

TEC260x-4 and TEC260x-4+PIR Series

# BACnet® MS/TP Networked Thermostat Controllers

## Description

The TEC260x-4 and TEC260x-4+PIR Series Thermostat Controllers are BACnet® Master-Slave/Token-Passing (MS/TP) networked devices that provide control of rooftop units (with or without economizers), heat pumps, and single- and multi-stage heating/cooling equipment. The TEC260x-4+PIR Series Thermostat Controllers have occupancy sensing capability built into the device. These devices provide energy savings in high-energy usage light commercial buildings such as schools and hotels. The devices maximize these energy savings by using additional setpoint strategies during occupied times.

The technologically advanced TEC260x-4 and TEC260x-4+PIR Series Thermostat Controllers feature a Building Automation System (BAS) BACnet MS/TP communication capability that enables remote monitoring and programming for efficient space temperature control.

The TEC260x-4 and TEC260x-4+PIR Series Thermostat Controllers feature an intuitive user interface with backlit display that makes setup and operation quick and easy. The thermostats also employ a unique, Proportional-Integral (PI) time-proportioning algorithm that virtually eliminates temperature offset associated with traditional, differential-based thermostats.

Refer to the *TEC260x-4 and TEC260x-4+PIR Series BACnet® MS/TP Networked Thermostat Controllers Product Bulletin (LIT-12011585)* for important product application information.

## Features

- BACnet MS/TP communication—provides compatibility with a proven communication network; BACnet MS/TP is widely accepted by Heating, Ventilating, and Air Conditioning (HVAC) control suppliers
- onboard occupancy sensor (Passive Infrared [PIR] Models)—provides energy savings without additional installation time and cost
- password protection option—provides against unwanted thermostat controller tampering
- backlit Liquid Crystal Display (LCD)—offers real-time control status of the environment in easy-to-read, English text messages with constant backlight that brightens during user interaction
- simplified setpoint adjustment—enables the user to change the setpoint by simply pressing the **UP/DOWN** arrow keys
- five easy-to-use interface keys—allow for easy commissioning of the thermostat, and eliminate the need for DIP switches
- two configurable digital inputs—provide additional inputs for advanced functions such as remote night setback, occupancy override, and service or filter alarms



**TEC260x-4+PIR Series BACnet MS/TP Networked Thermostat Controller**

- over 20 configurable parameters—enable the thermostat to adapt to any application, allowing installer parameter access without opening the thermostat cover
- optional discharge air sensor—monitors unit efficiency
- economizer output (TEC2604-4 and TEC2604-4+PIR models)—provides control of economizer operation for single- and multi-stage unitary rooftop equipment

## Repair Information

If a TEC260x-4 or TEC260x-4+PIR Series Thermostat Controller fails to operate within its specifications, replace the unit. For a replacement thermostat, contact the nearest Johnson Controls® representative.

## Selection Chart

Code Number	Description	Applications
TEC2601-4	Single-Stage	Fan Coil Units, Unit Heaters, and Single-Stage Packaged Heating/Cooling Equipment
TEC2601-4+PIR	Single-Stage with Onboard Occupancy Sensor	
TEC2602-4	Heat Pump	One or Two Heat Pump Stages with Optional Auxiliary Heat Stage
TEC2602-4+PIR	Heat Pump with Onboard Occupancy Sensor	
TEC2603-4	Multi-Stage	Multi-Stage Packaged Heating/Cooling Equipment
TEC2603-4+PIR	Multi-Stage with Onboard Occupancy Sensor	
TEC2604-4	Multi-Stage Economizer	Economizer Operation for Single- and Multi-Stage Unitary Rooftop Equipment
TEC2604-4+PIR	Multi-Stage Economizer with Onboard Occupancy Sensor	

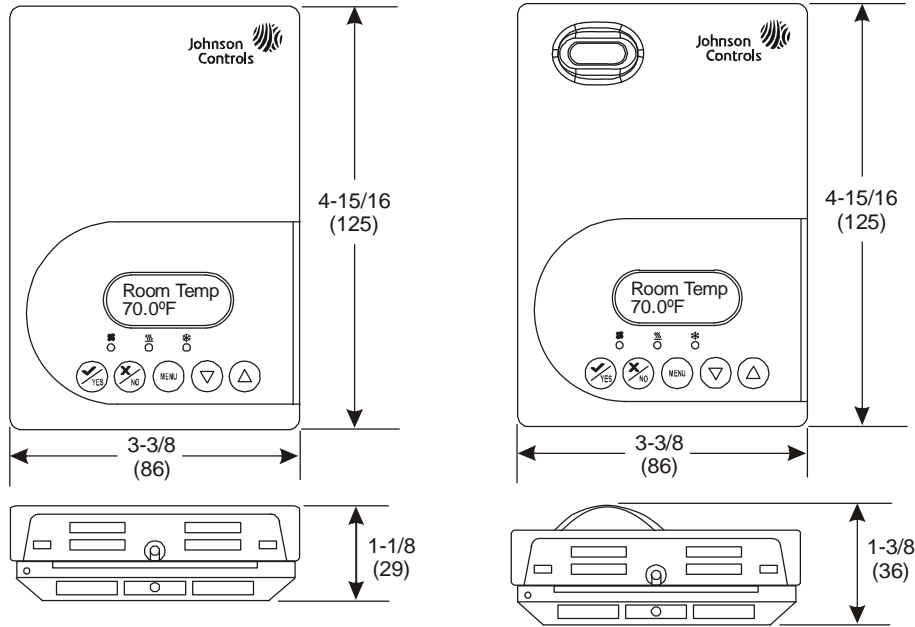
## Accessories

Code Number	Description
SEN-600-1	Remote Indoor Air Temperature Sensor
SEN-600-4	Remote Indoor Air Temperature Sensor with Occupancy Override and LED
TE-6363P-1	Outdoor Air Temperature Sensor
TE-6361M-1	8 in. (203 mm) <sup>1</sup> Duct Mount Air Temperature Sensor
TEC-3-PIR <sup>2</sup>	Cover with Occupancy Sensor

1. Other probe lengths available.

2. The TEC-3-PIR Accessory Cover can replace the existing cover on a non-PIR TEC260x-4 Series Thermostat Controller to provide occupancy sensing.

## TEC260x-4 and TEC260x-4+PIR Series BACnet® MS/TP Networked Thermostat Controllers (Continued)



Thermostat Controller Dimensions, in. (mm)

### Technical Specifications

TEC260x-4 and TEC260x-4+PIR Series BACnet MS/TP Networked Thermostat Controllers		
<b>Power Requirements</b>		19 to 30 VAC, 50/60 Hz, 2 VA (Terminals RC and C) at 24 VAC Nominal, Class 2 or Safety Extra-Low Voltage (SELV)
<b>Economizer Output Rating (TEC2604-4 and TEC2604-4+PIR Models)</b>		0 to 10 VDC into 2k ohm Resistance (Minimum)
<b>Relay/Triac Contact Rating</b>		19 to 30 VAC, 1.0 A Maximum, 15 mA Minimum, 3.0 A In-Rush, Class 2 or SELV
<b>Digital Inputs</b>		Voltage-Free Contacts across Terminal C to Terminals DI1 and DI2
<b>Wire Size</b>		18 AWG (1.0 mm Diameter) Maximum, 22 AWG (0.6 mm Diameter) Recommended
<b>MS/TP Network Guidelines</b>		32 Devices Maximum; 4,000 ft (1,219 m) Maximum Cable Length
<b>Thermostat Measurement Range</b>		-40.0°F/-40.0°C to 122.0°F/50.0°C
<b>Sensor Type</b>		Local 10k ohm Negative Temperature Coefficient (NTC) Thermistor
<b>Resolution</b>		±0.2°F/±0.1°C
<b>Control Accuracy</b>		±0.9°F/±0.5°C at 70.0°F/21.0°C Typical Calibrated
<b>Temperature Range</b>	<b>Backlit Display</b>	-40.0°F/-40.0°C to 122.0°F/50.0°C
	<b>Heating</b>	40.0°F/4.5°C to 90.0°F/32.0°C in 0.5° Increments
	<b>Cooling</b>	54.0°F/12.0°C to 100.0°F/38.0°C in 0.5° Increments
<b>Minimum Deadband</b>		2°F/1°C between Heating and Cooling
<b>Ambient Conditions</b>	<b>Operating</b>	32 to 122°F (0 to 50°C); 95% RH Maximum, Noncondensing
	<b>Storage</b>	-22 to 122°F (-30 to 50°C); 95% RH Maximum, Noncondensing
<b>Compliance</b>	<b>United States</b>	UL Listed, File E27734, CCN XAPX, Under UL 873, Temperature Indicating and Regulating Equipment
		FCC Compliant to CFR 47, Part 15, Subpart B, Class A
	<b>Canada</b>	UL Listed, File E27734, CCN XAPX7, Under CAN/CSA C22.2 No. 24, Temperature Indicating and Regulating Equipment
		Industry Canada, ICES-003
	<b>Europe</b>	CE Mark, EMC Directive 2004/108/EC
	<b>Australia and New Zealand</b>	C-Tick Mark, Australia/NZ Emissions Compliant
<b>BACnet International</b>		BACnet Testing Laboratories™ (BTL) 135-2001 Listed BACnet Application Specific Controller (B-ASC)
<b>Shipping Weight</b>	<b>TEC260x-4 Models</b>	0.75 lb (0.34 kg)
	<b>TEC260x-4+PIR Models</b>	0.77 lb (0.35 kg)