

MISCELLANEOUS KITS AND ACCESSORIES

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AVERAGING SENSOR KIT

SPECIFY TYPE OF INSTRUCTIONS FOR THE AVERAGING SENSOR KIT (23M20) USED WITH THE L CONNECTION NETWORK

Shipping and Packing List

Package 1 of 1 contains:

- 2 Wall Mount Sensors (RT19)
- 4 Screws
- 1 Unit wiring diagram



Figure 1. Averaging Sensor

Application

The 23M20 averaging sensor kit is used with the L Connection[®] network in applications that require an average space temperature. Two sensors are required per rooftop unit. This kit is compatible with L Series[®], S-Class[®], Strategos[®] and Energence[®] rooftop units and non-L Series units which use the Network Thermostat Control (NTC1-1). The Network Control Panel (NCP) can then be used to monitor and/or control the unit.

In applications requiring an optional After Hours Override Switch, 56L16 must be used.

Installation

WARNING

Personal injury, loss of life, or damage to property! Installation and service must be performed by a qualified installer or service agency.

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property.

Locate each sensor in conditioned space approximately 5 feet (1-1/2m) above the floor in an area with good air circulation. Avoid locating a sensor 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

Install each sensor on wall as follows:

- 1. Route shielded cable between the two sensor locations and to the:
 - L Series rooftop unit TB1 terminals 16 and 17 (M1 Unit Controller),
 - P298 terminals 6 and 7 (M2 and M3 Unit Controller),
 - P178 terminals 1 and 2 (NTC1-1).

See figure 2.

- 2. Connect the shield drain wire to the:
 - TB1 terminal 16 (M1 Unit Controller)
 - P298-6 (M2 and M3 Unit Controller)
 - P178 terminal 2 (NTC1-1).

See figure 2.

Cable type: Lennox P/N 94L63 or 27M19, Belden type 88761 or equivalent. (22AWG stranded or twisted pair, 100% aluminum shield with drain wire, Teflon jacket).

- 3. Center opening in baseplate over opening in wall. Mark holes for screws (see figure 1). 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.
- 5. Connect the shielded cable to sensor terminal block.
- 6. Replace averaging sensor cover and tighten side screws to secure cover in place.
- 7. Affix wiring diagram, provided in kit, on top of C section diagram on inside unit panel.

IMPORTANT—Both sensors must be connected as shown. These sensors must be used in pairs and will not work properly if both sensors are not connected.

Optional After Hours Override Switch S56

(56L16)

Connect wires from:

- L Series rooftop unit TB1 terminals 16 and 17 (M1 Unit Controller),
- P298 terminals 6 and 7 (M2 and M3 Unit Controller),
- P178 terminals 1 and 2 (NTC1-1) To the location where switch will be installed. Use standard 24VAC thermostat wire (one pair 20AWG minimum).
- 1. Connect the wires to the switch pigtails.
- 2. Secure switch to wall using two screws provided.





Figure 2. Typical Averaging Sensor and After-Hours Override Switch Field Wiring