

Standard Room Temperature Sensors (0 to 10V, 4 to 20 mA)



Figure 1. Standard Room Temperature Sensor.

Description

The Standard Room Temperature Sensors monitor and transmit changes in room temperature to the building control system. This family of products offers a number of features. The wide assortment offers the specific product that is compatible with your specific building automation system. The product family includes plain sensing-only models as well as full-featured models with digital display and up/down buttons for setpoint adjustment. All sensors incorporate precision temperature sensing elements to accurately and reliably measure room temperature. A styled ventilation ring optimizes airflow through the cover for good measurement response and superior control.

Features

- **Digital display:** The temperature display provides an easy-to-read room temperature value in degrees Fahrenheit or Celsius. Temperature engineering units are toggled between Degrees C and F on the display by pressing both the up and down arrow buttons for three seconds.
- **Up/down buttons for setpoint adjustment:** The basic setpoint adjustment incorporates up and down buttons to increase or decrease the setpoint. An access door aesthetically conceals the up/down buttons.
- **Occupancy override button:** The flush-mounted override button allows an occupant to change to an occupied control schedule during the unoccupied cycle. The access door aesthetically conceals the occupancy override button.
- **Maintenance-free:** These sensors draw a small amount of power directly from the controller power supply or from a local ac or dc transformer. They do not use batteries, which eliminates the need for servicing battery (replacement and disposal).

Specifications

Setpoint Temperature Range	63°F to 83°F (°C, if applicable)
Operating Temperature Range	55°F to 95°F (13°C to 35°C)
Output Temperature signal	0 to 10 Vdc or 4 to 20 mA
Line Output Signal for Setpoint Adjustment Output	0 to 10 Vdc for 63°F to 83°F or 18°C to 26°C 4 to 20 mA for 63°F to 83°F or 18°C to 26°C
Sensing Element Accuracy	±0.9°F (±0.5°C) over the operating range
Sensor Accuracy	±1.8°F (±1.0°C) over the operating range
Installation:	300 ft (91m) to 750 ft (228m) maximum cable length 18 to 22 AWG, multi-conductor (check <i>Q-Series RTS 0 to 10V or 4 to 20 mA Installation Instructions</i> 129-439 for number of wires needed), NEC Class 2
Calibration Adjustments	None required
Cover Dimensions	Height: 3-11/32 in. (85 mm) Width: 2-1/2 in. (63 mm) Depth: 1-1/2 in. (38 mm)
Cover Color	White
Power Requirements 0 to 10V outputs	20 to 30 Vdc, max. 25 mA
Power Requirements 4 to 20 mA outputs	20 to 30 Vdc, max. 25 mA + 20 mA * outputs QAAx071.W = max. 65 mA QAAx071.Fx = max. 85 mA
Display Options	Up/down setpoint adjustment buttons
Sensing Element Type	Digital sensor integrated circuit

Product Ordering Information

Product Number	Description
QAA2062.FWU	Room Temperature Sensor, 0 to 10 Volt, 55°F to 95°F, Sensing, Display, Setpoint, Override, White, Siemens Logo
QAA2062.WU	Room Temperature Sensor, 0 to 10 Volt, 55°F to 95°F, Sensing Only, White, Siemens Logo
QAA2072.FWNU	Room Temperature Sensor, 4 to 20 mA, 55°F to 95°F, Sensing, Display, Setpoint, Override, White, No Logo
QAA2072.FWU	Room Temperature Sensor, 4 to 20 mA, 55°F to 95°F, Sensing, Display, Setpoint, Override, White, Siemens Logo
QAA2072.WU	Room Temperature Sensor, 4 to 20 mA, 55°F to 95°F, Sensing Only, White, Siemens Logo

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Accessories Ordering Information

Description	Product Part Number
Occupancy Override Button, 25-pack (White)	544-480B
Setpoint Door, 25-pack (White)	544-481B
Blank Bezel, 25-pack (White)	544-482B
Room Temperature Sensor Repair Kit, Single-pack (White)	544-483B
Blanking Override Button, 25-pack (White)	544-484B
Single Adapter Base Mounting Kit	544-782B
Double Adapter Base Mounting Kit	544-783B
Non-Conduit Rough-In Kit, Double	544-784
Extender Ring Kit	544-785B