

# Honeywell

## 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 for mildew control with air conditioning systems). All models have a locking cover; the setting knob acts as 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 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

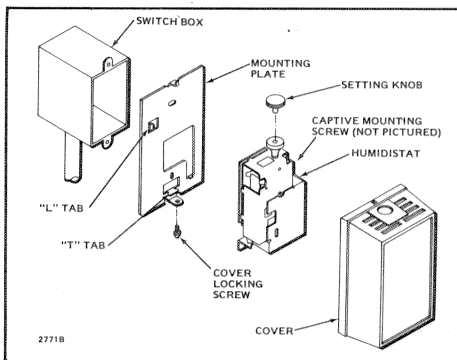


Fig. 1—Mounting the H600A.

1. Remove setting knob. Use setting knob to loosen cover locking screw. Lift off cover.
2. Remove the mounting plate from the controller 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.

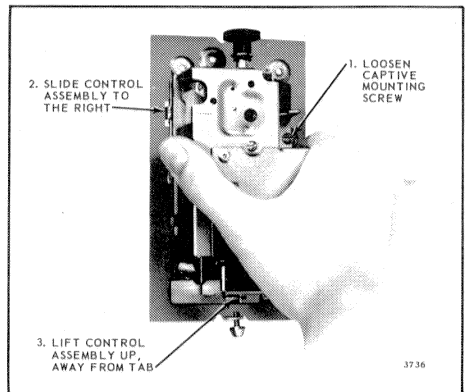


Fig. 2—Mounting the controller on the backplate.

### WIRING

Disconnect power supply before connecting wiring to avoid electrical shock or equipment damage.

All wiring must comply with local codes and ordinances.

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.

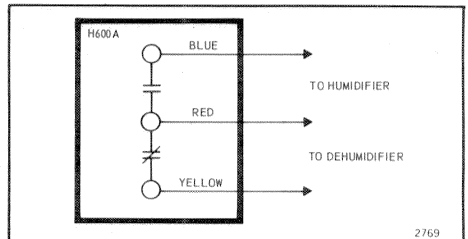


Fig. 3—H600A wiring diagram. Connect red and blue leadwires to humidifier or red and yellow leadwires to dehumidifier.

### CONNECTIONS FOR MILDEW CONTROL AND DEHUMIDIFICATION

Vacation homes 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 voltage 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 thermostat should be wired in parallel such that by leaving the system switch in COOL and selecting appropriate set points (85° F [29° C] and 50 percent RH) were used in a Florida Power and Light test) 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.

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.

Follow the manufacturer's instructions, if available; otherwise, refer to Figs. 4-5.

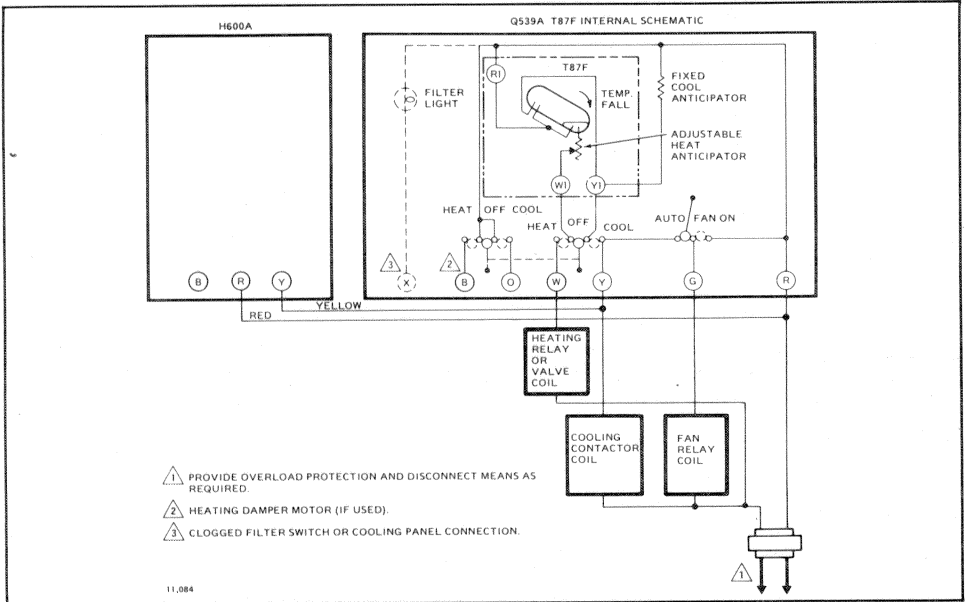


Fig. 4—Typical parallel hookup of H600A with Q539A subbase and T87F thermostat for dehumidification and mildew control.

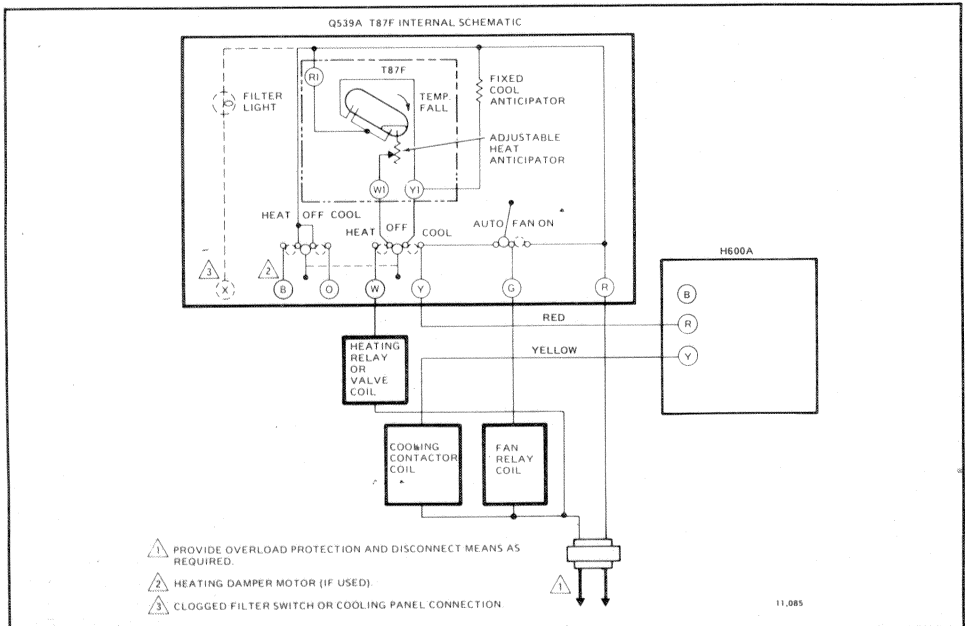




Fig. 5—Typical series hookup of H600A with Q539A subbase and T87F thermostat for dehumidification and mildew control.

## MOUNTING H600A

1. Connect leadwires from controller 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 controller. Using the adjusting knob supplied, tighten the cover locking screw securely. Remove adjusting knob.

## 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 knob clockwise  to the stop for positive ON operation and counterclockwise  for positive OFF.

## SETTING AND CHECKOUT

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.

### RELATIVE HUMIDITY SETTINGS

AT OUTSIDE TEMP.		SUGGESTED SETTING	AT OUTSIDE TEMP.		SUGGESTED SETTING
°F	°C		°F	°C	
-20	-29	15%	+10	-12	30%
-10	-23	20%	+20	-7	40%
0	-18	25%	Above 20	Above -7	40%

## CHECKOUT

After the controller 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.