TRADELINE

H600A HUMIDITY CONTROLLER

APPLICATION

The H600A Humidity Controller has spdt switching to operate humidification equipment on RH fall or dehumidification equipment on RH rise or to operate with air conditioning systems for dehumidification and mildew control. This control switches line or low voltage loads and is designed to be mounted on a wall either vertically or horizontally. It has a plastic locking cover; the setting knob acts as a cover removal tool.

INSTALLATION

WHEN INSTALLING THIS PRODUCT...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

CAUTION

Disconnect power supply before making wiring connections to prevent electrical shock or equipment damage.

LOCATION

Select a location about 5 ft [1.5 m] above the floor in an area with good air circulation at average temperature. Minimum operating temperature is 60° F [16° C]; maximum operating temperature is 125°F [52° C].

Do not mount the humidity controller where it may be affected by—

—drafts or dead spots behind doors and in corners.
—hot or cold air from ducts.
—radiant heat from the sun, appliances or fireplace.
—concealed pipes and chimneys.
—unheated (uncooled) areas behind the controller.

MOUNTING BACKPLATE

The TRADELINE H600A may be mounted vertically or horizontally. Instructions that follow are for vertical mounting. For horizontal mounting, follow the same instructions, but mount the backplate and control assembly horizontally. The knob should be on the right side. Before attaching the cover on a horizontally mounted control, add the proper faceplate and scaleplate.

1. Remove setting knob. Use knob to loosen cover locking screw. Remove cover.
2. Remove the mounting plate from the control assembly as shown in Fig. 2.
3. Route wiring from the controlled device to the H600A location.
4. Fasten the mounting plate to the junction box using the two screws furnished.

WIRING

Disconnect power supply before making wiring connections to prevent electrical shock or equipment damage.

All wiring must comply with applicable electrical codes and ordinances. Follow equipment manufacturer's instructions if available; otherwise, proceed as follows.

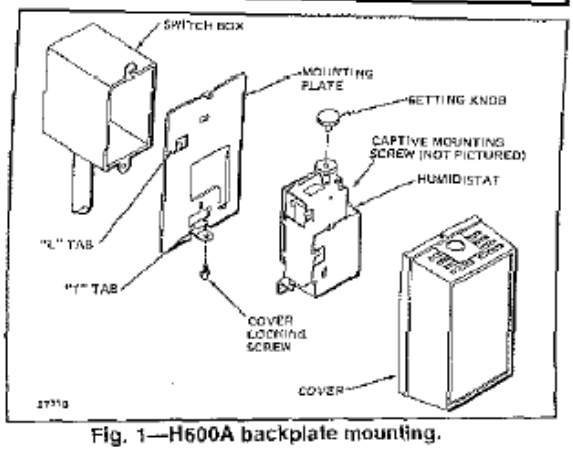

Fig. 1—H600A backplate mounting.

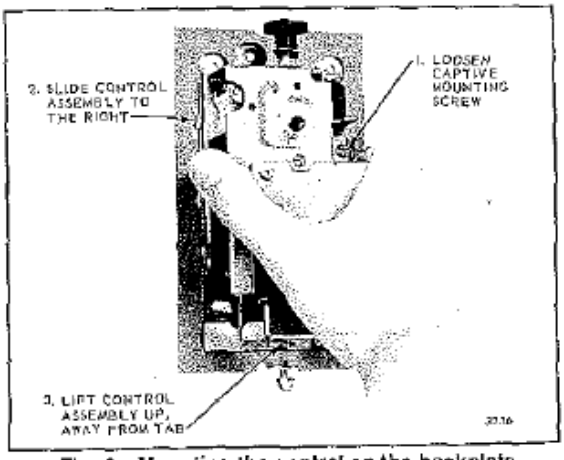

Fig. 2—Mounting the control on the backplate.

Use wire nuts to make connections to the leadwires. If one leadwire is not used on the H600A, insulate it by taping or using solderless connector. This will prevent accidental shorting.

CONNECTIONS FOR MILDEW CONTROL AND DEHUMIDIFICATION

Vacation homes that are unoccupied during the hot, humid summer weather are an invitation to mildew. The common cure is to simply select a moderate thermostat setting and let the air conditioner run. By applying either a low votage thermostat in combination with an H600A Humidity Controller or a W884E Comfort Center, mildew can be reliably prevented and air conditioning energy use can be optimized. The dehumidistat and

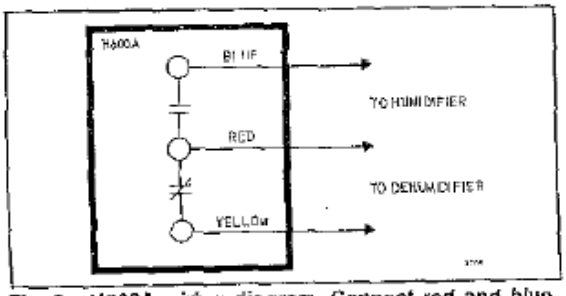

Fig. 3—H600A wiring diagram. Connect red and blue leadwires to humidifier or red and yellow leadwires to dehumidifier.

thermostat should be wired in parallel such that by leaving the system switch in COOL and selecting appropriate set points; for example, 85° F [29° C] and 50 percent RH, either device will be able to control the air conditioning equipment. This independent operation will allow the higher temperature set point and still prevent mildew by controlling humidity. For wiring diagram, see Figs. 4 and 5.

Loads connected to the controller terminals should not exceed the following electrical ratings:

	DEHUMIDIFIER (RED TO YELLOW)		HUMIDIFIER (RED TO BLUE)	
	120 Vac	240 Vac	120 Vac	240 Vac
Full Load	7.5 A	3.85 A	4.4 A	2.2 A
Locked Rotor	45.0 A	22.8 A	26.4 A	13.2 A
Resistive	—	—	8.0 A	4.0 A

Pilot Duty: 50 VA at 24 V, 120 VA at 120 V or 240 V.

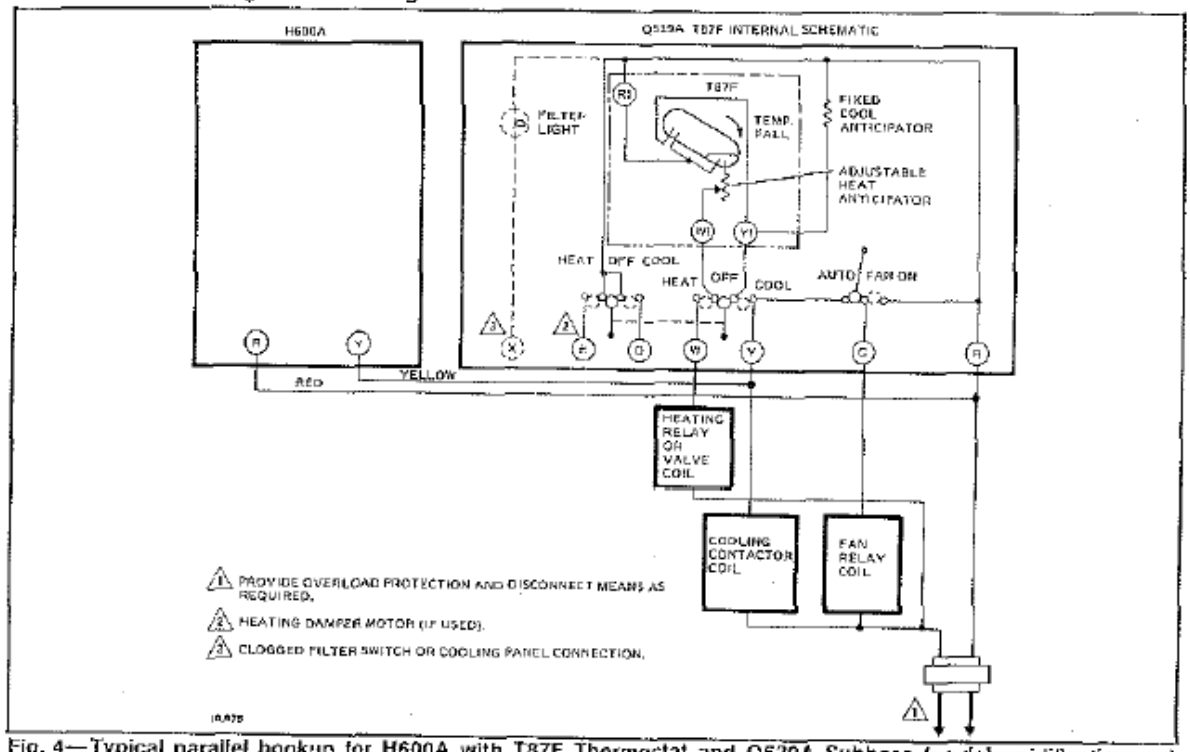

Fig. 4—Typical parallel hookup for H600A with T87F Thermostat and Q539A Subbase for dehumidification and mildew control.

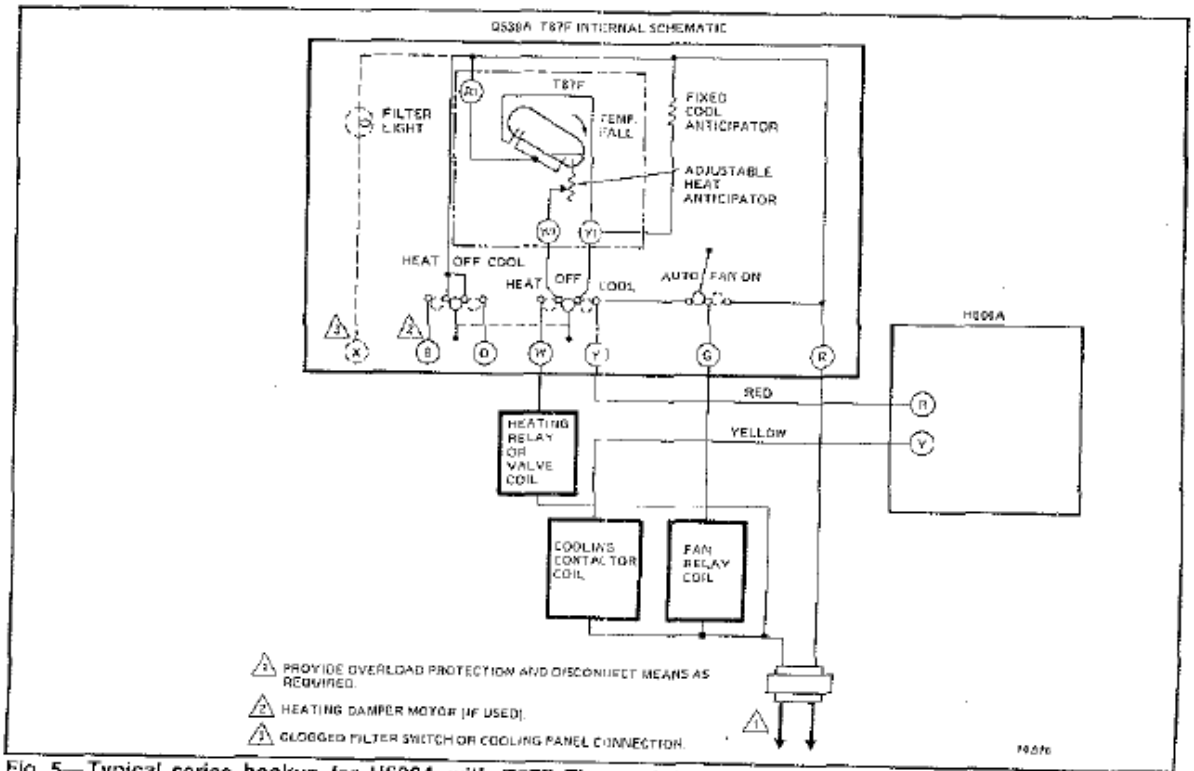

Fig. 5—Typical series hookup for H600A with T87F Thermostat and Q539A Subbase for dehumidification and mildew control.

MOUNTING CONTROL ASSEMBLY

1. Connect leadwires from control to wires running from controlled equipment.

2. Attach the H600A to the mounting plate by slipping it under the tabs (Fig. 2) and tightening the captive mounting screw.

3. Place cover on vertically mounted controls. For horizontally mounted controls, mount proper faceplate and scaleplate on cover before placing cover on control.

The *horizontal faceplate* mounts over the existing faceplate on the cover with the setting indicator on the right end. Peel the wax paper backing from the horizontal faceplate, carefully position one long edge of the faceplate to one long edge of the cover. Be sure faceplate is right side up. Apply the faceplate with a rolling motion to eliminate air bubbles. Buff the surface of the faceplate with finger or soft cloth.

The *setting indicator scaleplate* mounts on the right end of the cover. Remove the vertical scaleplate by lifting the tabs with a screwdriver. Position the horizontal scaleplate over the setting indicator. Bend the tabs around the vent holes using a screwdriver.

4. Attach cover using the setting knob to tighten the cover locking screw on the bottom of the left end of the cover. Remove the setting knob.

SETTING

Adjust the relative humidity setting by inserting the adjustment knob into the hole in the center of the setting indicator. Turn until the pointer is opposite the desired setting. When adjustment is complete, remove knob to prevent tampering.

OPERATION

The H600A (*for humidifying*) *makes contact on a* humidity fall to the set point minus the differential to start the humidifier. *In most humidifier systems the fan* must be operating before the humidifier will start. An *increase in humidity to the set point breaks the contacts* and stops the humidifier.

The H600A (for dehumidifying) makes contact on a relative humidity rise to the set point to start the dehumidifier. *A decrease in relative humidity to the set point* minus the differential breaks the switch contacts to *stop the dehumidifier. Turn the control clockwise* ↷ to the stop for positive ON operation and counterclockwise ↶ *for positive OFF.*

CHECKOUT

After the control has been installed, *turn the adjustment* to OFF (to the stop). The system should be off. With the fan running, slowly turn the *adjustment knob* until the controlled equipment starts to operate. Advancing the adjustment to the ON stop will produce constant ON operation.

RELATIVE HUMIDITY SETTINGS

AT OUTSIDE TEMPERATURE		RECOMMENDED SETTING (percent)	AT OUTSIDE TEMPERATURE		RECOMMENDED SETTING (percent)
°F	°C		°F	°C	
-20	-29	15	+10	-12	30
-10	-23	20	+20	- 7	35
0	-18	25	Above +20	Above -7	40

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PRINTED IN TAIWAN R.O.C.

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