

TE-6800 Series

Temperature Sensors

Description

The TE-68xx-xN00S Series provides temperature sensing in room wall mount applications. It allows local setpoint temperature adjustment and temporary occupancy override.

A warmer/cooler dial is included on certain models for minor temperature adjustments from the setpoint. An occupancy override button allows the user to request a time-of-day scheduling override when the space is occupied outside of the normal occupied hours schedule. All sensors have DIP switches that enable or disable unit functions.

Depending on the model chosen, the wires connecting the sensor to the controller can be terminated using a screw terminal block or modular jack connection, offering wiring flexibility. All models include a Zone Bus access port for connecting accessories to access the 6-pin modular jack. This feature allows a technician to commission or service the controller via the sensor.

Refer to the *TE-6800 Series Temperature Sensors Product Bulletin (LIT-12011542)* for important product application information.

Features

- controller configuration switch — allows users to adjust room comfort and to choose occupancy features that match the application and controller
- occupancy Light-Emitting Diode (LED) indicator — displays the current operating mode of the controller (VMA1200 and VMA1400 Series controllers only)
- manual override Pushbutton (PB) — overrides time-of-day scheduling when the space is occupied outside of normal occupied hours schedule

Repair Information

Do not field repair the TE-6800 Series Temperature Sensors. As with any electrical device, keep the air vents clean and free from dust or obstruction.

If the TE-6800 Series Temperature Sensor fails to operate within its specifications, replace the unit. For a replacement sensor, contact the nearest Johnson Controls® representative.



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IMPORTANT: Do not remove the Printed Circuit Board (PCB). Removing the PCB voids the product warranty.

Selection Chart

Product Code Number	Temperature Sensing Element	Warmer/Cooler Temperature Setpoint Adjustment Override	Temperature Display	Connection	Enclosure Dimension, mm
TE-68NT-0N00S	Ni1000	No	No	Terminal Block	80 x 80
TE-68NT-1N00S	Ni1000	Yes	No	Terminal Block	80 x 80
TE-68NP-0N00S	Ni1000	No	No	Modular Jack	80 x 80
TE-68NP-1N00S	Ni1000	Yes	No	Modular Jack	80 x 80
TE-68PP-0N00S	Pt1000	No	No	Modular Jack	80 x 80
TE-68PP-1N00S	Pt1000	Yes	No	Modular Jack	80 x 80
TE-68PT-0N00S	Pt1000	No	No	Terminal Block	80 x 80
TE-68PT-1N00S	Pt1000	Yes	No	Terminal Block	80 x 80


Accessories

Product Code Number	Description
ACC-INSL-0 ¹	Wallbox Mounting Pad (10/bag)
ACC-INSL-1 ¹	Surface Mounting Pad (10/bag)
NS-WALLPLATE-0	Adapts a TE-6800 Sensor (80 x 80 mm) to a standard 80 x 120 mm wallbox
T-4000-119	Hex-head Adjustment Tool (30/bag)

1. These foam pads help prevent drafts from entering the unit through the wall, and make installation easier when mounting on an uneven surface.

TE-6800 Series Temperature Sensors (Continued)

Technical Specifications

TE-6800 Series Temperature Sensors		
Nickel Sensor	Temperature Sensor	1000 ohm thin-film nickel
	Temperature Coefficient	Approximately 3 ohms per F° (5.4 ohms per C°)
	Reference Resistance	1000 ohms at 70°F (21°C)
	Accuracy	±0.34F° at 70°F (±0.18C° at 21°C)
Platinum Sensor	Temperature Sensor	1000 ohm thin-film platinum
	Temperature Coefficient	Approximately 2 ohms per F° (3.9 ohms per C°)
	Reference Resistance	1000 ohms at 32°F (0°C)
	Accuracy	±0.35F° at 70°F (±0.19C° at 21°C)
Setpoint Range	Single Adjustment	Warmer/Cooler
Sensor Response Time	10 minutes at 10 feet per minute	
Field Connections	Modular Jack	8-position modular jack connector
	Terminal Block	Screw type terminals for 18 to 24 AWG wire
Zone Bus Access	6-pin connector with front bottom access for a laptop with HVAC PRO software and CVTPRO converter	
Manual Override	Integral momentary push button (DIP switch selectable)	
LED Light	Green LED light indicates two modes of operation (VMA1200 and VMA1400 Series controllers only)	
Ambient Operating Conditions	32 to 131°F (0 to 55°C) 10 to 95% RH, noncondensing; 86°F (30°C) maximum dew point	
Ambient Storage Conditions	-40 to 140°F (-40 to 60°C) 5 to 95% RH, noncondensing; 86°F (30°C) maximum dew point	
Materials	White thermoplastic	
Accessory	NS-WALLPLATE-0	Adapts a TE-6800 Sensor (80 x 80 mm) to a standard 80 x 120 mm wallbox
Dimensions (H x W x D)	3-1/4 x 3-1/4 x 1-7/16 in. (80 x 80 x 36 mm)	
Shipping Weight	1 lb (0.5 kg)	
Compliance 	United States	UL Listed, File E107041, CCN PAZX, Under UL 916, Energy Management Equipment
	Canada	UL Listed, File E107041, CCN PAZX7, Under CAN/CSA C22.2 No. 205, Signal Equipment
	Europe	CE Mark – Johnson Controls, Inc. declares that the TE-6800 Series Temperature Sensors are in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC
	Australia and New Zealand	C-Tick Mark, Australia/NZ Emissions Compliant