# CO<sub>2</sub> Solution

High energy saving system for CO<sub>2</sub> retail applications







## High energy saving system for CO2 retail applications

The  $XeCO_2$  system is the complete and innovative solution for the retail world that ensures an optimized efficiency management of the  $CO_2$  plants.  $XeCO_2$  consists of controllers for refrigerated cabinets and compressor racks / condensing units and of monitoring and controlling systems.

## **XM700**

## High performance multiplexed cabinet controllers



- Advanced and adaptive superheat management synchronized with the compressor rack status
- Performance optimization through overfeed evaporators resulting in increased rack suction temperature
- Quick and easy installation thanks to pre-configured application maps
- Reduced energy consumption through "Optimized Defrost Duration" (ODD) algorithm which decreases defrost duration of up to -20%
- High efficiency whether using a stepper or a PWM valve
- Increased controller performances thanks to remote update
  - Easier and faster access to information through the innovative web user interface
  - Same rich user experience for PC, tablet and smartphone access



## Up to 20% energy savings\*

- \* compared to a conventional transcritical R744 booster supermarket unit with parallel compressor, in a location with 20 °C of average external temperature
- Safer systems thanks to the synchronization among compressor racks, cabinets, and monitoring systems
- Powerful and adaptable hardware platforms for any control need
- Maximum efficiency thanks to dynamic superheat management
- Advanced algorithms for energy saving management
- Easy and intuitive installation and use
- Heat recovery and integration with HVAC systems for efficiency improvement
- CRO for compressor rack optimization via dynamic suction set point



## **iProRACK**

#### Controllers for transcritical booster racks

- Complete management of dual heat recovery, gas cooler by-pass, parallel compression and de-superheater
- High performance thanks to the evaporator overfeeding compatibility
- Warm climate solutions through parallel compression and the adiabatic function
- Increased compressor life by integrated oil injection management
- Safeguarding by gas leak detector compatibility
- High flexibility via a modular platform to satisfy any rack dimension



## **XWEB PRO**

## Advanced controlling and monitoring systems

- Increased strategy-control performance with significant improvement in control and plant efficiency thanks to XM700 & iProRACK perfect synchronization
- Even faster and reliable data reading from independent field bus using 4 serial ports with up to 19200 bauds speeds
- Advanced connectivity with dual Ethernet and Wi-Fi ports dedicated to Service and Modbus TCP/IP communication, providing flexibility and non-stop operation
- Quick memory expansion via micro SD for secure and easy system configuration
- Remote firmware update function for all controlling systems present in the field



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