

Solutions for Cold Rooms



Controllers and electrical panels
for cold room management



Controllers and electrical panels for cold rooms

The XER solution for the optimized management of cold rooms comprises controllers and electrical panels, and is designed for all applications in the retail and food service world. This new generation of controllers is suited for every kind of cold room, regardless of performances or dimensions. The powerful hardware platform, the easy installation mode and the intuitive configuration best meet all installers and service staff needs. Flexibility and safety are ensured by the option to add models with Circuit Breaker and Residual Current Circuit breaker to the basic configuration.

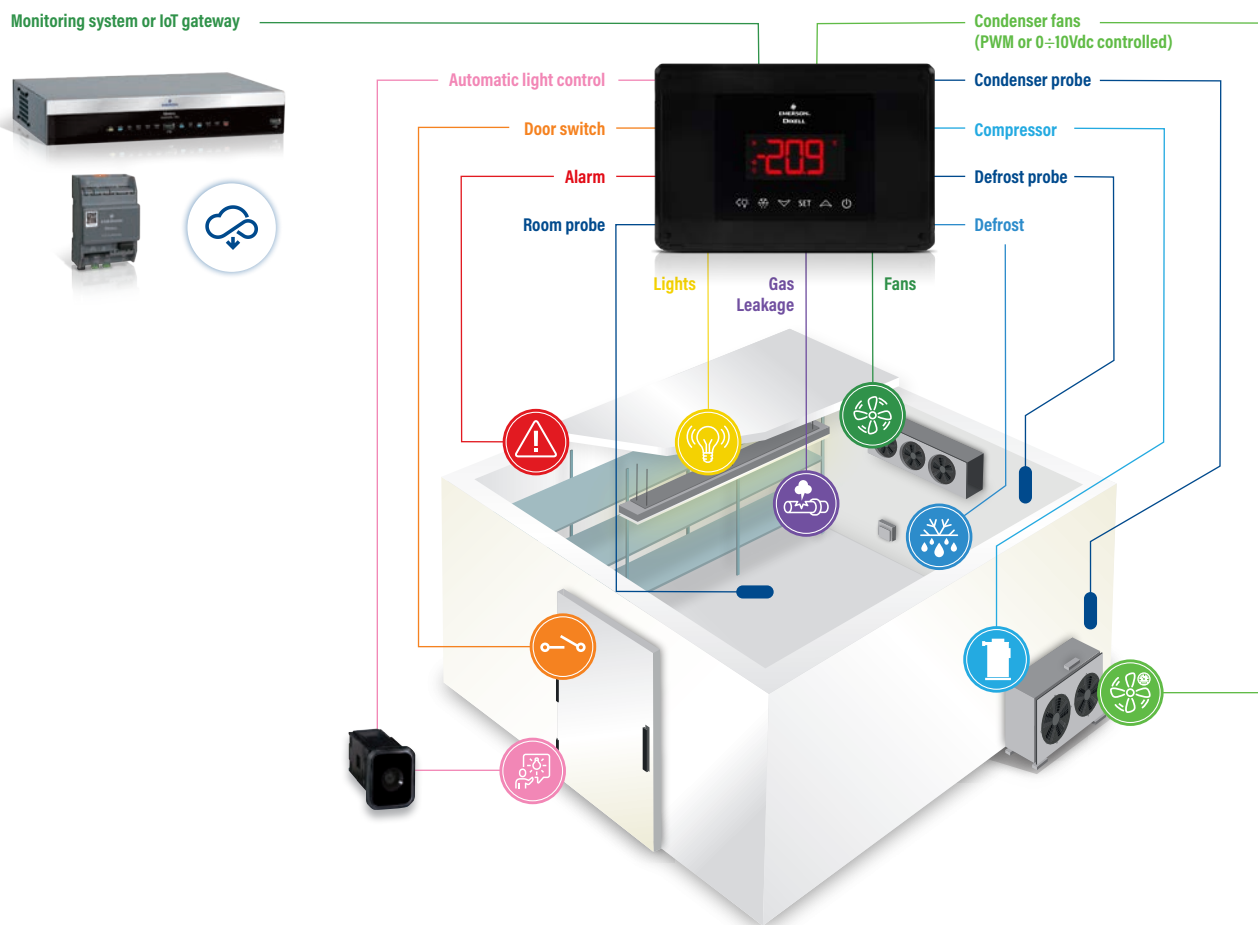
Applications

The XER family of controllers is the ideal solution for the management of all kinds of cold room application, from small shop, to a restaurant, from supermarket to a large storage center.



Complete cold room management

Because of its high-performance hardware and enhanced functions, XER is ready to answer most needs of the cold rooms currently on the market.



Main features



High flexibility

Thanks to the available pre-installed Circuit Breaker or a Residual Current Circuit breaker the new applications and the replacement of old controllers, adding some safety components, is quick and easy.



Safety

XER can be used also in long refrigerated circuits and avoid liquid return conditions. The "Pump Down" logic helps to reduce liquid return conditions when long piping is used to connect condensing unit and evaporator.



Environmentally friendly

With our eco-friendly solutions, innovation and efficiency means respecting the environment by optimizing consumption and reducing pollution, and gas emissions. The energy consumption is guaranteed thanks to the use of modulating loads (ventilators, lights, heaters, and more) via selectable analogue outputs (PWM, 0÷10Vdc or 4÷20mA).



Double parameter map

Two parameter maps are available on XER; the user can select the most suitable for its application and quickly set parameters. The possibility to restore the factory default settings – a very useful operation in case of mistakes during the programming – allows automatic re-configuration of the controller to have it operating again for a subsequent and easier update.



Real time clock with replaceable lithium battery

Controllers are equipped with a replaceable lithium battery, which ensures data-saving even during long blackout periods. The system promptly advises when the charge of the battery goes below the set threshold, allowing its preventive replacement and ensuring saved data is secure.



Gas leak detection

Controllers, through a gas leak detector, can promptly signal possible refrigerant losses, maintaining safe conditions inside the cold room and avoiding machine stops due to gas leaks in the refrigeration circuit. A tempestive intervention reduces waste of gas and products inside the room and prevents its deterioration.



Homogeneous temperature control

The XER family, thanks to temperature regulation determined by the average of one or more probes (up to 4), allows having a homogeneous temperature inside the cold room. This special function is highly valued for large cold rooms where the temperature results can be different and not homogeneous, affecting the quality of the product.



High visible signaling in case of malfunctioning or regulation failures

With the innovative Alarm Frame, any alarm condition or regulation failure can be signaled in a more effective way, making it clearly visible from longer distances.



Data Management Cloud ready

The XER is compatible with the new “Data Management Cloud” service that allows the user to remotely access data on a Cloud platform through common mobile devices. The auto-detect system installed makes it possible to connect the controller and receive the application data automatically within a few minutes, resulting in time and cost reduction for the installation.

- Maintenance optimization avoids unnecessary costs
- Optimized food preservation enabled by accurate reporting of all variables
- Data analysis for critical situations and waste detection



LESS THAN 10 MINUTES to display your data online!

Firmware update



It is possible to update the firmware of the controller by using the Wizmate® software, directly on site, without replacing the controller and avoiding machine stops, which would result in wasted energy and resources. Moreover, now available is the ability to adjust possible malfunctions in unusual operating conditions, and updating the controller with the latest available versions, enabling improved and extra functionality. The useful frontal output allows a quick, easy and safe update without opening the enclosure. Furthermore, the output allows to connect the Hot Key for the parameter update.

Automatic light control

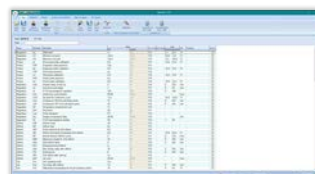
The usage of the motion sensor (X-MOD model) automates lights and/or evaporator fan control. Interior and/or aisle lights can be switched on if human presence is detected near or inside the cold room. Evaporator fans can be stopped in case of human presence is detected inside the cold room to increase the safety of the application.



Main accessories



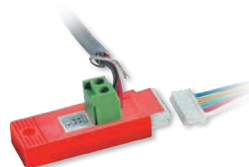
XJ485USB-KIT
Converter from USB
to RS485



WIZMATE
Programming tool for
controllers and Hot Key



X-MOD 5V
Motion detector



XJ485CX
Serial interface converts the
TTL output into an RS485



HOT KEY 64K
Key for parameter
programming



KIT CABLE GLANDS
Cable gland kit
(4xPG7+6xPG11)

Features

XER features a powerful hardware platform able to satisfy all needs from multiple types of cold rooms; simply choose the one that best suits your application.



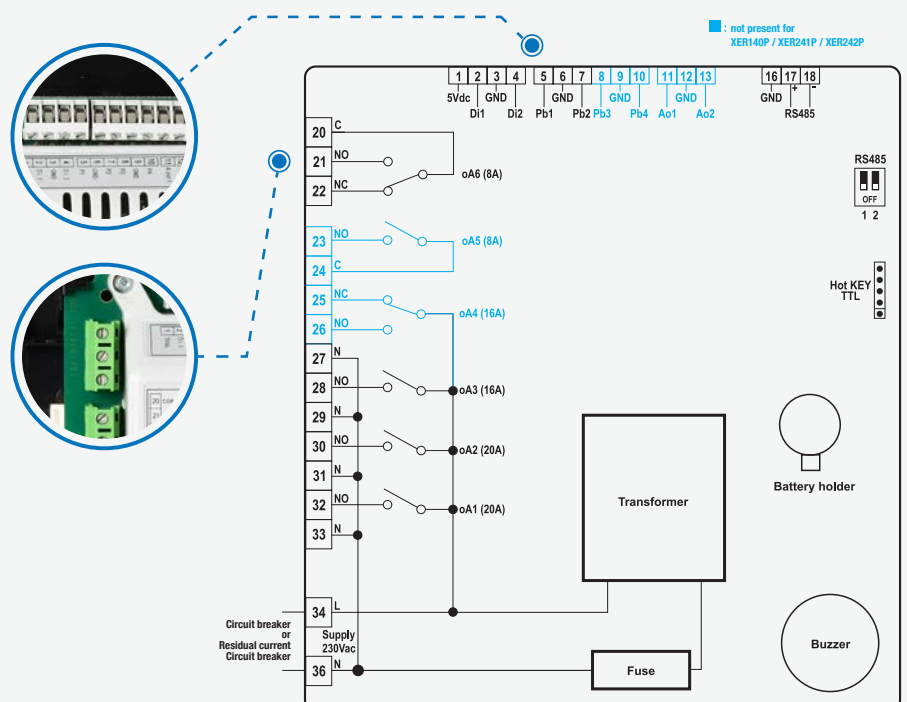
Circuit breaker

Residual current circuit breaker

	XER140P	XER160P	XER241P	XER261P	XER242P	XER262P
Display	3 digits with decimal point, icons and alarm frame	3 digits with decimal point, icons and alarm frame	3 digits with decimal point, icons and alarm frame	3 digits with decimal point, icons and alarm frame	3 digits with decimal point, icons and alarm frame	3 digits with decimal point, icons and alarm frame
Power Supply	230Vac, switching optional	230Vac, switching optional	230Vac, switching optional	230Vac, switching optional	230Vac, switching optional	230Vac, switching optional
Probe inputs	2 x NTC/PT1000 configurable	4 x NTC/PT1000 configurable	2 x NTC/PT1000 configurable	4 x NTC/PT1000 configurable	2 x NTC/PT1000 configurable	4 x NTC/PT1000 configurable
Digital inputs	2 x configurable	2 x configurable	2 x configurable	2 x configurable	2 x configurable	2 x configurable
Relay outputs	2x20A SPST + 1x16A SPST + 1x8A SPDT all configurable	2x20A SPST + 2x16A SPST + 1x8A SPST + 1x8A SPDT all configurable	2x20A SPST + 1x16A SPST + 1x8A SPDT all configurable	2x20A SPST + 2x16A SPST + 1x8A SPST + 1x8A SPDT all configurable	2x20A SPST + 1x16A SPST + 1x8A SPDT all configurable	2x20A SPST + 2x16A SPST + 1x8A SPST + 1x8A SPDT all configurable
Hot Key output	present	present	present	present	present	present
0÷10Vdc output	optional	optional	optional	optional	optional	optional
PWM output	optional	optional	optional	optional	optional	optional
Serial outputs	TTL + RS485 optional	TTL + RS485 optional	TTL + RS485 optional	TTL + RS485 optional	TTL + RS485 optional	TTL + RS485 optional
Real Time Clock	optional	optional	optional	optional	optional	optional

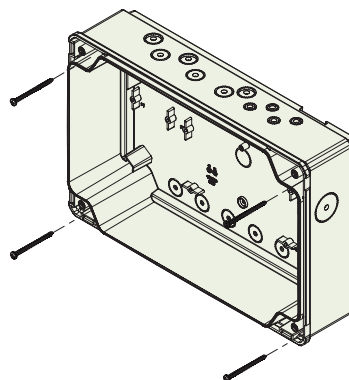
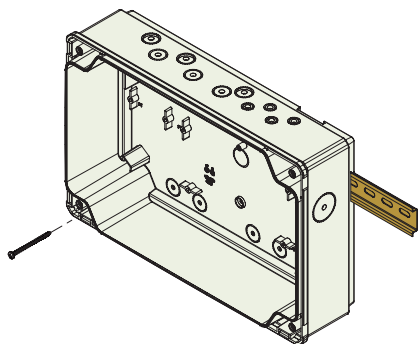
Connections

The relay output configuration with 4 direct loads and 2 additional relays, allows the XER to be suitable for the most applications present in the cold room market. Each relay can be configured during installation guaranteeing high flexibility for the user. The inclined terminals make the installation easier, and the rising clamp terminals can accept cross-section cables up to 4mm² without precautions. This simplifies and increases connection speed.



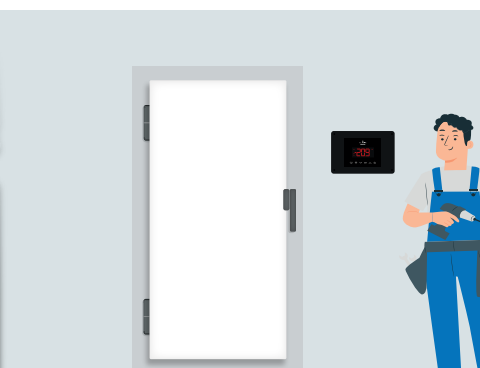
Mounting

The XER family features quick and easy DIN Rail or wall mounting. The cable glands ensure an IP protection degree of the product and the hinges, which keep the electronic part mounted with the rest of the box, allow a safe and easy wiring.

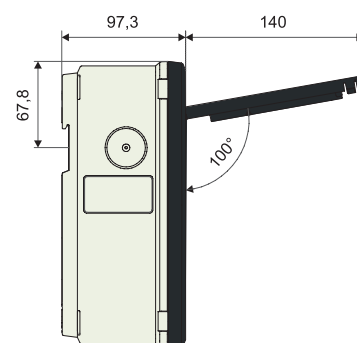
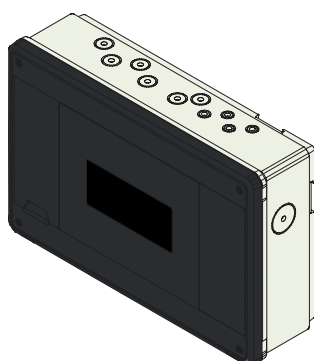


DIN Rail mounting allows an efficient alignment of multiple controllers. This is useful in case of applications where there are several cold rooms.

4 screws, with pre-formed posts and in 4 corners separated by gasket from the inner part, allow you to attach the controller quickly and safely to the wall.



Dimensions



Emerson Commercial & Residential Solutions

Dixell S.r.l. - Z.I. Via dell'Industria, 27 - 32016 Alpago (BL) ITALY - Tel. +39.0437.9833 r.a. - Fax +39.0437.989313
EmersonClimate.com - Dixell@Emerson.com

release 1.0 - 1582007500-GB

All trademarks are property of their respective owners. Dixell reserves the right to alter its products without notice. All rights reserved. Because environmental conditions are outside of Dixell's control, we cannot assume liability for results obtained nor any damages that may occur due to improper application. Manuals and updates are available on our Web Site EmersonClimate.com

EMERSON. CONSIDER IT SOLVED.™