



Duct Averaging Temperature Sensors

Description

The Duct Averaging 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 heating and cooling application and monitoring mixed air temperature.

Features

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



Figure 1. Duct Averaging Temperature Sensor.

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	8 ft. (2m), or 16 ft. (6m), or 24 ft. (8m)
Mounting	2 x 4 inch (5 x 10 cm) electrical conduit box
Coil Material	Annealed aluminum or copper
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 Averaging Temperature Sensor Product Numbers

Product Number	Description
QAM2012.250	Duct Temperature Sensor, 2 x 4 Box Housing, Platinum 1000 Ohm, 385 Alpha, 8-Foot Probe
QAM2012.500	Duct Temperature Sensor, 2 x 4 Box Housing, Platinum 1000 Ohm, 385 Alpha, 16-Foot Probe
QAM2012.750	Duct Temperature Sensor, 2 x 4 Box Housing, Platinum 1000 Ohm, 385 Alpha, 24-Foot Probe
QAM2020.500	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, Siemens, 16-Foot Probe
QAM2020.750	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, Siemens, 24-Foot Probe
QAM2021.750	Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, JCI, 24-Foot Probe
QAM2030.250	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type II, 8-Foot Probe
QAM2030.500	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type II, 16-Foot Probe
QAM2030.750	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type II, 24-Foot Probe
QAM2032.250	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type III, 8-Foot Probe
QAM2032.500	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type III, 16-Foot Probe
QAM2032.750	Duct Temperature Sensor, 2 x 4 Box Housing, NTC 10K Ohm Type III, 24-Foot Probe

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