

Surface Mount Temperature Sensors

Description

The Surface Mount Temperature Sensors monitor and transmit changes in 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 mount directly on a pipe inlet and sense the temperature of water in the pipe. All sensors incorporate precision temperature sensing elements to accurately and reliably measure temperature.

Features

- Variety of sensing elements
- Suitable for retrofit or add-on jobs
- Responsive to temperature change
- Accuracy equals immersion well devices
- Familiar installation requires no special tools



Figure 1. Surface Mount 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
Mounting	2 x 4 inch (5 x 10 cm) electrical conduit box
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

Surface Mount Temperature Sensor Product Numbers

Product Number	Description
QAD2012U	Pipe Strap-on Temperature Sensor, 2x4 box housing, Platinum 1000 Ohm, 385 Alpha
QAD2020U	Pipe Strap-on Temperature Sensor, 2x4 box housing, Nickel 1000 Ohm, Siemens
QAD2021U	Pipe Strap-on Temperature Sensor, 2x4 box housing, Nickel 1000 Ohm, JCI
QAD2030U	Pipe Strap-on Temperature Sensor, 2x4 box housing, NTC 10K Ohm Type 2
QAD2032U	Pipe Strap-on Temperature Sensor, 2x4 box housing, Platinum 1000 Ohm, 385 Alpha

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