



Model 8052

Temperature Sensor Installation Instructions

Introduction:

The 8052 is a temperature sensor. It can be used with the 8061 and 8062 remote sensors for the 8870 series thermostats or with the 6202, 6203, 6303, and 6404 zone control boards.

Installation Instructions:

1. Select a location for mounting the sensor
 - Mount where the desired temperature is best represented.
 - Shield or mount away from direct radiation sources such as sunlight, UV lights, heat exchangers or cooling coils.
 - Mount as close as possible to the component to which the sensor will be wired.
2. Install the sensor
 - Drill a 1/4" hole to clear the sensor for duct installation.
3. Disconnect power to the component to which the sensor will be wired.

Caution: Damage to components can occur if power is not disconnected.

4. Verify the sensor resistance
 - Use an ohm-meter or multimeter to measure the resistance of the sensor. Measure at the wires near the component to check any wire splices. Confirm the resistance corresponds (within 5%) to the temperature where the sensor is installed:

Temperature (°F)	Resistance (kΩ)
30	34.6
40	26.1
50	19.9
60	15.3
70	11.9
80	9.4
90	7.4
100	5.9

5. Wire the sensor to the component
 - Use 18 - 22 awg wire (2-wire thermostat cable).
 - Use the two small wire nuts provided.
 - Caution: Excessive bare wire can lead to shorts.** Strip only as much insulation as is necessary.
 - The sensor is not polarity specific. Either sensor lead may be connected to either terminal on the component to which it is wired.
 - For the 8062, use terminals T1 and T2
 - For the 8061, use either terminals T1 and T2 or T3 and T4
 - For all zone control boards, use the terminals marked "Plenum Sensor"
 - Use care when routing and stripping the wire. Sharp bends (kinks) or cuts in the wire (particularly susceptible where the insulation has been stripped) can lead to eventual conductor failure.
6. Reconnect power to the component to which the sensor is installed

Sensor Specifications:

Voltage: 20-30 VAC
Resistance @ 25°C (77°F): 10 kΩ
Tolerance @ 25°C (77°F): ±3%