

INDOOR TEMPERATURE SENSOR

INSTALLATION INSTRUCTIONS FOR WALL-MOUNT SENSOR (59M04) IS USED WITH BUILDING CONTROLLERS (BC) ON THE L CONNECTION® NETWORK

Shipping and Packing List

Package 1 of 1 contains:

- 1- Sensor
- 2- Screws

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier

Application

This sensor provides a temperature input to the Building Controller. The BC can use the indoor temperature to override NCP scheduled outputs and to set alarms based on over or under temperature conditions.

The BC Building Controller, used with the L Connection Network, controls lights, vent hoods, exhaust fans, sprinklers, security and fire systems, and other building equipment.

The sensor is **NOT** compatible with IMC or NTC rooftop controllers.

Installation

Locate sensor in conditioned space approximately 5 feet (1-1/2m) above the floor in an area with good air circulation at average temperature. Avoid locating the room thermostat where it might be affected by:

- drafts or dead spots behind doors and in corners
- hot or cold air from ducts
- radiant heat from sun or appliances
- concealed pipes and chimneys

- 1- Route shielded cable between sensor location and Building Controller.

Cable type: Lennox P/N 94L63, Belden type 88761 or equivalent. (22AWG stranded or twisted pair, 100% aluminum shield with drain wire, Teflon jacket).

- 2- Remove sensor cover and center opening in baseplate over opening in wall. See figure 1.
- 3- Mark holes for screws. Remove baseplate and drill holes.
- 4- Insert wall anchors (field provided) and align baseplate over opening in wall. Pull wiring through opening in baseplate. Secure baseplate to wall with screws.

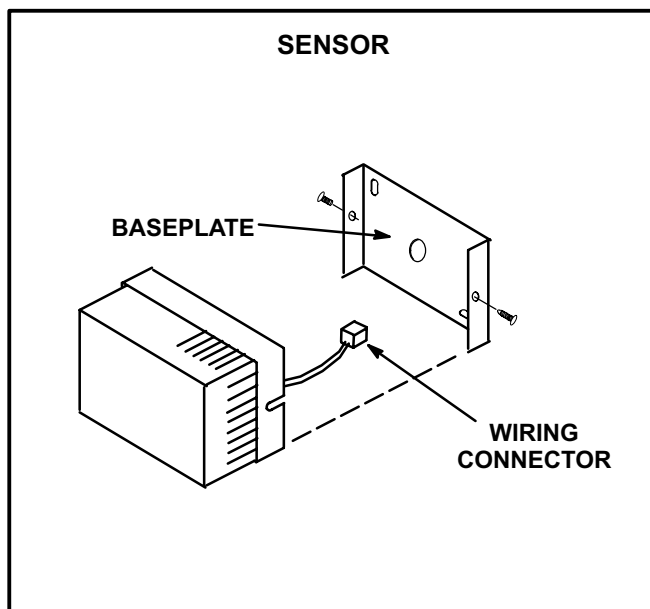


FIGURE 2

- 5- Connect the shielded cable to sensor terminal block.
- 6- Replace sensor cover and tighten side screws to secure in place.

7- Connect sensor to any available input (T1, T2, T3, T4) on P187 Building Controller terminal block. Connect the shield drain wire to the input common as shown in figure 2.

Make note of which inputs are used and refer to Unit Controller (UC) Software manual to configure override outputs and alarms.

The temperature will be displayed on the NCP. Refer to the NCP Software manual to enter a description of the temperature input.

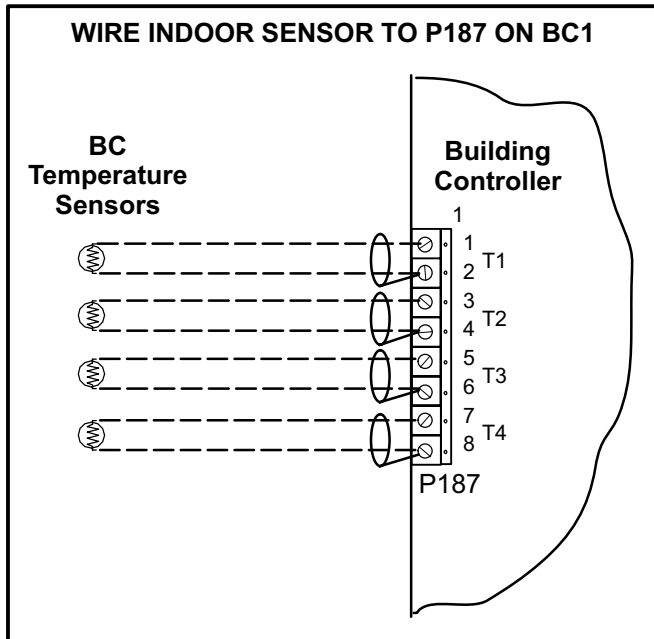


FIGURE 2

Sensor Check

Check the temperature displayed on the NCP. If the temperature is incorrect, disconnect the sensor from the BC and measure the resistance. The resistance should correspond to the temperature as follows:

Important: The sensor must be disconnected from the BC before measuring resistance.

°F	Resistance
-40	335,671
-20	164,959
0	85,323
20	46,218
30	34,566
40	26,106
50	19,904
60	15,313
70	11,884
80	9,298
90	7,332
100	5,826
120	3,756
130	3,047

All values are +/- 2%.

The operating range of each input is -40°F to 130°F (-22°C to 54°C).