

# **Installation Guide**

#### Mounting



These models are designed for monitoring fluid temperatures in situations where an immersion sensor cannot be used. Mount the probe in direct physical contact with the pipe and under the pipe insulation.

- 1. From the probe area, remove any pipe insulation and clean the exterior of the pipe to ensure good contact and heat transfer.
- **NOTE:** For best results, apply thermal conductive compound (e.g., HMO-4532) to the pipe underneath the sensor.
- 2. Place the sensor probe in direct contact with the pipe and attach the probe to the pipe using a metal worm gear strap or cable ties.
- 3. Wind any extra lead length around the pipe for extra security.
- 4. Wrap or replace insulation around the sensor to reduce the effect of ambient air temperature.
- **NOTE:** The STE-1455 does not include an enclosure.
- 5. For the STE-1454, open the cover by pulling slightly on the latch on the right side of the enclosure while pulling on the cover.
- 6. Feed the wire leads through the provided hole in the enclosure and secure them.
- 7. Mount the enclosure in a suitable location close to the probe.





# **Connections and Wiring**

- 1. Attach conduit to the 1/2" NPT threaded connection hole that is provided in the bottom of the enclosure as needed.
- 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.
- 2. Bring the cable from the controller through the bottom hole.
- 3. Make connections to the two wire leads with either butt-splices or solder. Using wire nuts is not recommended.
- **NOTE:** The two-wire sensor is not polarity sensitive.
- 4. Swing the STE-1454's door closed until securely latched.
- 5. If desired for added security, install the two (provided) screws in the door's integrated screw tabs.

# Configuration

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

# **Specifications**

Sensor Type III thermistor, 10K ohm @ 77° F (25° C) **Probe Sensing Range** 

-40 to 212° F (-40 to 100° C)

**Ambient Operating Range** 

32 to 122° F (0 to 50° C) 5-ft. non-plenum-rated, PVC Wiring insulated, 22 AWG cable (between sensor and enclosure for STE-1454) **Probe Material** 304 series stainless steel **Probe Dimensions** 2" (50 mm) length by 0.236" (6 mm) diameter

**Enclosure (STE-1454 Only)** 

UL94-V0, IP65 (NEMA 4X), ABS

#### 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.

## **More Information**

For troubleshooting, controller configuration, and other information, see the **Type III Sensors Applica**tions 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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