

### Two-Position Electric Room Humidistats General Instructions

#### APPLICATION

For low or line on-off control of humidifiers, dehumidifiers, valves, solenoid valves, compressors, relays, etc.

#### SPECIFICATIONS

**Control Dial Settings:** 10 to 90% RH.

**Humidity Sensing Element:** Nylon ribbon.

**Differential:** 5% RH.

**Environment:**

**Ambient Temperature Limits,**

**Shipping and Storage,** -40 to 140°F (-40 to 60).

**Operating,** 40 to 125°F (4 to 52).

**Humidity,** 5 to 95% RH, non-condensing.

**Location:** NEMA 1, indoor location only.

**Electrical Switch:** Snap-acting SPDT (See Figure 1).

**Ratings,** See Table 1.

**Connections:** 6" color coded leads.

**Cover:**

**HC-101,** Beige plastic with Brushed Bronze Schneider Electric Barber-Colman insert.

**HC-101-770,** Beige plastic with Brushed Bronze Robertshaw insert.

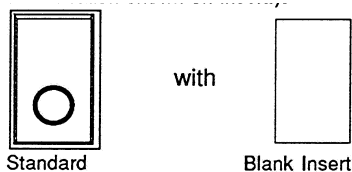
**HC2-101,** Beige metal with Brushed Bronze insert.

**Mounting:** Flush or surface switch boxes or, for 24V only, directly to wall.

**Dimensions:** 4-3/8" high x 2-7/8" wide x 1-5/8" deep (111 x 73 x 41). See Figure 2.

#### STANDARD MODELS INCLUDE

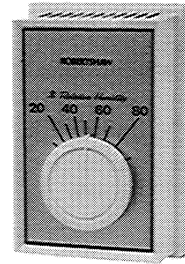
(Company Identification shown on insert):



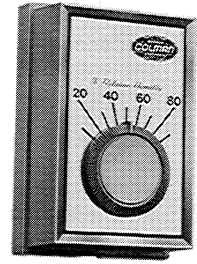
- |         |                                   |
|---------|-----------------------------------|
| One (1) | Humidistat with external setpoint |
| One (1) | Blank cover                       |
| Two (2) | #6 Mounting screws                |
| One (1) | 5/64" Allen wrench                |

#### ACCESSORIES

- |         |                      |
|---------|----------------------|
| AT-504  | Aux. mounting base   |
| AT-505  | Wall box cover plate |
| At-546  | Aux. mounting base   |
| AT-1103 | Wire guard           |
| AT-1104 | Cast guard           |
| AT-1105 | Plastic guard        |
| AT-1155 | Plastic guard        |
| AT-1165 | Plastic guard        |



HC-101-770



HC-101



† Only HC21-1 with metal cover is CSA certified.

Table-1 Maximum Electrical Ratings.

AC Volt 50/60 Hz	FLA	LRA	Resistive Amps	Pilot Duty VA
24	-	-	8	80
120	7.2	43.2	8	345
240	3.6	21.6	8	345

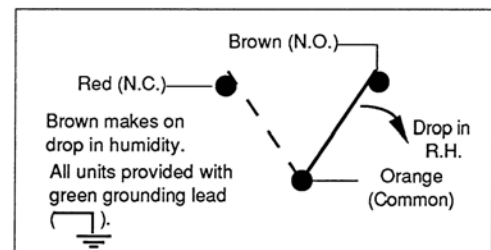


Figure-1 Switch Action and Terminal Identification.

#### PRE-INSTALLATION

##### Inspection

Inspect the carton for damage. If damaged, notify the appropriate carrier immediately. Inspect the device for obvious damage due to shipping. Return damaged products.

##### Required Installation Items

- Wiring Diagrams
- Tools (not provided):
  - DVM (digital volt-ohm meter)
  - Appropriate screwdriver for terminal connections and mounting screws
  - Appropriate drill bit for mounting screws

## INSTALLATION

### Caution:

- Installer must be a qualified, experienced technician.
- Disconnect power before installation to prevent electrical shock and equipment damage.
- Make all connections in accordance with electrical wiring diagram and in accordance with national and local electrical codes. *Use copper conductors only.*

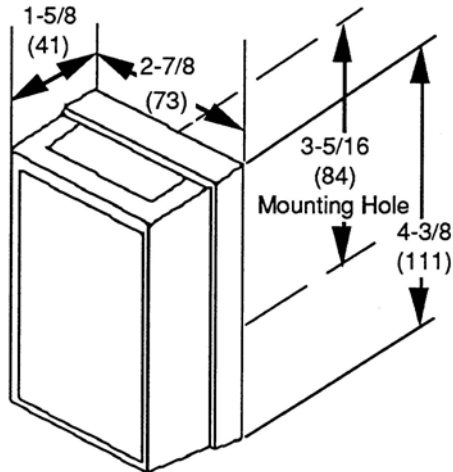


Figure-2 Mounting Dimensions.

## MOUNTING PROCEDURE

The Humidstats require upright mounting on a flat vertical surface. Locate the unit where it will be exposed to unrestricted circulation of air, which represents the average humidity of the controlled space.

**Caution:** Avoid locations where excessive moisture, corrosive fumes, vibration or high ambient temperatures are present.

Unit may be installed on either a flush switch box, or a surface switch box, or directly on a wall (for the 24 volt applications only).

1. Pull the required wires.
2. Make all electrical connections in accordance with job wiring diagram and in compliance with national and local electrical codes.
3. To install, cover must be removed. Pull dial knob off, loosen screw and remove cover.
4. Mount with #6 screws provided for switch box mounting. Different screws are required for wall mounting.

5. For external setpoint:  
Re-install cover, tighten screw with 5/64" Allen wrench provided and replace dial knob.

### For internal setpoint (See Figure 3):

- a. Before re-installing cover, turn the dial plate to desired setting and if locked dial setting is required, tighten dial lock screw (See Figure 3).
- b. With a pair of pliers, break off dial shaft at undercut.
- c. Remove cover insert from cover.
- d. Remove protective backing from adhesive on the blank insert provided, and press firmly in place on the cover.
- e. Re-install cover assembly and tighten cover screw with 5/64 in. Allen wrench provided.
- f. Remove protective film from face of cover insert.

## FIELD REPAIR

Electrical Room Humidstats are not field repairable.

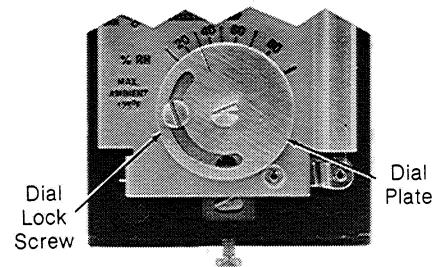


Figure-3 Locking Dial Feature.