

Supply Air Temperature Sensor (SA Sensor)

- Temperature Probe for use with SmartZone-2 & SmartZone-4

GENERAL DESCRIPTION

The Supply Air Temperature Sensor is stainless steel probe designed to sense air temperature in the plenum for the purpose of controlling equipment via the SmartZone-2 and SmartZone-4 Zoning boards.

When placed properly in the plenum it provides the SmartZone control boards with an accurate average temperature of the air leaving the supply plenum. This temperature reading is used to control the equipment staging as well as protect the equipment with high and low limit cut-outs. The temperature reading made possible with the SA Sensor will also be displayed at the top of the SmartZone control board when the "SUPPLY" indicator is on.

**For further information refer to the SmartZone System Manual.*



Mounting

Select a proper mounting location for the most accurate sampling of average air temperature in the plenum. This location will be based on the coil design and the shape and size of the plenum. The key is to make sure the sensor is in the air stream.

Gas/Electric – Sensor should be located in Supply Air Plenum where it will sense AVERAGE air temperature within the plenum. The most ideal placement for the Sensor will be 2 to 4 feet beyond the evaporator.

Heat Pump – The sensor is placed inside the cabinet of the air handler AFTER the coil BUT BEFORE the blower.

Once a location is selected, drill a 1/4" hole in the plenum and insert the sensor. Secure sensor with two #7 X 1/2" sheet metal screws (w/ washers if needed) and seal with caulk if necessary.

Pluggable Connection

The SA Sensor is equipped with 10ft of unshielded wire and a pluggable connector designed to work with the SmartZone family of products. Connect the pluggable connector to the SmartZone board as shown in Figure 1.

NOTE: Do not cut or modify the wiring or connector, this may cause the temperature readings on the SmartZone control board to become inaccurate and therefore not control equipment properly.

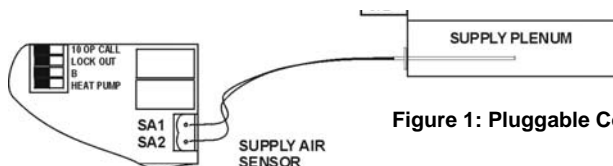


Figure 1: Pluggable Connection

Specifications

Mounting	Mount securely in any orientation (Vertical, Horizontal or Diagonal)
Accuracy Range	0°C to 100°C
Accuracy	+/- 0.5°F
Casing Material	Stainless Steel
Ambient Resistance	10 kΩ +/- 2.5% @ 25°C
Sensor Type	10k, TYPE III
Max Temp Display	199°F or 199°
Environmental	Moisture Resistant
Dimensions	Length: 7.875" Diameter: 0.25"
Mounting Dimensions	Plate: 2" X 0.5" Holes: 1/4" Diameter (1.5" Center to Center)

