Outside Air Temperature Sensor

STE-1451

Installation Guide

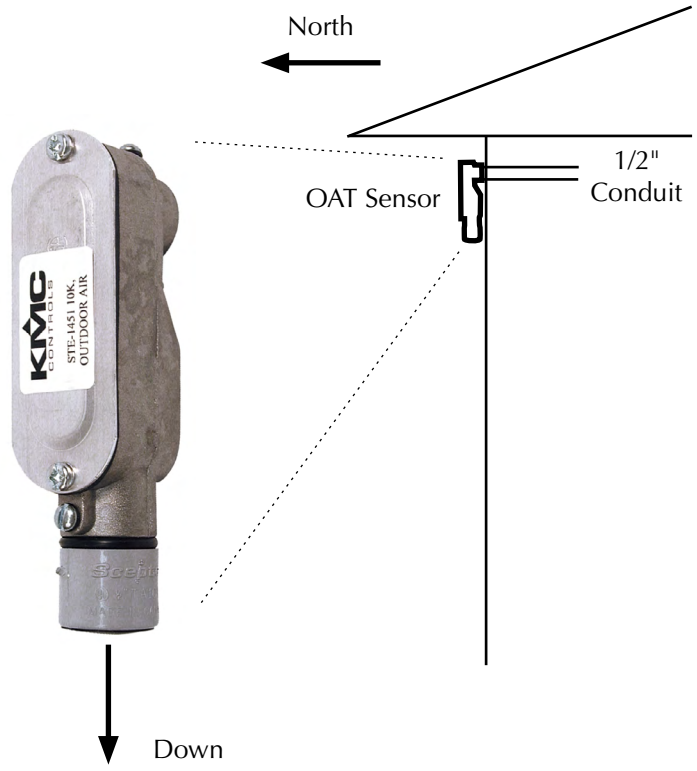
Mounting

Designed specifically for outside air temperature measurement, this device comes in an aluminum LB-style enclosure.

For best results, locate the sensor on the north side of the structure (when located north of the equator) high under the eaves or another protected area to prevent incorrect readings from direct sunlight and damage due to the elements. Also, avoid proximity to other heat sources, vents, power wires, or a large thermal mass.

1. Run 1/2" conduit through the wall.
2. Attach the conduit to the sensor enclosure's CW 1/2" NPT fitting with a suitable coupler (such as a Chase closed nipple).

NOTE: The sensor air holes must face down to prevent the accumulation of dirt or water.



Connections and Wiring

1. Remove the two cover screws and cover.

NOTE: Removal of only one screw is required. The other screw can be loosened, and the cover can be swung out of the way.

2. Feed wires through the conduit opening.

NOTE: Use 18 to 24 AWG shielded wiring for all connections. Do not locate the device wires in the same conduit with wiring used to supply inductive loads such as motors. Make all connections in accordance with national and local codes.

3. Make connections to the two wire leads with either butt-splices or solder. (Using wire nuts is **not** recommended.) The two-wire sensor is not polarity sensitive.
4. Plug the conduit with sealant to prevent air infiltration.
5. Check that the rubber weather gasket is placed correctly between the enclosure and cover.
6. Reinstall the cover and tighten the screws to create a weather-resistant seal.

Specifications

Sensor	Type III thermistor, 10K ohm @ 77° F (25° C)
Temperature Limits	–40 to 122° F (–40 to 50° C); 5 to 95 % RH non-condensing
Wiring	22 AWG wire leads
Case	Aluminum LB-style, IP65 (NEMA 4X)

Maintenance

No routine maintenance is required. Each component is designed for dependable, long-term reliability and performance. Careful installation will also ensure long-term reliability and performance. If dirt clogs the air holes at the bottom, remove it.

Configuration

For controller configuration, see the **Type III Sensors Applications Guide** on the KMC web site.

More Information

For **troubleshooting, controller configuration, and other information**, see the **Type III Sensors Applications Guide** on the KMC web site. For **additional information**, see the **STE-1400 Series Data Sheet** on the KMC web site.

Important Notices

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