

## General Description

The HC-110 series panel mount humidity controllers provide humidity display, relay control, and feature programmable setpoints, upper and lower setpoint limits, differentials and calibration.

# HUMIDITY CONTROLLERS HC-110

## Applications

Applications include computer rooms, HVAC, food service, medical, agricultural and industrial equipment.

## Features

- Membrane touch-pad programming
- 0.56" high red LED display
- Programmable setpoint(s) and differential(s)
- Panel mount enclosure
- Humidity setpoint display
- LED relay status indicator(s)
- Tamper resistant programmable setpoint limits
- Available with single or dual stages

## Specifications

**Power requirements:** Available in 12 or 24 volt models - Specify AC (2VA) or DC (100 mA) voltage supply

**Sensor:** Not included (see HS 50 series or HS 800 series specifications)

**Accuracy:**  $\pm 3\%$  (depends on accuracy of sensor)

**Relay status indicator:** Lighted while relay is activated

**Relay(s) contact rating:** SPDT relay, 4 Amp (24 VAC resistive)

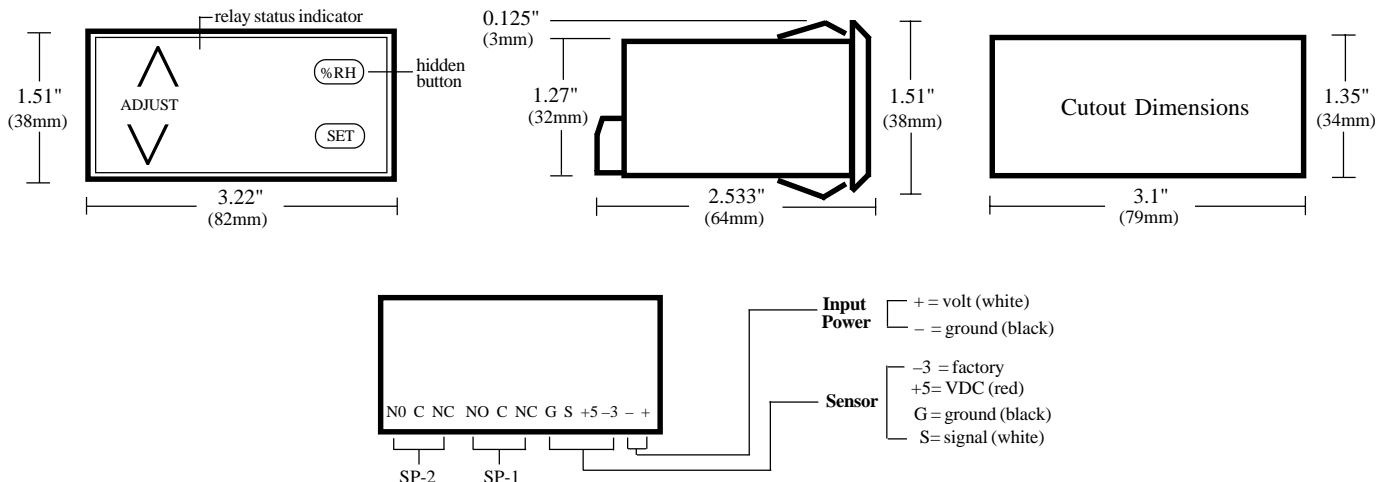
**Ambient temperature range:** 20° to 158°F, - 6° to 70°C

**Humidity:** 90% non-condensing

**Agency approvals:** U.L. and C.U.L. recognized

**Weight:** 3.6 oz. (0.1kg)

## Dimensions & Wiring



## Programming Instructions

- A. SETPOINT(S)
1. To start the programming sequence, press the SET button once. Unit displays "SP1" (setpoint 1).
  2. Press the SET button again to display SP1 value.
  3. To program an increase or decrease in SP1, press the appropriate ADJUST arrow.
  4. Repeat steps 1 thru 3 for SP2 (setpoint 2, dual stage model only).
  5. To complete the programming sequence, press the SET button until the screen goes blank. After five seconds, the unit will automatically display sensor humidity.

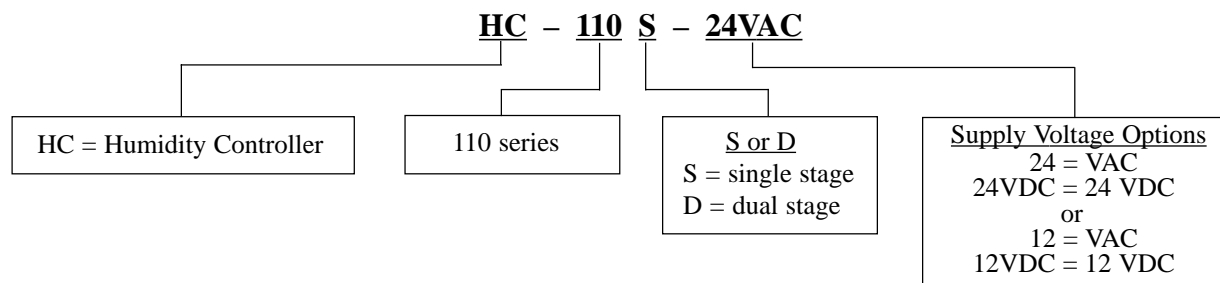
**IMPORTANT:** If the programming sequence is interrupted for more than 15 seconds or not completed to the blank screen stage, the unit will automatically revert to the humidity display mode **WITHOUT** acknowledging any new values (tamper resistant feature).

B. DIFFERENTIAL(S), HIGH/LOW SETPOINT LIMITS AND CALIBRATION – To program these parameters, press the "hidden" button located behind the "%RH" symbol (instead of the SET button), and repeat the programming procedure described in step A.

1. Differential "dIF" – setting a positive differential value will close the NO (normally open) relay(s) on humidity fall (humidification applications) and open the relay(s) on humidity rise. A negative differential setting will close the NO relay(s) on humidity rise (dehumidification applications) and open the relay(s) on humidity fall. Differential is programmable from –30% to +30%. **DO NOT SET DIFFERENTIAL AT "0"**.
2. High and Low Setpoint Limits "HI" and "LO" – allow you to limit the range in which the setpoints can be programmed. Also, by programming the high and low setpoint limit values to the same number, a tamper-resistant fixed setpoint is established.
3. Calibration "CAL" – Controller calibration can be programmed  $\pm 30\%$ . Unit is factory calibrated to a certified standard.

## Ordering Information

Please use the following example when ordering:



## Custom Design & Modifications

In addition to standard models, Control Products specializes in complete custom design of electronic controls. Modifications of standard controls such as wire length and guarded access are also available. Please consult factory for more information.

## Warranty

Control Products, Inc. warrants its products to be free from defects in material and workmanship under normal use for one year and is not responsible for consequential damages or installation costs of any nature. Exposure to contaminants and extreme environmental conditions such as moisture, temperature, chemicals, etc. may cause the unit to degrade or fail. Control Products accepts no liability for product applications or customer application testing.