



## Outdoor Air Temperature Sensors

### Description

The Outdoor Air Temperature Sensors monitor and transmit changes in outdoor 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. All sensors incorporate precision temperature sensing elements to accurately and reliably measure temperatures.

### Features

- Variety of sensing elements
- Sensor includes sun shield, conduit elbow connection, and sensing element
- Robust design for outdoor environments
- Responsive to temperature change
- Accurate and reliable indication of outdoor air temperature
- Familiar installation requires no special tools



Figure 1. Outdoor Air 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	Rigid conduit connection, 1/2 in. (1.3 cm)
Sun Shield Material	400 series stainless steel
Conduit Pipe Threads	1/2-inch – 14 NPSMI
Housing Material	Cast zinc

# Outdoor Air Temperature Sensor Product Numbers

Product Number	Description
QAC2012U	Outdoor Air Temperature Sensor, Metal Housing, Platinum 1000 Ohm, 385 Alpha
QAC2020U	Outdoor Air Temperature Sensor, Metal Housing, Nickel 1000 Ohm, Siemens
QAC2021U	Outdoor Air Temperature Sensor, Metal Housing, Nickel 1000 Ohm, JCI
QAC2030U	Outdoor Air Temperature Sensor, Metal Housing, NTC 10K Ohm Type II
QAC2032U	Outdoor Air Temperature Sensor, Metal Housing, NTC 10K Ohm Type III

## Dimensions

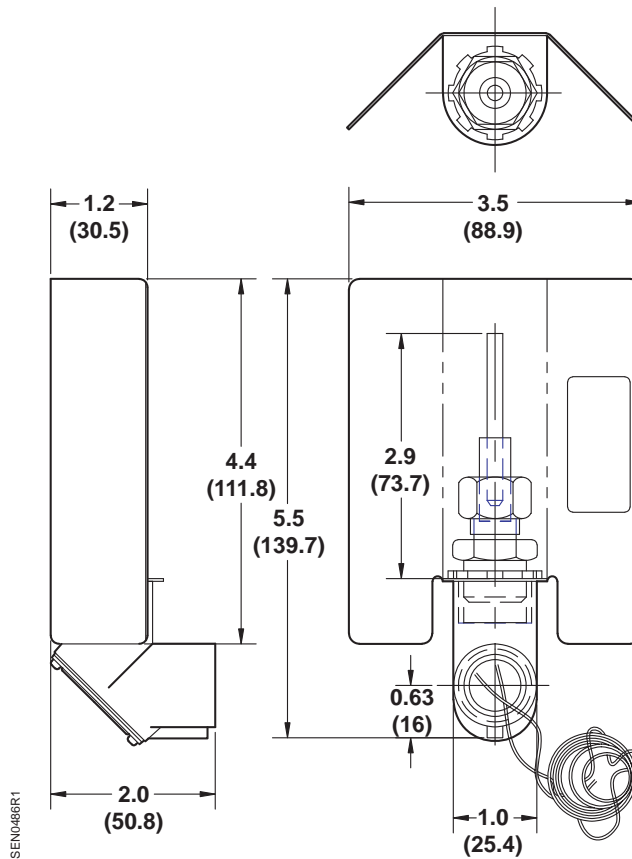


Figure 2. Outdoor Air Temperature Sensors  
Dimensions in Inches (mm).



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