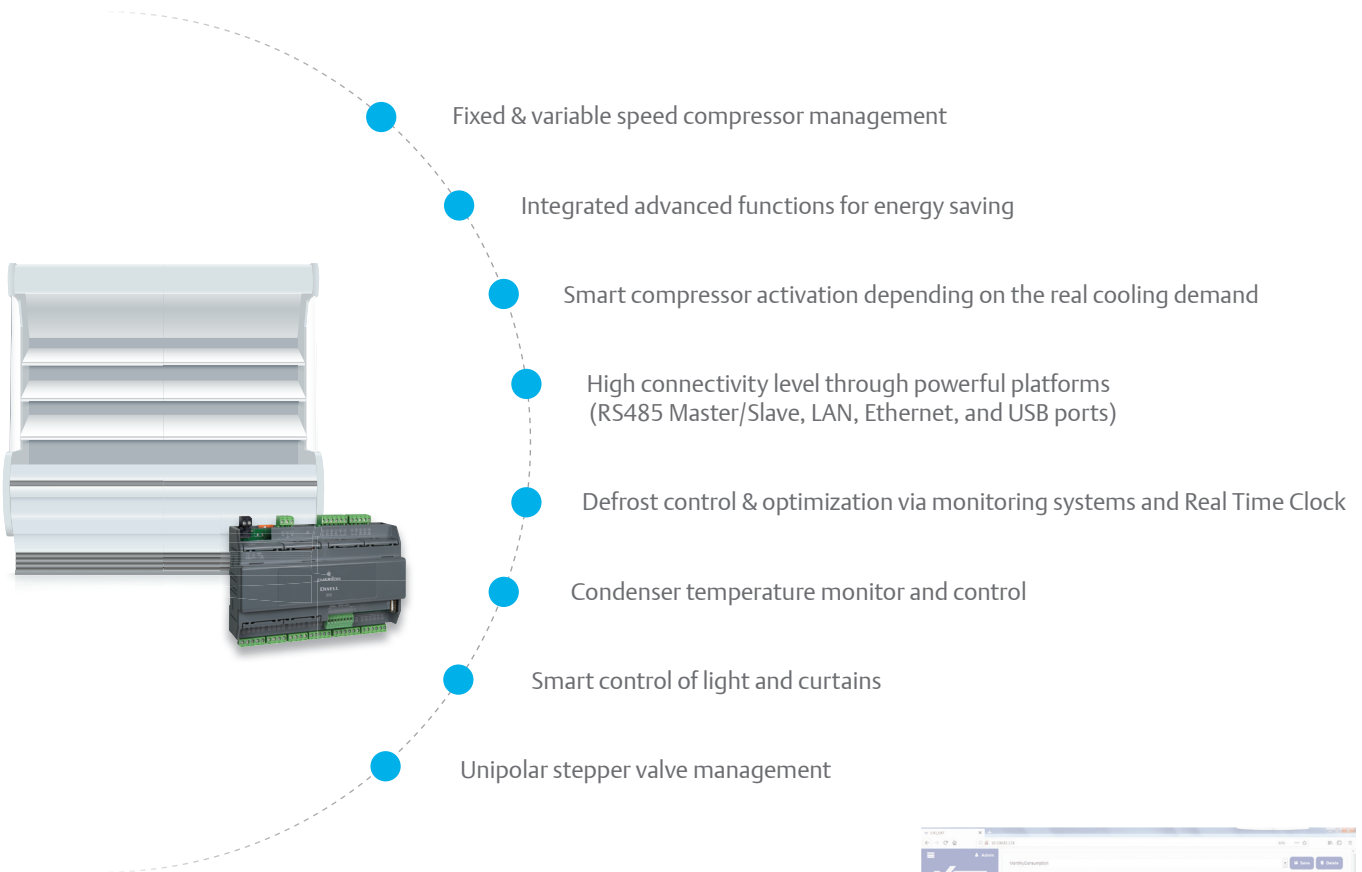
HIGH COMPATIBILITY
The LAN, compatible with previous versions, allows new controllers to be installed in already existent networks receiving the same commands and sharing the same information.

XM800

Powerful controller for integrated display cases

The XM887D controller is designed for integrated display cases with compressor on board where Propane as refrigerant is used. The condensation can be done via air or water heat exchanger. It is suitable for applications with up to 3 evaporators, 3 circuits and 3 fixed or VSD compressors. This new solution features a powerful iPro platform in a 10 DIN case that provides high connectivity thanks to its several communication ports. XM887D can be connected to the new IPCH keyboard, to the Visograph graphic display and also to the Visotouch touch display for a simple and intuitive interaction with the system.

- Fixed & variable speed compressor management
- Integrated advanced functions for energy saving
- Smart compressor activation depending on the real cooling demand
- High connectivity level through powerful platforms (RS485 Master/Slave, LAN, Ethernet, and USB ports)
- Defrost control & optimization via monitoring systems and Real Time Clock
- Condenser temperature monitor and control
- Smart control of light and curtains
- Unipolar stepper valve management

Enhanced communication

XWEB EVO is Dixell's family of controlling and supervising systems that controls remotely the XM800 functioning.

High HMI compatibility

The XM887D controller can support LED, LCD or touch screen keyboards ensuring, for every application, the right solution in terms of information and format.

Kind of applications

The controller is the ideal solution to manage different kind of display cases with compressor on board. Here below 3 standard applications that can be controlled via XM887D.
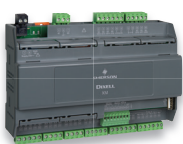
MULTICIRCUIT EVAPORATOR DISPLAY CASE

- 1 evaporator
- up to 3 circuits
- up to 3 compressors
- outputs: 1 defrost, 1 fan, 1 light/night blind

MODULAR DISPLAY CASE

- up to 3 evaporators
- up to 3 circuits
- up to 3 compressors
- outputs: 1 defrost, 1 fan, 1 light/night blind

MULTICIRCUIT EVAPORATOR DISPLAY CASE WITH VSD COMPRESSORS

- 1 evaporator
- up to 3 circuits
- up to 3 VSD compressors
- outputs: 1 defrost, 1 fan, 1 light/night blind

think natural

H$_2$O circuit

Heat exchanger

VSD compressor

Controller

Air IN

Valve

Air OUT

Evaporator
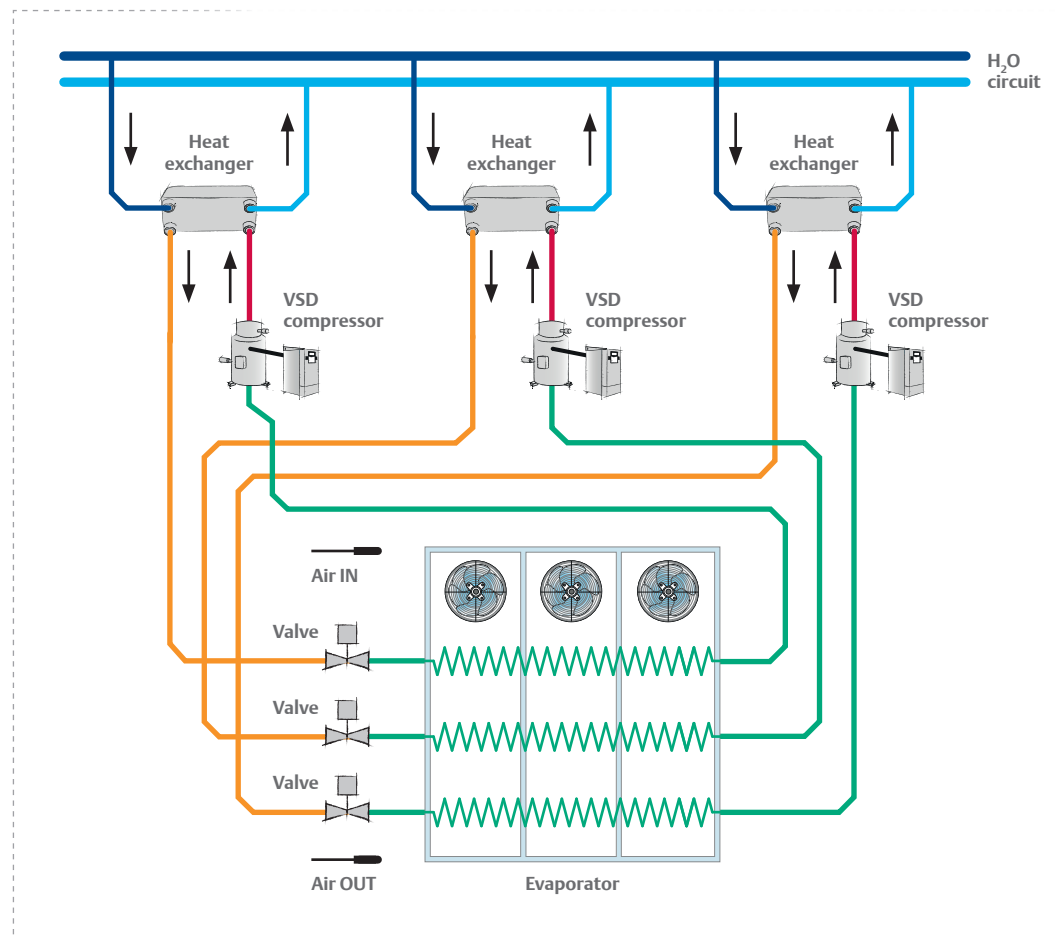
iProRACK
v. 2.8

Solutions for transcritical CO$_2$ compressor racks

NEW
TOUCH INTERFACE

The iProRACK family is designed for the management of racks with standard refrigerants, CO2 subcritical applications and transcritical CO$_2$ booster systems. It manages compressor racks with up to 2 circuits and 12 compressors per circuit.
In transcritical applications it directly controls the high pressure valves, heat recovery systems, by-pass valve and parallel compression.

Touch screen terminal

CanBUS

Slave ModBUS

Monitoring systems

Controller

Expansion modules

EEV drivers

Master ModBUS

Battery backup
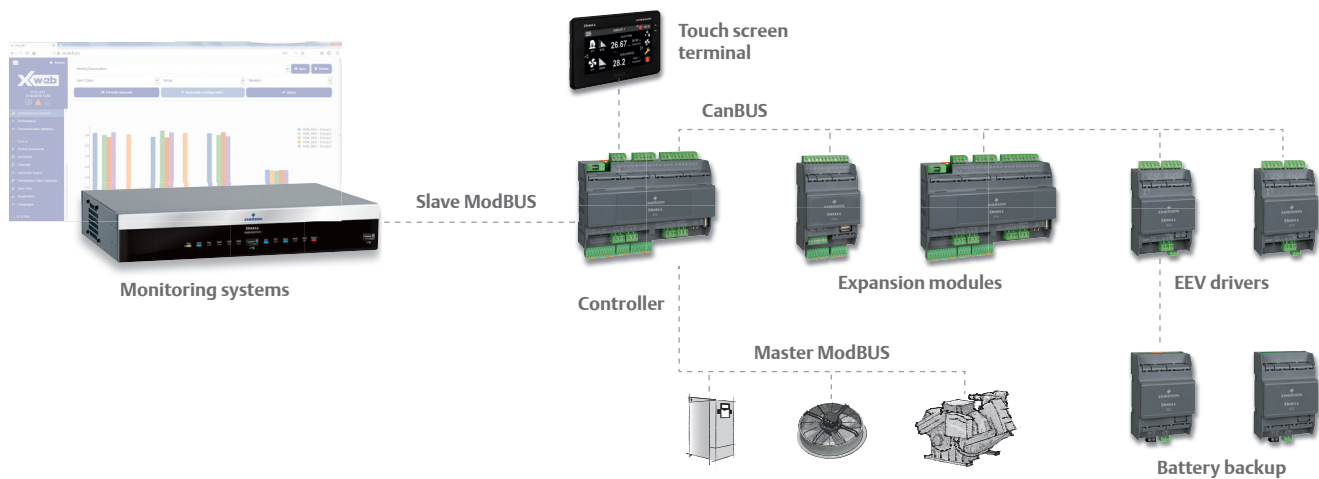
Visotouch interface

- More powerful way to work through the touch technology
- Intuitive interface to get the information with fewer taps
- Frontal red LED (alarms) and green LED (ON status)
- Graphic display TFT
- Icons with "animation" for a detailed status of the machine
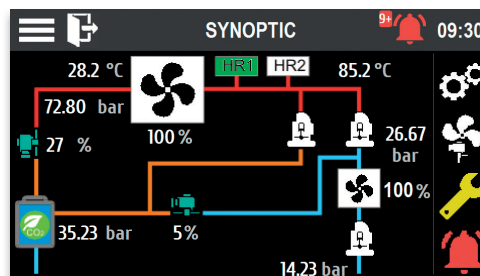
SYNOPTIC

The synoptic screen offers a general view of the machine. For a detailed overview, it is possible to touch every single part of the circuit.
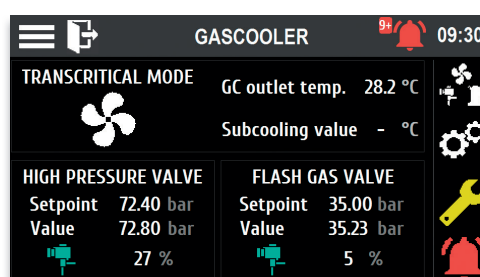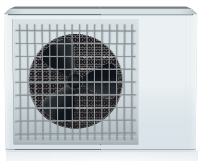
GASCOOLER

All useful information in a unique screen, such as: the status of the valve, the pressure and temperature.

New features

- Dual heat recovery for transcritical CO_2 rack with gas cooler by-pass and pump management
- Oil injection management
- Parallel compression for COP optimization
- Compressor pump down

- Gas cooler optimization
- 3 de-superheater management
- Management of gas leak detectors
- Management of electronic fans or fans with inverter via ModBUS
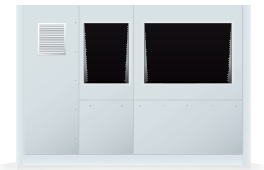- Coresense™ integration via ModBUS connection
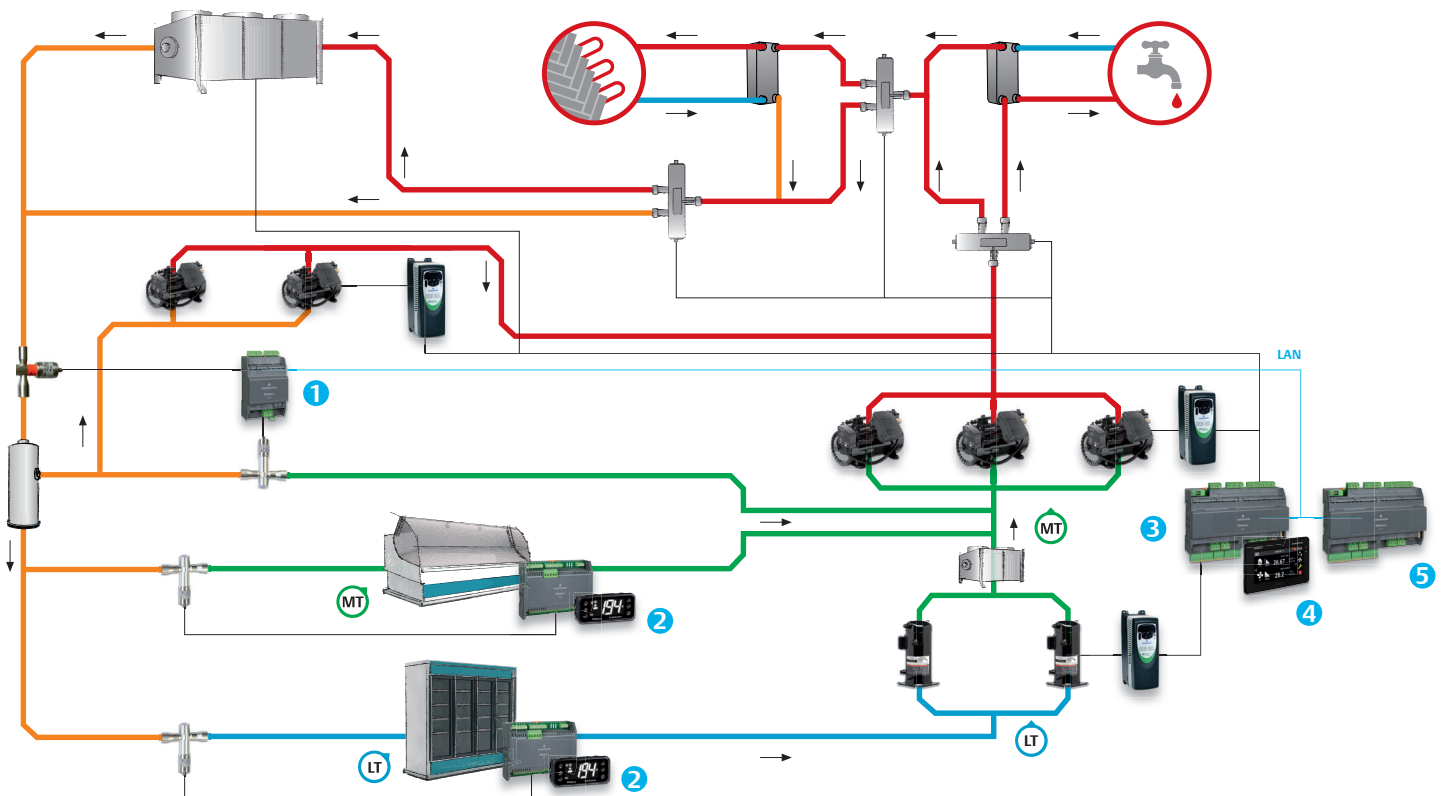
think natural

Available for

Condensing units
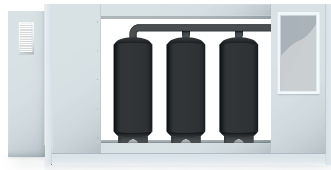
Compressor racks

Advanced compressor racks

Compressor packs

Transcritical solution-booster plant with dual heat recovery, gas cooler by-pass & parallel compression and de-superheater

LAN

MT

MT

MT

LT

LT

1 **XEV20D**
electronic expansion valve driver

2 **XM600**
cabinet controller

3 **IPR215D**
compressor rack controller

4 **VISOTOUCH**
touch screen display

5 **IPX215D**
expansion module

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EMERSON. CONSIDER IT SOLVED.™