

TEC210x-2 Series

Networked Thermostats

Description

The TEC210x-2 Series of thermostats is a family of highly advanced thermostats specifically designed for control of equipment such as rooftop units (with and without economizers), heat pumps, and single and multi-stage heating/cooling equipment. The TEC210x-2 thermostats feature Metasys® system N2 Bus communication capability that enables remote monitoring and programmability for efficient space control. The TEC210x-2 thermostats use an intuitive, plain text, menu driven, backlit display that makes setup and operation quick and easy.

The TEC Series includes four models:

- Single-stage (TEC2101-2)
- Heat Pump (TEC2102-2)
- Multi-stage (TEC2103-2)
- Economizer (TEC2104-2)

All thermostats use a unique proportional control algorithm that virtually eliminates temperature offset associated with traditional differential-based thermostats.

Features

- **Metasys System N2 Open Communication** provides compatibility with a proven communication network; N2 Bus is widely accepted by Heating, Ventilating, and Air Conditioning (HVAC) control suppliers.
- **Backlit Liquid Crystal Display (LCD)** provides real-time control status of the environment in easy-to-read, plain text messages with constant backlight that brightens during user interaction.
- **Simplified Temporary Setpoint Adjustment** enables user to change the temporary setpoint by only pressing UP/DOWN arrow key(s).
- **Five Easy-to-Use Interface Keys** allow for easy adjustment of the thermostat's many options (eliminates the need for DIP switches).
- **Two Digital Inputs** provide additional inputs for service, remote override, or filter alarms.
- **Over 20 Configurable Parameters** enable the thermostat to adapt to any installation.
- **Economizer Output (TEC2104-2)** controls economizer operation for single- and multi-stage unitary rooftop equipment.



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Accessories

Code Number	Description
SEN-600-1	Remote Indoor Temperature Sensor
SEN-600-2	Outdoor Air Temperature Sensor
SEN-600-3	Duct Mount Temperature Sensor
SEN-600-4	Remote Indoor Temperature Sensor with Occupancy Override Button and LED

Selection Chart

Code Number	Description	Applications
TEC2101-2	Single-Stage	Fan Coil Unit, Unit Heaters, and Single-Stage Packaged Heating/Cooling Equipment
TEC2102-2	Heat Pump	Heat Pump with up to 3 Heating/2 Cooling Stages
TEC2103-2	Multi-Stage	Multi-Stage Packaged Heating/Cooling Equipment
TEC2104-2	Multi-Stage, Economizer	Packaged Rooftop Units with Economizers

Technical Specifications

TEC210x-2 Series Networked Thermostats	
Power Requirements	20 to 30 VAC, 50/60 Hz, 2 VA at 24 VAC nominal, Class 2
Relay Contact Rating Maximum Inductive	1 ampere with in-rush surges up to 3 amperes, 30 VAC maximum, Class 2
Digital Inputs	Relay dry contact only across the C terminal to DI1 and DI2
Economizer Output	0 to 10 VDC into 2 K ohm resistance minimum (TEC2104-1 only)
Thermostat Measurement Range	-40 to 122°F (-40 to 50°C)
Auxiliary/Outdoor Air Temperature Indication Range	-40 to 122°F (-40 to 50°C)
Control Range	Cooling: 54 to 100°F (12 to 37.5°C) in 1/2 degree increments Heating: 40 to 90°F (4.5 to 32°C) in 1/2 degree increments
Minimum Deadband	(Between heating and cooling) 2F° or 1C°
Ambient Operating Conditions	32 to 122°F (0 to 50°C); 0 to 95% RH noncondensing
Ambient Storage Conditions	-22 to 122°F (-30 to 50°C); 0% to 95% RH noncondensing
Dimensions (H x W x D)	4.94 x 3.38 x 1.13 in. (125 x 86 x 29 mm)
UL and cUL Listing	File E27734 with CCN's XAPX (US, UL 873) and XAPX7 (Canada, CSA C22.2 No. 24)