

INSTALLATION INSTRUCTIONS FOR COMBINATION HUMIDISTAT MODEL 052000

APPLICATION:

This humidity-control device has been designed for use with central-unit power humidifiers. It may be installed on the wall or on the return-air plenum of forced warm-air furnaces. **IMPORTANT:** Do not duct mount controller on counterflow furnaces — the heat convection will impair performance. In this case, wall mount only. The controller will operate (open and close) in line (115) volt a.c. or low (24) volt a.c. circuits.

FEATURES:

All materials are of the highest quality and have been selected for their reliability and long life. This humidistat provides continuous and positive humidity control when installed in accordance with recommended procedures. For simplicity of operation, the dial face has been keyed to a corresponding chart which shows the recommended dial setting as directly related to the outside temperature.

OPERATION:

The control switch makes contact on a 'sensed' decrease in the relative humidity to the set point and starts the humidifier. Any 'sensed' increase in relative humidity to the set point breaks the switch contact and stops the humidifier.

The sensing element is made of exceptionally

thin (1 mil) moisture-sensitive nylon ribbon. The inherent physical properties of this element make it sensitive to relatively small changes in humidity and provides reliable operation.

LOCATION:

Wall Mount Applications — Select a location four to five feet above the floor in a central area of the home (preferably near the thermostat). Avoid locations near hot or cold air ducts or other air-discharging equipment. **Furnace Return Air Duct Applications** — ***IMPORTANT:** Do not duct mount controller on counter-flow furnaces — the heat convection will impair performance. In this case, wall mount only.

Locate humidistat for easy inspection and operation. When routing wiring to and from controller do not fasten wiring to warm-air plenum; the high temperatures could affect the wire casing. Installing controller on return-air ducts from bathroom, laundry, kitchen or other high humidity areas, should also be avoided to prevent improper operation.

Note: In pressure differential (by-pass) humidifier installations, used in conjunction with a return air duct, the humidistat should be installed upstream from humidified air.

WIRING:

All wiring must conform to local codes, ordinances and regulations relating to wire size, type of insulation and enclosures. Low-voltage wiring is

not recommended for return air plenum applications because of difficulty in obtaining proper seal around wires entering the 'knock-out' openings of the humidistat.

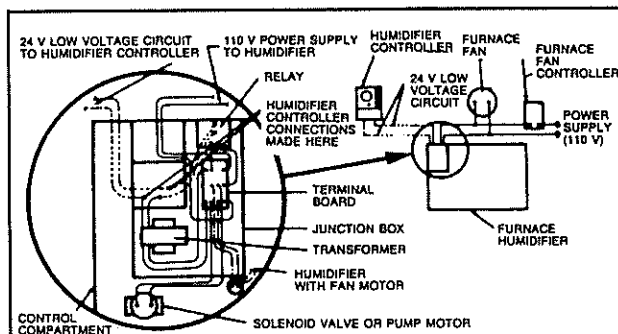


FIG. 1 — TYPICAL WIRING DIAGRAM FOR LOW (24) VOLT CIRCUITS.

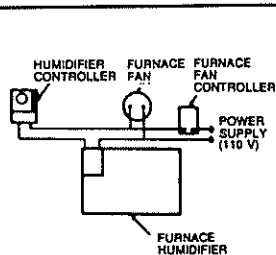


FIG. 2 — TYPICAL WIRING DIAGRAM FOR LINE (110) VOLT CIRCUITS.

INSTALLATION FOR WALL-MOUNT APPLICATION (LOW VOLTAGE) (24 V.A.C.)

CAUTION: Disconnect power to humidifier before starting installation. (Refer to Figs. 1 and 3).

Step No. 1. Remove contents from package and identify with Parts List.

PARTS LIST, packed with each Humidistat

- 1 paper mounting template (adhesive backed)
- 1 form gasket (not used with wall mount application, may be discarded)
- 2 round grommets
- 4 round washer shaped plastic spacers (remove from plastic spine)
- 4 self-tapping screws, 1" long
- 2 machine screws, 5/16" long
- 2 solderless quick-connect terminals
- 1 metal backplate (Do not remove cable connector knockouts from flange.)
- 1 plastic trim cover
- 1 humidity sensing control
- 1 control knob
- 4 self-tapping screws, 3/8" long

Step No. 2. Position mounting template on wall at selected location. Drill or punch four mounting holes and one wiring hole according to template instructions.

Step No. 3. Pull wires from humidifier through wall at wiring hole.

Step No. 4. Remove control knob from shaft of humidity-sensing control, releasing plastic trim cover.

Step No. 5. Secure sensing control to metal backplate (keep flange of backplate facing controller), using two No. 6 x 3/8" self-tapping screws supplied.

Step No. 6. Insert rubber grommet into hole at bottom center of metal backplate. Pull wires through grommet opening.

Step No. 7. Secure metal backplate to wall with the four 1" self-tapping screws, using one plastic spacer per screw to hold backplate away from wall.

Step No. 8. Secure wiring to sensing control using solderless quick-connect terminals.

Step No. 9. Attach plastic trim cover to metal backplate locating metal backplate flange tabs into slots on bottom of plastic trim cover (FIG. 6 detail). Swing plastic trim cover over sensing-control shaft. Be sure plastic trim cover is firmly seated over backplate. Secure plastic trim cover to sensing control using two No. 6 x 3/8" self-tapping screws.

Step No. 10. Press control knob onto sensing control shaft.

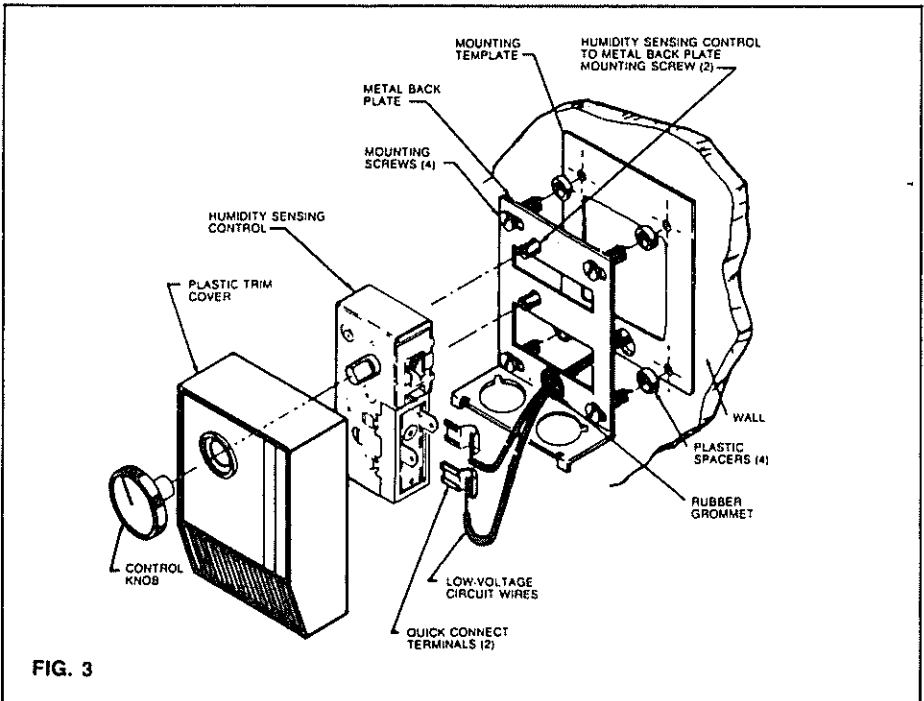


FIG. 3