

## H46C Humidity Controller

### INSTALLATION INSTRUCTIONS

### APPLICATION

The H46C Humidity Controller is used with portable and central unit dehumidifiers to maintain relative humidity. The H46 has an spst, snap-acting switch designed for line voltage circuits and two leadwires for switch box mounting.

### 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 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

**Electrical Shock Hazard.**  
**Can cause electrical shock or equipment damage.**  
 Disconnect power supply before connecting wiring.

### Location

Select a location about 5 ft (1.5m) above the floor in an area with good circulation at average temperature and humidity for the area to be controlled. Avoid locations near hot or cold air ducts and discharged air from the controlled equipment.

### Mounting

1. Remove the setting knob.
2. To remove cover, pull cover forward from device.
3. Install a 2 in. x 3 in. (51 mm x 76 mm) vertical switch box at the selected location.
4. Using the two screws provided, fasten the adapter plate to the switch box, as shown.

5. Pull the wires from the switch box through the opening in the adapter plate and connect to the H46 leadwires with the solderless connectors provided. See Fig. 2 and 3 for typical hookup.
6. Push the wires back into the switch box.
7. Place the H46 against the adapter plate, making certain the tab at the bottom of the plate fits into the notch on the H46.
8. Fasten the H46 to the adapter plate by tightening the captive screw.
9. Replace the cover and the setting knob.

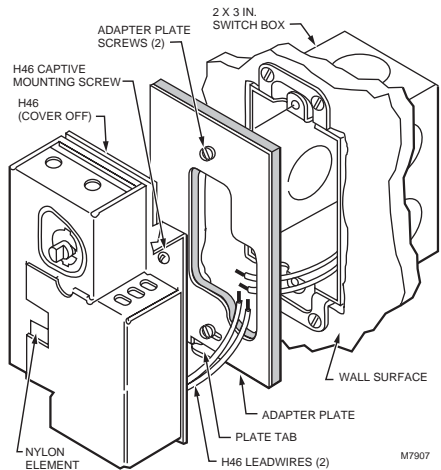


Fig. 1. Mounting H46C on vertical switch box.

### Wiring

Disconnect power supply before connecting wiring to avoid electrical shock or equipment damage. All wiring must comply with local codes or equipment damage. All wiring must comply with local codes and ordinances. Do not exceed contact and coil ratings when wiring into system. See Fig. 2.



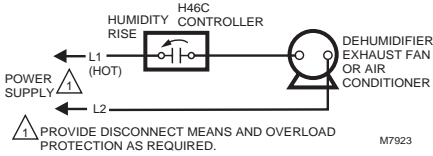


Fig. 2. Typical H46C wiring diagram.

Wiring in series prevents overcooling but the air conditioner runs only when both the thermostat and dehumidistat are calling. During unoccupied times, the homeowner should set the thermostat to a relatively low setting and control moisture using the dehumidistat.

## SETTING AND ADJUSTMENT

The H46 makes contact on a relative humidity rise to the setpoint to start the dehumidifier. On a decrease in relative humidity to the setpoint (minus the differential), the switch breaks contact to stop the dehumidifier. Turn the knob clockwise to the setting stop to place the H46 in the On position. Turn the knob counterclockwise to the setting stop to place the H46 in the Off position.

## CHECKOUT

After completing all mounting and wiring, turn on the power supply. Place the system into operation by turning the setting knob toward the low end of the scale until the dehumidifier motor starts. Turn the setting knob slowly toward the high end of the scale until the dehumidifier motor stops.

## Connections and Operation

A dehumidistat in combination with the thermostat can be used to run the air conditioner to control relative humidity levels. The dehumidistat and thermostat can be wired in parallel or in series.

Wiring in parallel allows the dehumidistat to independently control the humidity level, but could cause overcooling of the home. During unoccupied times, the homeowner should set the thermostat to a relatively high setting and control moisture using the dehumidistat.

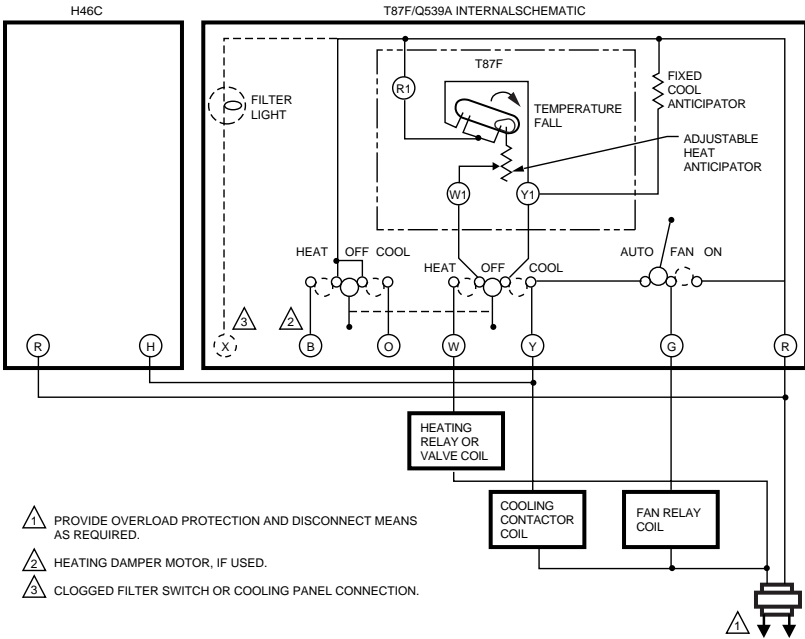
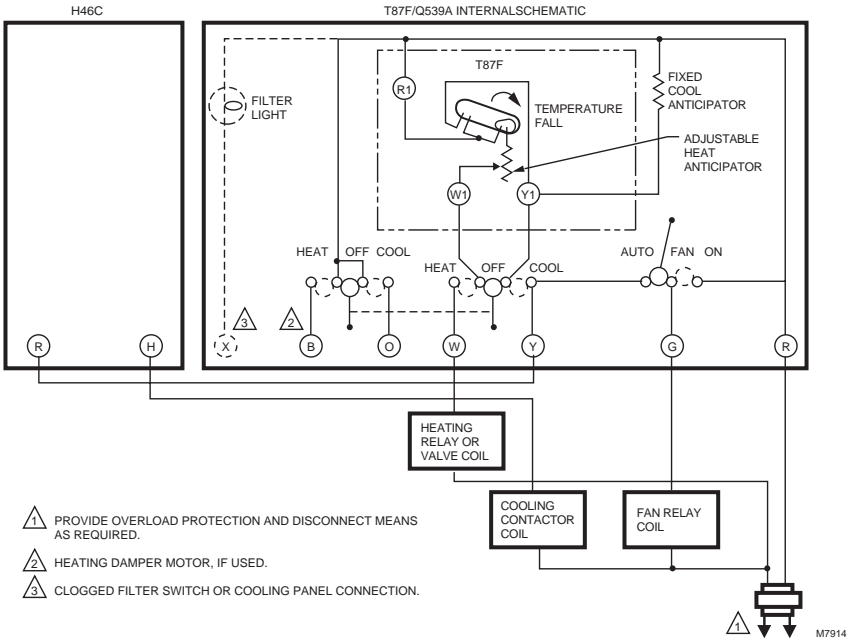


Fig. 3. Typical parallel wiring hookup for H46C with T87F/Q539A combination for dehumidification and mildew control.



**Fig. 4. Typical series wiring hookup of H46C with T87F/Q539A combination for dehumidification and mildew control.**

**Honeywell**

**Automation and Control Solutions**

Honeywell International Inc.  
1985 Douglas Drive North  
Golden Valley, MN 55422

Honeywell Limited-Honeywell Limitée  
35 Dynamic Drive  
Scarborough, Ontario  
M1V 4Z9

