

TE-6100 Series

# Temperature Sensors and Completed Sensor/Hardware Assemblies

## Description

TE-6100 Series Completed Assemblies are used in a wide variety of temperature sensing applications. In addition to these completed units, there are various other sensing elements and hardware configurations that may be field assembled, depending on the application.

Refer to the *TE-6000 Temperature Sensing Elements Product Bulletin (LIT-216288)* for available temperature sensing elements and the *TE-6001 Hardware Assemblies for TE-6000 Temperature Elements Product/Technical Bulletin (LIT-216300)* for available hardware configurations.

Refer to the *TE-6100 Series Temperature Sensors and Completed Sensor/Hardware Assemblies Product Bulletin (LIT-216310)* for important product information.

## Features

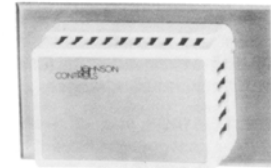
- Nickel and silicon sensor elements — provide multiple resistance ranges for a variety of applications
- Modular jack connectors on room temperature sensors TE-6100-11 and -12 — allow connection to controllers and test panels over standard or plenum-rated telephone cable
- Optional mounting assemblies — provide easy mounting through the use of a mounting bracket or wallplate

## Repair Information

If the TE-6100 Temperature Sensors and completed sensor/hardware assemblies fail to operate within their specifications, replace the units. For replacement devices, contact the nearest Johnson Controls® representative.



TE-6100-3



TE-6100-8, -960, -961  
(with T-4000 Cover)

## Selection Charts

### TE-6100 Assemblies

Product Code Number	Type	Description
TE-6100-1	Nickel	17 ft (5.18 m) Averaging, Temperature Sensing Element (1,000 ohms, ±1%) with Conduit Box
TE-6100-2		Similar to TE-6100-1 Except 8 ft (2.4 m) Averaging Element
TE-6100-3		Temperature Sensing Element (1,000 ohms, ±1%), Dual-Wound with Conduit Box
TE-6100-8 <sup>1</sup>		Room Temperature Sensing Element (1,000 ohms, ±1%) with Setpoint 55 to 85°F (13 to 29°C), without Cover
TE-6100-11 <sup>1, 2</sup>		Nickel Sensor Room Sensing Element with Modular Jack, without Cover
TE-6100-12 <sup>1, 2</sup>		Similar to TE-6100-11 Except with Setpoint, without Cover
TE-6100-960 <sup>1</sup>	Silicon	Base Room Thermostat with Setpoint, without Cover
TE-6100-961 <sup>1</sup>		Space Temperature Assembly with Wallplate Adaptor and Mounting Bracket
TE-6100-962		18 in. (457 mm) Duct-Temperature Sensor Assembly, Averaging Type (may be shortened to 8 in. [203 mm])

1. Order the T-4000 Cover separately.

2. Order the TE-1800-9600 Mounting Kit separately.

### Accessories

Product Code Number	Description
T-275-100	Mounting clip for Use with Averaging Sensors
TE-6001-8	Mounting Bracket for Use with Averaging Sensors
TE-6001-961	Push button switch for Use with TE-6100-11, -12, -960, -961
TE-6001-962	Toggle switch for Use with TE-6100-11, -12, -960, -961
TE-1800-9600	Electrical Wallbox Mounting Adaptor Kit Includes Wallplate Adaptor, Mounting Bracket, and Screws

### Cover and Faceplate Options (Part 1 of 2)

Product Code Number <sup>1</sup>	Cover Position	Faceplate/Cover Color	Description
T-4000-2139	Horizontal	Brushed Aluminum/Beige	Without Setpoint Window or Thermometer, with Johnson Controls Logo
T-4000-2140			Without Setpoint Window, with °F/°C Thermometer and Johnson Controls Logo
T-4000-2141			Exposed Setpoint, without Thermometer, with Johnson Controls Logo
T-4000-2142			Exposed Setpoint, with °F/°C Thermometer and Johnson Controls Logo
T-4000-2639		Brown and Gold/Beige	Without Setpoint Window or Thermometer, with Johnson Controls Logo
T-4000-2640			Without Setpoint Window, with °F/°C Thermometer and Johnson Controls Logo
T-4000-2642	Exposed Setpoint, with °F/°C Thermometer and Johnson Controls Logo		
T-4000-2138	Horizontal or Vertical	Brushed Aluminum/Beige	Without Setpoint Window, Thermometer, or Johnson Controls Logo

## TE-6100 Series Temperature Sensors and Completed Sensor/Hardware Assemblies

### Cover and Faceplate Options (Part 2 of 2)

Product Code Number <sup>1</sup>	Cover Position	Faceplate/Cover Color	Description
T-4000-2144	Vertical	Brushed Aluminum/Beige	Without Setpoint Window or thermometer, with Johnson Controls Logo
T-4000-2145			Exposed Setpoint, without Thermometer, with Johnson Controls Logo
T-4000-2146			Exposed Setpoint, with °F/°C Thermometer and Johnson Controls Logo
T-4000-2644		Brown and Gold/Beige	Without Setpoint Window or Thermometer, with Johnson Controls Logo
T-4000-2645			Exposed Setpoint, without Thermometer, with Johnson Controls Logo

1. The T-4000 covers are for use with the TE-6100-8, -11, 12, -960, and -961 devices.

### Technical Specifications

TE-6100 Series Temperature Sensors and Completed Sensor/Hardware Assemblies		
Elements	TE-6100-1 through -12	Nickel resistance type
	TE-6100-960, -961, -962	PTC silicon
Reference Resistances	TE-6100-1 through -12	1,000 ohms at 70°F (21°C)
	TE-6100-960, -961, -962	1,035 ohms at 77°F (25°C)
Temperature Coefficient	TE-6100-1 through -12	Positive, approximately 3 ohms/°F (5.4 ohms/°C)
	TE-6100-960, -961, -962	Positive, approximately 4.3 ohms/°F (7.7 ohms/°C)
Resistance Tolerances	TE-6100-1, -2, -3, -8	±1.0% at 70°F (21°C)
	TE-6100-960, -961, -962	Calibrated for 1,035 ohms ±0.5/-0.15 ohms at 77°F (25°C)
Ambient Operating Environment	TE-6100-1, -2, -3	-50 to 250°F (-46 to 121°C)
	TE-6100-8	0 to 130°F (-18 to 54°C), 10 to 90% RH, noncondensing
	TE-6100-11, -12, -960, -961	32 to 104°F (0 to 40°C), 10 to 90% RH, noncondensing, limited by an 85°F (29°C) maximum dew point
	TE-6100-962	-40 to 216°F (-40 to 102°C)
Set Point Range	TE-6100-8	55 to 85°F (13 to 29°C), °F and °C scales furnished
	TE-6100-12	Warmer/cooler scale
	TE-6100-960	50 to 85°F (10 to 29°C), °F and °C scales furnished