

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.

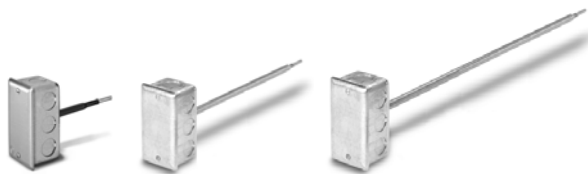


Figure 1. Duct Point Temperature Sensors.

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 |
| QAM2021.010 | Duct Temperature Sensor, 2 x 4 Box Housing, Nickel 1000 Ohm, JCI, 4-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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