



Mounting Instructions Cont'd

- 1) Place the RH transmitter where it is to be mounted and mark the (2) mounting holes. Two #8 x 3/4" self tapping TEK screws are included with the installation instruction.
- 2) Now remove the cover and install your conduit connectors, watertight fittings, and or 1/2" vent plug. **Please note that the inner ring will knockout first and then the outer ring should be tapped in (1) or (2) locations with a screwdriver before it can be peeled out. The cover will be connected to the housing by the RH sensor leads.**
- 3) Next connect all of the wires to the corresponding terminal blocks and/or flying leads below.
- 5) Now place the cover onto the unit and gently turn until it is tight. **Be careful not to apply too much pressure when tightening.**
- 6) Finally verify that you are getting a humidity reading on your Building Automation System. **Please note that it may take ten to twenty minutes for the sensor reading to stabilize upon initial power up.**

OAT-3K-RH Outdoor Air Temperature Sensor w/ Humidity

The OAT-3K-RH temperature and humidity sensor is a Relative Humidity transmitter that can be powered with either a +8 to 36 VDC or 24 VAC supply voltage. The OAT-3K-RH converts resistance to a linear 0 to 10 VDC output for reading relative humidity. The OAT-3K-RH uses a half-wave bridge rectifier to convert the AC power to a useable DC voltage. **Caution: When using a 24 VAC transformer, Solidyne recommends that you use an isolated transformer.** If sharing the transformer with your controller, valve, actuator, or any other device, be sure to connect all of the devices with the proper polarity, since most devices are earth grounded. Failure to do so may result in damage to the OAT-3K-RH, your controller, or any other devices that are attached due to a ground loop problem. Accuracy is maintained over the operating range, using a thermistor for temperature compensation. Precision production tolerances maintain sensor interchangeability to within +/- 3% nominal without recalibration. Each OAT-3K-RH Series humidity transmitters are calibrated at 3 different points, using an NIST Traceable Temperature/Humidity chamber. The temperature sensor in the OAT-3K-RH is a 10k thermistor.

All of the units come with a two year factory warranty.

Specifications

- Input:** 5 wire (3 for 0-10VDC, 2 for 3k thermistor)
- Supply Voltage:** +8 to 35VDC or 24VAC
- Current Draw:** Less than 4mA
- Life Expectancy:** 100,000 hours or 11.5 years
- Enclosure Material:** Beige ABS plastic

Wiring Connections

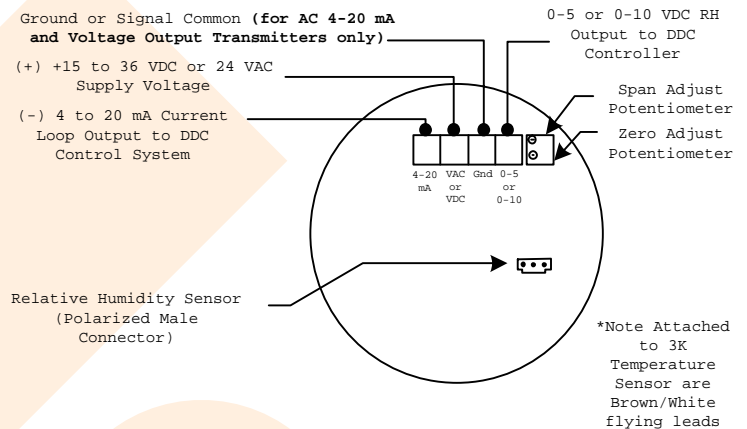
5 wires must be pulled for the OAT-3K-RH to work properly. Solidyne recommends the use of 18 to 22 AWG twisted pair wires or shielded cable for all sensor installations.

Mounting Instructions

Outdoor Mounting Configuration:

The RH transmitter should be mounted so that the unit is under an Eave, Shield, or in area that is out of the elements or direct sunlight. All of the RH sensors have a +/- 3% interchangeability. It is recommended to do a single point calibration for a higher accuracy

Wiring Diagram



Dimensions

