Humidity Switch

Programmable, 8 Amp Relay, 3-Digit Display

The microprocessor based Series HS Humidity Switch provides control for humidifying or dehumidifying. Relative humidity, output status, and error messaging can be viewed on the bright green LED. The switch features 9 user defined parameters including setpoint, hysteresis, control type, cycle time, and probe adjustment. Access to programming parameters can be locked for security purposes using the password protection feature. The Series HS includes a fitting clip for panel mounting, gasket, rear terminal cover, and instruction manual.

**SPECIFICATIONS**
- Relative Humidity Range: 0 to 100% RH.
- Input: 0 to 3V, 0 to 1V or 4-20 mA (depending on model) humidity probe not included.
- Accuracy: THC-P: ±5% @ 20 to 80%; HS: ±1% RH.
- Display: 3-digit, green, 1/2˝ (12.7 mm) digits.
- Resolution: 1 digit.
- Temperature Limits: 32 to 158°F (0 to 70°C).

**APPLICATIONS**
HS Digital Humidity Switches are suitable for industrial chillers, environmental chambers, walk-ins and freezers, heat sealers, beer and wine chillers, mug frosters, coolers, display cases and cabinets, meat and produce storage, floral preservation, refrigerated transportation, laboratories, food service equipment, ovens and dryers, green houses, museums, and tobacco preservation. Monitors humidity in ducts.

**ACCESSORY**
THC-P Humidity Probe, 0 to 3 V output, 4 ft (1.5m) cable

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Sensor</th>
<th>Supply Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS-311</td>
<td>0 to 3 V</td>
<td>110 V AC</td>
</tr>
<tr>
<td>HS-312</td>
<td>0 to 3 V</td>
<td>230 V AC</td>
</tr>
<tr>
<td>HS-111</td>
<td>0 to 1 V</td>
<td>110 V AC</td>
</tr>
<tr>
<td>HS-112</td>
<td>0 to 1 V</td>
<td>230 V AC</td>
</tr>
<tr>
<td>HS-411</td>
<td>4 to 20 mA</td>
<td>110 V AC</td>
</tr>
<tr>
<td>HS-412</td>
<td>4 to 20 mA</td>
<td>230 V AC</td>
</tr>
</tbody>
</table>

**Series THC**

Independent Displays, 61 Programmable Parameters, 4 SPST Relays

Simultaneously measure and control temperature and humidity with the Series THC Temperature/Humidity Switch. The unit offers a 3-digit red display for temperature indication and a 3-digit green display indicating humidity. The Series THC is equipped with four independent relays, two for temperature control and two relays for humidity control.

The unit offers 61 programmable parameters for temperature and humidity control including set point, differential, direct/reverse acting, cycle time, alarm clock time, and decimal point adjustment. In the event of a probe error, the default operation of the relays can be set to open or close. The THC features error or alarm messaging and password protection.

The THC Temperature/Humidity Switch accepts up to two temperature probe inputs (sold separately) and a humidity sensor. A humidity sensor with 0–1V, 0–3V (sold separately), or 4–20 mA output can be used with the Series THC.

**SPECIFICATIONS**
- Measurement Range: Temperature: -58 to 302°F (-50 to 150°C); Humidity: 0 to 100% RH.
- Input: Up to 2 thermistors and 1 humidity sensor.
- Output: 4 SPST, 8A relays @ 250 VAC.
- Horsepower Rating (HP): 1/3 HP.
- Control Type: ON/OFF direction, direct or reverse acting, neutral.
- Power Requirements: 110 or 230 VAC (depending on model).
- Memory Backup: Nonvolatile memory.
- Memory Backup: CE, UL, ULc.
- Agency Approvals: CE.

**ACCESSORIES**
THC-P Humidity probe with 3V output & 4 ft (1.2 m) cable
TS-5, Temperature probe, PVC with 5 ft (1.5 m) cable
TS-6, Temperature probe, metal with 5 ft (1.5 m) cable
TS-51, Temperature probe, PVC with 10 ft (3 m) cable
TS-61, Temperature probe, metal with 10 ft (3 m) cable

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC-10</td>
<td>°F 110 VAC</td>
</tr>
<tr>
<td>THC-11</td>
<td>°C 110 VAC</td>
</tr>
<tr>
<td>THC-20</td>
<td>°F 230 VAC</td>
</tr>
<tr>
<td>THC-21</td>
<td>°C 230 VAC</td>
</tr>
</tbody>
</table>