



WHITE-RODGERS

2271/72/73/74W Line or Low Voltage Humidistat / Dehumidistat INSTALLATION INSTRUCTIONS

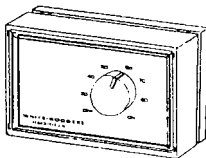
Operator: Save these instructions for future use!

FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR OPERATING THIS CONTROL COULD CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE.

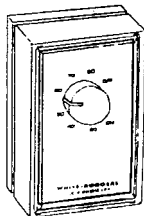
DESCRIPTION

These wall-mounted, line or low voltage humidity controls are available as a Humidistat commonly used to control and operate a furnace humidifier or as a Dehumidistat commonly used to cycle an air conditioning system to control humidity in an unoccupied home to prevent mildew build-up associated with high humidity levels.

These humidity controls feature a moisture-sensitive nylon sensing element and also provide positive ON-OFF settings for manual operation.



2271W



2274W

PRECAUTIONS

If in doubt about whether your wiring is line, or low voltage, have it inspected by a qualified heating and air conditioning contractor, electrician, or someone familiar with basic electricity and wiring.

Do not exceed the specification ratings.

All wiring must conform to local and national electrical codes and ordinances.

This control is a precision instrument, and should be handled carefully. Rough handling or distorting components could cause the control to malfunction.

CAUTION

To prevent electrical shock and/or equipment damage, disconnect electric power to system, at main fuse or circuit breaker box, until installation is complete.

Do not short out terminals on primary control to test. Short or incorrect wiring will burn out humidistat control and could cause personal injury and/or property damage.

WARNING

Do not use on circuits exceeding 30 volts. Higher voltage will damage control and could cause shock or fire hazard.

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PART NO. 37-9600C
Replaces 37-9600B

SPECIFICATIONS

ELECTRICAL DATA

Electrical Rating:

2271W Humidistat 0.5A, @ 120V AC, 60Hz.
2272W

2273W De-Humidistat 1.0A, @ 120V AC, 60 Hz.

2274W

Pilot Duty 30V AC, 60Hz., 60VA.

THERMAL DATA

Setpoint Humidity:

Range: 30 to 80% RH

Diff.: 5% RH

Operating Ambient: 10° to 40° C (50° to 104°F)

INSTALLATION

SELECT THERMOSTAT LOCATION

Proper location insures that the humidity control will provide a desired humidity level throughout the home. Observe the following general rules when selecting a location.

1. Locate humidity control about 5 ft. above the floor.
2. Install humidity control on a partitioning wall, not on an outside wall.
3. For most residential applications locate humidity control adjacent to the existing wall thermostat for easy installation and wiring.
4. Never expose humidity control to direct light from lamps, sun, fireplaces or any temperature radiating equipment.
5. Avoid locations close to windows, adjoining outside walls, or doors that lead outside.

ROUTE WIRES TO LOCATION

All wiring must conform with local and national electrical codes and ordinances.

1. Probe for obstructions in partition before drilling 1/2" hole in wall at selected location. Take up quarter round and drill a small guide hole for sighting (see Fig. 1). From basement, drill 3/4" hole in partition floor next to guide hole. In basementless houses, drill 1/2" hole through ceiling and into partition from above (see Fig. 1).

2. Through this hole drop a light chain, or 6" chain attached to a strong cord. Snag cord in basement with hooked wire. In basementless houses, drop cord through hole in ceiling and down partitioning; snag cord at the humidistat location.
3. Attach humidistat cable to cord and pull cable through hole in wall so that 6" of cable protrudes.
4. Position a typical electrical re-work box over 1/2" hole and cut around outline of electrical box. Pull wiring through knockout and secure electrical box in wall.

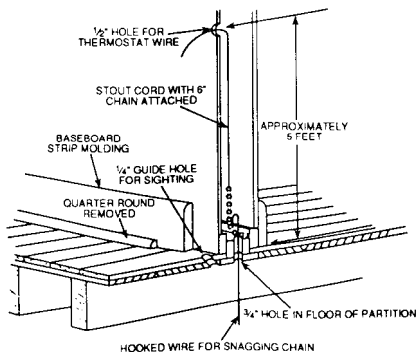


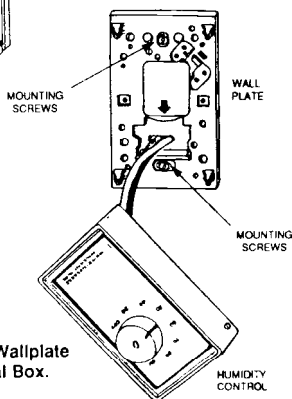
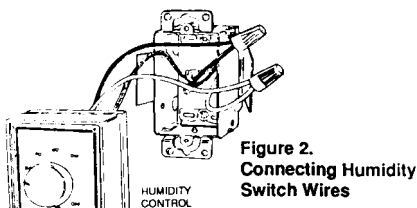
Figure 1. Routing Thermostat Wires

CAUTION

To prevent electrical shock and/or equipment damage, disconnect electrical power to system, at main fuse or circuit breaker box, until installation is complete. Verify power is off with a voltmeter.

ATTACHING HUMIDITY CONTROL TO ELECTRICAL BOX

1. With wallplate still attached to humidity control and wires through wallplate, connect leads together; one black to Line, other black to Load and secure with wire nuts. Connect green wire to electrical box ground. (see Fig. 2)
2. Remove the two screws from the humidity control cover and separate the humidity control from wallplate by gripping the wallplate in one hand. Use the other hand to pull gently at the top and bottom of the humidity control.
3. Push wire connections into electrical box, place wallplate over electrical box (insuring wallplate is right end up for vertical or horizontal) line up mounting holes and fasten wallplate with screws supplied. (see Fig. 3)
4. Holding humidity control, push switch wires into electrical box and snap humidity control onto wallplate. Re-install the two screws removed in step 2.
5. Turn on power to system.



CAUTION

Cover screws must be installed to prevent electrical shock hazard.

Figure 3. Attaching Wallplate to Electrical Box.

WIRING

All wiring must conform with local and national electrical codes and ordinances.

All wiring diagrams are for typical systems only. Refer to equipment manufacturer's instructions for specific system wiring information.

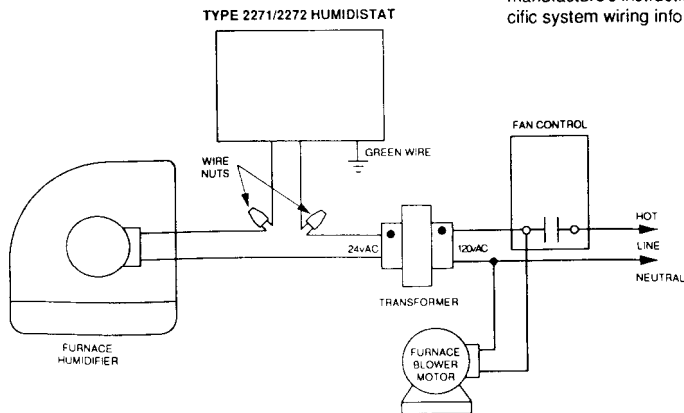
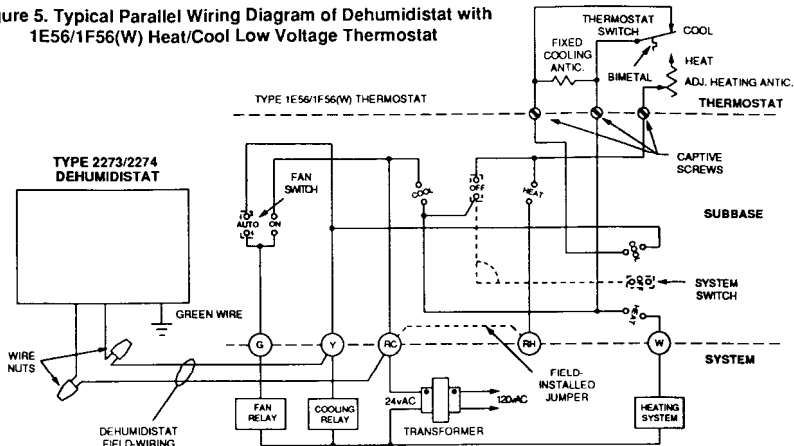
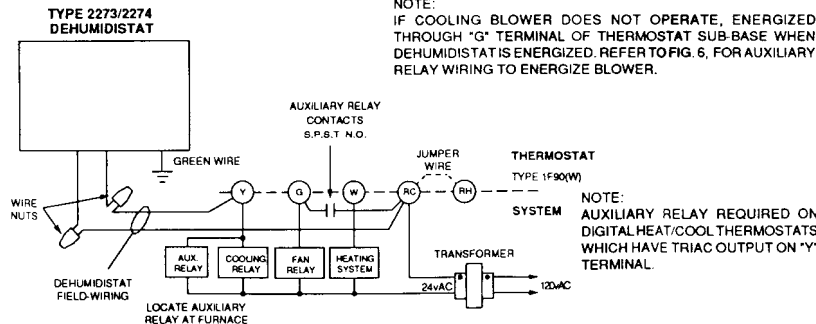


Figure 4. Typical Furnace Humidifier Humidistat Wiring Diagram

Figure 5. Typical Parallel Wiring Diagram of Dehumidistat with 1E56/1F56(W) Heat/Cool Low Voltage Thermostat



NOTE:
IF COOLING BLOWER DOES NOT OPERATE, ENERGIZED THROUGH "G" TERMINAL OF THERMOSTAT SUB-BASE WHEN DEHUMIDISTAT IS ENERGIZED. REFER TO FIG. 6, FOR AUXILIARY RELAY WIRING TO ENERGIZE BLOWER.



NOTE:
AUXILIARY RELAY REQUIRED ON DIGITAL HEAT/COOL THERMOSTATS WHICH HAVE TRIAC OUTPUT ON "Y" TERMINAL.

Figure 6. Typical Parallel Wiring Diagram of Dehumidistat with 1F90(W) Heat/Cool Low Voltage Digital Thermostat

OPERATION

HUMIDISTAT CONTROL

Normally, the system is wired so that the Furnace humidifier can operate only when the furnace blower is operating, and only if the Humidistat control is calling for humidity. If the furnace blower is also used for the air-conditioning system, the humidistat should be turned to full "OFF" during the cooling season.

SETTING & ADJUSTMENT

1. Although a relative humidity environment of 45-50% may be desirable, setting your humidistat at this point when the outside temperature is below -1°C (30°F) can cause condensation on windows and walls. Continued condensation for extended periods of time may result in structural damage. Use the following chart, as a guide for maximum dial settings for various outdoor temperatures. If condensation forms at these sug-

gested settings, reduce the humidistat setting by successive 5% increments. After each reduction in setting allow 6 hours for equilibrium to be reached before further re-adjustment.

2. An operational check can be made as follows:
 - a. Turn humidistat knob to "ON" position. Turn the thermostat fan switch to "ON" the humidifier should start.
 - b. Then rotate knob to desired setting.
 - c. Turn thermostat fan switch back to "AUTO".

At Outside Temperature °C	-20	-10	-5	Above 0°
°F	0	+10	+20	Above +20°
Recommended Setting	25%	30%	35%	40%

DEHUMIDISTAT CONTROL

A dehumidistat wired in parallel may be used to maintain the relative humidity level during unoccupied times regardless of ambient temperature. By cycling an air conditioning system the relative humidity is maintained to help prevent high humidity levels which are associated with mold and mildew build-up.

⚠ CAUTION

Do not use parallel wiring if compressor is not equipped with low temperature protection. Operating compressor without low temperature protection will damage compressor and could cause personal injury and/or property damage.

SETTING & ADJUSTMENT

1. A relative humidity environment of 50-55% is desirable during the summer. To achieve this the cooling thermostat would be set at a higher than occupied temperature or off. The dehumidistat will cycle the air conditioning system as required to maintain the relative humidity setting.
2. An operational check can be made as follows:
 - a. Turn dehumidistat knob to "ON" position. The cooling system and blower should start.
 - b. Then rotate knob to desired setting.

WARRANTY INFORMATION

THIS WARRANTY STATEMENT SUPERSEDES ALL WARRANTY STATEMENTS DATED PRIOR TO JANUARY 1, 1992.

White-Rodgers Division of Emerson Electric Co. ("Seller") warrants that its products purchased for resale (the "Products") will be free from defects in material and workmanship under normal use and service for a period of twelve (12) months from date of installation. Seller's obligation under this warranty, and Purchaser's exclusive remedy for the breach thereof, shall be limited to, at Seller's option, Seller's replacement of any defective Product, F.O.B. Seller's factory, or Seller's issuance of a credit in the amount of the purchase price of such Product for resale as described below. Seller shall have the option of requiring the return of any defective Product, transportation charges prepaid, before recognizing any claim. This warranty shall not apply to any Product (1) which has been repaired or altered outside Seller's factory or by other than Seller in any manner so as in Seller's judgement, to affect its serviceability or proper operation; (2) which has been subjected by persons other than Seller to improper handling, operation, maintenance, repair or alteration; or (3) which has been subjected to misuse, negligence or accident.

This warranty extends only to persons or organizations who purchase the Products for resale. THE FOREGOING CONSTITUTES SELLER'S SOLE RESPONSIBILITY UNDER THIS WARRANTY, AND PURCHASER'S EXCLUSIVE REMEDY FOR BREACH THEREOF EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, WHETHER OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE. SELLER SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE SALE, RESALE OR USE OF THE PRODUCTS.

Complete warranty information and instructions for replacing/returning warranty products can be found in the White-Rodgers Product Catalogue, or by telephoning or writing to:

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WARRANTY INFORMATION FOR CONSUMERS

When you purchase a White-Rodgers Division product, it is typically for replacement of a device which has failed on existing residential or commercial equipment, or a component of new equipment purchased for modernization.

While our warranty does not extend to you, your contractor or dealer is protected by a one-year product warranty from White-Rodgers. Your supplier can rely on a nearby White-Rodgers wholesaler for prompt credit or replacement.