

Duct Point Temperature Sensors

Description

The Duct Point Temperature Sensors monitor and transmit changes in duct air temperature to the building control system. Specific devices within the range are compatible with whatever North American manufactured building automation system you may be installing. They provide accurate, reliable indication of duct temperature. The sensor resistance varies proportionally to the actual duct air temperature being measured. They are well suited for application such as heating and cooling, morning warm-up/cool-down, and monitoring discharge air temperature.

Features

- Variety of sensing elements.
- Suitable for multiple duct applications.
- Responsive to temperature change.
- Accurate and reliable indication of duct temperature.
- Familiar installation requires no special tools.



Figure 1. Duct Point Temperature Sensors.

Specifications

Temperature Range	Controller dependent
Output Signals	Changing resistance
Sensing Element Type	NTC Thermistor, Platinum RTD, or Nickel RTD
Accuracy:	
NTC Thermistors, mid-range	±1.0°F (±0.5°C)
Pt RTD and Ni RTD, mid-range	±0.75°F (±0.4°C)
Installation:	
Wiring	2-conductor: 18 to 22 AWG twisted pair (per code requirements)
Calibration Adjustments	NTC: None required RTD: Adjust for increased temperature offset (a constant) as required, related to added resistance of the field wiring
Dimensions:	
Probe Lengths	4 in. (10 cm), 8 in. (20 cm), or 18 in. (45 cm)
Mounting	2 x 4 inch (5 x 10 cm) electrical conduit box
Probe Material	0.028 Wall SAE J526 ZTEW or Galfan steel tubing
Housing	Standard NEC approved 2 x 4 inch (5 x 10 cm) utility box with 1/2 inch (13 mm) knockouts
Cover Plate	Standard NEC approved 2 x 4 inch (5 x 10 cm) utility box cover
Screw Head Type	Standard slotted

Duct Point Temperature Sensor Product Numbers

Product Number	Description
QAM2012.010	Duct Temperature Sensor, 2 x 4 Box Housing, Platinum 1000 Ohm, 385 Alpha, 4-Inch Probe
QAM2012.020	Duct Temperature Sensor, 2 x 4 Box Housing, Platinum 1000 Ohm, 385 Alpha, 8-Inch Probe
QAM2012.045	Duct Temperature Sensor, 2 x 4 Box Housing, Platinum 1000 Ohm, 385 Alpha, 18-Inch Probe
QAM2020.010	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, Siemens, 4-Inch Probe
QAM2020.020	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, Siemens, 8-Inch Probe
QAM2020.045	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, Siemens, 18-Inch Probe
QAM2021.020	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, JCI, 8-Inch Probe
QAM2021.045	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, JCI, 18-Inch Probe
QAM2030.010	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type 2, 4-Inch Probe
QAM2030.020	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type 2, 8-Inch Probe
QAM2030.045	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type 2, 18-Inch Probe
QAM2032.010	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type 3, 4-Inch Probe
QAM2032.020	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type 3, 8-Inch Probe
QAM2032.045	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type 3, 18-Inch Probe

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