

T26 Series Line Voltage Thermostats Heating, Cooling, Combination Heating and Cooling

Application

The T26 Series line voltage thermostat controls heating, cooling or year round air conditioning units in commercial, industrial or residential installation.

All Series T26 thermostats are designed for use **only** as operating controls. Where an operating control failure would result in personal injury and/or loss of property, it is the responsibility of the installer to add devices (safety, limit controls) that protect against, or systems (alarm, supervisory systems) that warn of, control failure.

Installation

Location

The thermostat should be mounted 4 to 5 feet above the floor in a location where it will be subjected to and affected by average room temperature. Do not mount the thermostat where it may be affected by heat from lamps, sunlight, fireplaces, registers, radiators, pipes, etc., or by cold from windows, doors, registers, pipes, etc.,

Wiring

Make all wiring connections using copper conductors only, and in accordance with the National Electrical Code and local regulations. Loads exceeding the rating of the thermostat can be handled with a relay or motor starter.

⚠ WARNING: Disconnect the power supply before wiring connections are made to avoid possible electrical shock or damage to the equipment.

Mounting

The thermostats are supplied with factory installed vertical faceplates. If horizontal mounting is desired, a faceplate to convert from vertical mounting is packed with the thermostat for on-the-job installation. If any other version is desired (concealed adjustment, less thermometer, etc.) separate faceplate kits are available for on-the-job installation.

The following procedure should be followed in the installation. Do not remove the thermostat cover to install. All wiring and mounting can be completed without removing the cover. The terminal identifications are located under the mounting plate at the back of the thermostat. (See Fig. 5.)

1. Select the proper mounting location.
2. Install a 2 in. × 3 in. vertical or horizontal (as required) outlet box.
3. Run the wire in a conduit or BX to the 2 in. × 3 in. outlet box. A standard shallow switch and receptacle box can be used where surface mounting and exposed conduit wiring are necessary, such as on a concrete or brick wall. Allow about 6 inches of wire for connections to the thermostat terminals.
4. Remove the mounting plate, see Figs. 2 and 3, and fasten the plate to the outlet box with the screws provided in the mounting plate.
5. Make the necessary wiring connections to the electrical terminals at the rear of the thermostat. (See Typical Application Diagrams.) Use the terminal screws supplied (8-32 × 1/4 in. binder head).

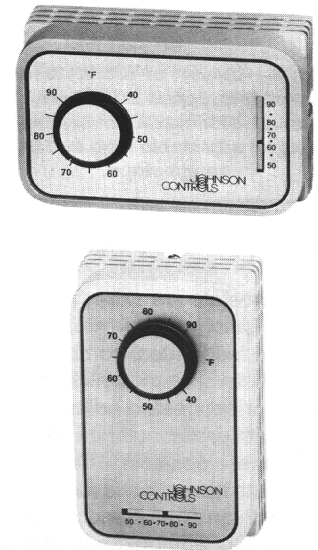


Fig. 1 -- T26 Thermostat with horizontal faceplate (top) or vertical faceplate (bottom).

Substitution of other screws may cause problems in making proper connections.

6. Hook the two slots in the back of the thermostat over the formed prongs on the mounting plate and swing the thermostat into position against the mounting plate.
7. Tighten the mounting plate locking screw. (See Figs. 2 and 3.)

Optional Faceplate Installation

1. Mount the thermostat.
2. Pull knob off of range adjustment shaft.
3. Peel off the backing strip from the selected faceplate.
4. Position the plate over the factory installed plate with one long edge and two corners aligned straight and even with the installed plate.

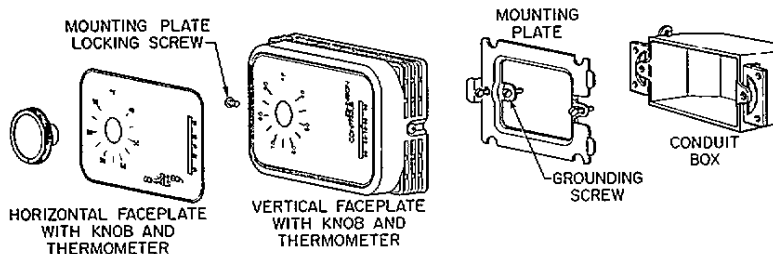


Fig. 2 — Line drawing illustrating method of mounting a vertical thermostat to a horizontal outlet box and installing a horizontal faceplate.

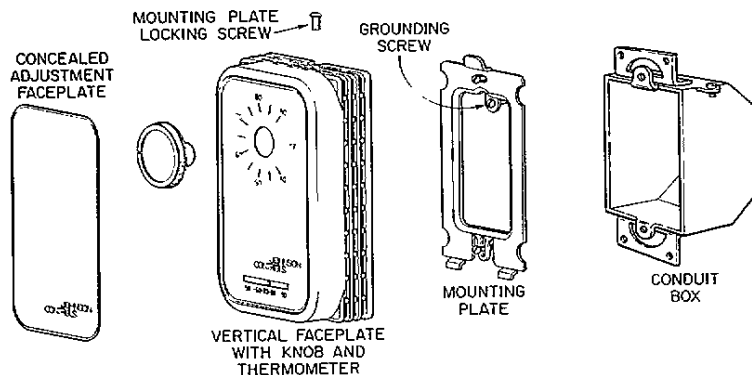


Fig. 3 — Line drawing illustrating method of mounting a vertical thermostat to outlet box. Also shown is a solid vertical faceplate for concealed adjustment when desired.

5. Hold this position and firmly press the selected faceplate onto the cover.
6. Replace the knob.

Adjustments

Models with an external knob permit thermostat adjustment by rotating the knob. The indicator notch on the knob denotes the thermostat dial setting.

For concealed dial models (with cover removed), the dial setting desired should be lined up with the reference mark on the base of the thermostat. This will put the desired setting at a 9 o'clock position when the thermostat is held vertically. Dial settings on the T26 heating and SPDT thermostats indicate the point at which contacts make to start the heating system. Dial settings on the T26J indicate the point at which contacts make to start the cooling system.

Range Stops

Note: Energy conservation models have a factory fixed limited range. The stops are not field adjustable.

High range and low range stops are an integral feature of the standard thermostats. Stops may be set in the following manner.

High Range Stop

1. Set the dial to the maximum stop setting desired.
2. Pull knob off of range adjustment shaft.
3. Remove the thermostat cover by loosening the cover screw. Remove the cover.
4. While holding the dial firmly in position, depress tab "A," Fig. 4, and rotate clockwise until the tab is against stop "C."

5. Release the tab making sure it fits into the nearest notch. Notches in the dial are approximately 2-1/2F° (1.4C°) apart.

Low Range Stop

1. Follow the same steps as outlined under "High Range Stop" but rotate tab "B," Fig. 4, counterclockwise.
2. Replace the cover and tighten the cover screw. Assemble the knob. Rotate the knob to the desired operating setting.

Dial Locks

The high range stop and low range stop can be set to keep the dial from rotating. Rotate the dial to the set point desired and move both tabs to a position against either side of stop "C" as outlined in the "High Range Stop" and "Low Range Stop" paragraphs.

Calibration

The T26 thermostats are factory calibrated and no field calibration should be attempted.

Checkout Procedure

Before leaving the installation, observe at least three complete operating cycles to be sure that all components are functioning correctly.

Faceplates

Faceplates are available in separate kits for on-the-job installation. All plates have a peel-off backing strip. The faceplates are available in all combinations shown in the "Faceplate Selection Table."

Repairs and Replacement

Field repairs must not be made except for the knob, cover and mounting plate. For a replacement thermostat or repair parts, contact the nearest Johnson Controls distributor.

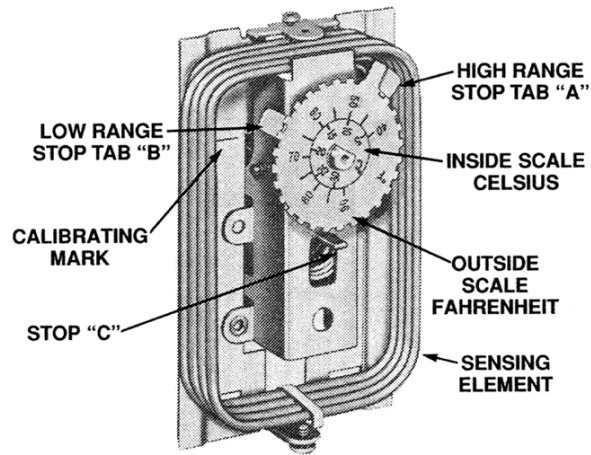


Fig. 4 -- Dial stops are shown above.
High range stop is set by tab "A";
low range stop is set by tab "B".

Faceplate Selection Table
(For T26⁽¹⁾ Thermostats with Plastic Cover)

Kit Number	Mounting Position	Type of Adjustment	Thermometer Cutout	Temperature Scale
PLT333-1R ⁽²⁾	Vertical	Knob	Yes	Fahrenheit
PLT333-2R ⁽²⁾	Horizontal	Knob	Yes	Fahrenheit
PLT333-3R	Vertical	Concealed	Yes	Fahrenheit
PLT333-4R	Horizontal	Concealed	Yes	Fahrenheit
PLT333-5R	Vertical	Knob	Yes	Celsius
PLT333-6R	Horizontal	Knob	Yes	Celsius
PLT333-9R	Horizontal	Concealed	No	—
PLT333-12R	Vertical	Concealed	No	—

⁽¹⁾Can only be used with plastic cover assembly which was made available in the Fall of 1989.

⁽²⁾Supplied with standard wholesaler models (vertical is factory installed).

Faceplates must be ordered in multiples of ten.

Replacement Parts

Part Number	Description
CVR88A-600R	Cover Assembly for Knob Adjustment Models with Thermometer, °F Scale, Vertical Faceplate and Horizontal Faceplate Supplied Unassembled
KNB26A-600R	Plastic Push On Knob for Thermostat with Plastic Cover
PLT51A-602R	Conduit Box Mounting Plate
PLT61A-600	Mounting Plate for Thermostat and Selector Switch
PLT231-1R	Double Gang Box Mounting Plate

Typical Application Diagrams

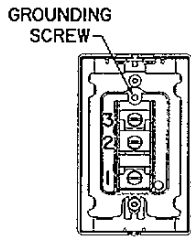


Fig. 5 — Drawing of back view of thermostat showing terminal location and identifications.

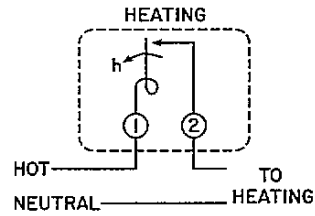


Fig. 6 — Internal diagram of T26A and T26B.

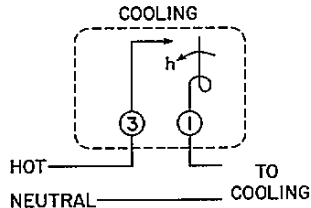


Fig. 7 — Internal diagrams of T26J.

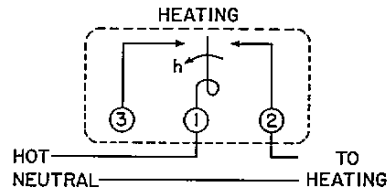


Fig. 8 — T26S, T26T wired for heating application.

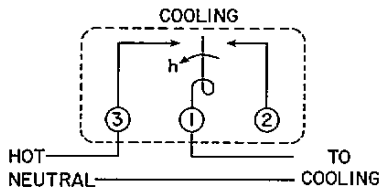


Fig. 9 — T26S, T26T wired for cooling application.

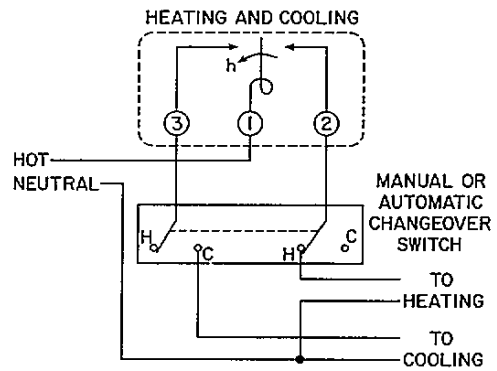


Fig. 10 — T26S, T26T wired for heating and cooling with manual or automatic changeover switch.

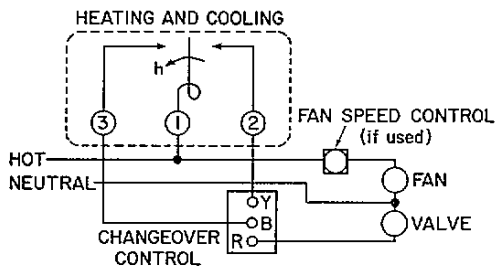


Fig. 11 — T26S, T26T on fan-coil unit with cycling valve and continuous fan. Terminal markings shown for A19CAC changeover control.

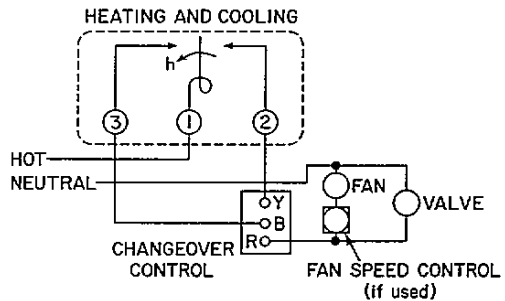


Fig. 12 — T26S, T26T on fan-coil unit with cycling fan and valve. Terminal markings shown for A19CAC changeover control.

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