# XR35 digital controller For medium temperature refrigerated applications



# Energy efficient refrigeration control

# **Energy efficiency**

- Direct temperature control algorithms deliver smarter compressor cycling
- Visual cues for high and low temperature alarms help prevent food spoilage and energy waste
- Night setback mode increases temperature setpoint for energy savings



# Usability

- Icon-based display makes it easy to see the exact status of the system and determine its operational state
- Onboard keypad allows parameter changes to be completed directly at the controller
- Optional remote display available (XREP)

## Data accessibility

- Automatic temperature logging can be used to identify potential maintenance issues
- Integration with Emerson supervisory platforms provides centralized view into alarms, system status and data logs

## Reliability

- Advanced algorithms prevent short cycling and excessive compressor cycling
- Diagnostics provide an early warning of maintenance issues to help retailers schedule service
- Temperature-based defrost control preserves food quality

## **Specifications**

#### Inputs:

Up to four inputs (two fixed, two configurable): Fixed:

1. Control temperature

2. Defrost termination temperature (evaporator probe) Configurable (one digital):

Display probe, alarm probe condenser, auxiliary relay control

Digital options: door switch, defrost activation, external/alarm, energy saving mode activation

## Output:

Two relay outputs available:

1. Compressors/solenoid valve

2. Configurable (light, alarm, or auxiliary)

### User interface:

.5" LED temperature display

9 status icons on the front

6 keypad interface consists of Up, Down, SET, DEF, Light and ON/

OFF or ES mode (energy savings) Temperature display in °F or °C

## Mounting:

Panel mounted in a 29 x 71mm panel hole or wall mounted in a C-Box 108 x 108 x 90mm enclosure

### Sensor:

NTC thermistors (two options available) Room probe (controlling probe) placed in the return-air or discharge air

Evaporator probe mounted in coldest spot of evaporator Optional third and fourth probes can be used for display/ condenser

## Power:

120Vac or 230Vac (+/-10% 50/60Hz)

## Communication:

Onboard serial port XJ485 adaptor Supports MOD-BUS-RTU Settable serial address 1-247

## Programming:

2 levels of password-protected parameters Lockable keyboard Hot key flash memory device can upload/download a program to unit

# Intelligent Store<sup>®</sup> architecture

Integrating facility hardware with Emerson's ProAct<sup>®</sup> service offerings allows retailers to capitalize on their infrastructure investments and further reduce operational costs. Over time, efficiencies gained from infrastructure investments will erode if not properly maintained. Emerson's facility experts offer free analysis of operational data and prescribe a customized set of solutions to target areas needing improvement. For free operational cost analysis, contact us at RetailSolutionsMarketing@Emerson.com. For more information on Emerson's ProAct services, visit EmersonClimate.com.

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# XR75 digital controller For low temperature refrigerated applications



# Energy efficient refrigeration control

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## Usability

- Icon-based display makes it easy to see the exact status of the system and determine its operational state
- Onboard keypad allows parameter changes to be completed directly at the controller
- Optional remote display available (XREP)

## Data accessibility

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## Reliability

- Advanced algorithms prevent short cycling and excessive compressor cycling
- Diagnostics provide an early warning of maintenance issues to help retailers schedule service
- Temperature-based defrost control preserves food quality

# **Specifications**

## Inputs:

## Fixed:

1. Control temperature

2. Defrost termination temperature (evaporator probe) Configurable (one digital):

Display probe, alarm probe condenser, auxiliary relay control Digital options: Door switch, defrost activation, external/alarm, energy saving move activation

## Outputs:

Four relays available:

- 1. Compressors/solenoid valve
- 2. Defrosts
- 3. Evaporator fans
- 4. Alarms, lights, or condenser fans

## User interface:

.5" LED temperature display 9 status icons on the front 6 keypad interface consists of Up, Down, SET, DEF, Light and ON/ OFF or ES mode (energy savings) Temperature display in °F or °C

## Mounting:

Panel mounted in a 29 x 71mm panel hole or wall mounted in a C-Box 108 x 108 x 90mm enclosure

## Sensor:

NTC thermistors (two options available)

Room probe (controlling probe) placed in the return-air or discharge air

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