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.

INSTALLATION

Note: Units must be mounted away from vibration, impacts, water and corrosive gases.

- Cut hole in panel 2.80 x 1.14 inches (71 x 29 mm).
- Apply silicone (or rubber gasket) around the perimeter of the hole to prevent leakage.
- Insert unit into hole of panel.
- Slide removable fitting clips onto unit from the back until secure to panel.
- Remove back cover to wire unit.
- Wiring diagram is displayed on the top of the unit.
- Note: PROBE CABLE LENGTH MUST NOT EXCEED 328 ft (100 m).
- DO NOT INSTALL PROBE CABLE NEAR POWER CABLES.
- Replace cover once wiring is completed.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Input:</th>
<th>0 to 1 V, 4 to 20 mA, or THC-P probe (3 V).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Humidity Range:</td>
<td>0 to 1 V and 4 to 20 mA inputs: 0 to 100; THC-P input: 20 to 90.</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>HS: ±1%; THC-P: ±5%</td>
</tr>
<tr>
<td>Display:</td>
<td>3-digit, green, 1/2&quot; (12.7 mm) digits.</td>
</tr>
<tr>
<td>Resolution:</td>
<td>1 digit</td>
</tr>
<tr>
<td>Temperature Limits:</td>
<td>32 to 158°F (0 to 70°C)</td>
</tr>
<tr>
<td>Storage Temperature:</td>
<td>-4 to 176°F (-20 to 80°C)</td>
</tr>
<tr>
<td>Output:</td>
<td>16 A SPDT relay @ 250 VAC resistive.</td>
</tr>
<tr>
<td>Horsepower Rating (HP):</td>
<td>1/3 HP.</td>
</tr>
<tr>
<td>Control Type:</td>
<td>ON/OFF.</td>
</tr>
<tr>
<td>Power Requirements:</td>
<td>110 VAC or 230 VAC (depending on model).</td>
</tr>
<tr>
<td>Memory Backup:</td>
<td>Nonvolatile memory.</td>
</tr>
<tr>
<td>Weight:</td>
<td>2.3 oz (65 g).</td>
</tr>
<tr>
<td>Front Panel Rating:</td>
<td>IP64.</td>
</tr>
<tr>
<td>Agency Approvals:</td>
<td>CE, UL.</td>
</tr>
</tbody>
</table>

WIRED DIAGRAM

- THC-P probe should be connected to the HS switch as follows:
  - Yellow/Green wire: Positive (Vcc)
  - Brown wire: Data (IN)
  - Blue wire: Ground (GND)
The output is activated when the relative humidity is less than SP.

Access to all code protected parameters.
- Press SET for 8 seconds. The access code value 0 is shown on the display. (Unit comes with code set at 0 from factory).
- With the UP and DOWN arrows, code can be set to user needs.
- Press SET to enter the code. If code is correct, the first parameter label is shown on the display (SP).
- Move to the desired parameter with the UP and DOWN keys.
- Press SET to view the value on the display.
- The value can be modified with the UP and DOWN keys.
- Repeat until all necessary parameters are modified.
- Press SET and DOWN at the same time to quit programming or wait one minute and the display will automatically exit programming mode.

* The keyboard code can be reset to ZERO by turning off the controller and turning it on again while keeping the SET key depressed.

**LED INDICATIONS**
- This indicates the load is connected. The system waits for the programmed minimum stop time of the load.

**DISPLAY MESSAGES**
In normal operation, the humidity will be shown on the display. In case of alarm or error, the following messages will be shown:
- ER Memory Error
- --- Short-Circuit Probe Error
- ooo Open Probe Error

In the event an error occurs, the unit follows a fixed working cycle which connects the load for 5 minutes and then disconnects the load for 5 minutes alternately.

**MAINTENANCE/REPAIR**
Upon final installation of the Series HS Humidity Switch, no routine maintenance is required. A periodic check of system calibration is recommended. The devices are not field repairable and should be returned to the factory if recalibration or other services is required. After fir obtaining a Returned Goods Authorization (RGA) number, end the material, freight prepaid, to the following address. Please include a clear description of the problem plus any application information available.

Dwyer Instruments, Inc.
Attn: Repair Department
102 Highway 212
Michigan City, IN 46360 U.S.A.