

Duct-Mount High-Limit Humidistat

Specification and Installation Instructions

Model

SHS80 (Duct-Mount High-Limit Humidistat)

Description

The SHS80 is capable of sensing, monitoring and controlling relative humidity in the supply or return air duct. Its primary function is to act as both a 0-10 Vdc humidity sensor and an On/Off high limit protection for modulating humidifiers.

Features

- Built-ir
- On/Of adjust
- 2 anal
- Status

Technical

 Built-in temperature and hum On/Off high limit humidistat w 	
adjustment (20-90 %RH)	SHS80
 2 analog outputs (0-10 Vdc) Status and high limit LEDs 	
Status and high limit LEDs	
Technical Specifications	
Description	SHS80
Power supply	24 Vac or Vdc ±10%
Power consumption	1 VA
Electrical connection	0.8 mm ² [18 AWG] minimum
Humidity transmitter output	0-10 Vdc (0-100 %RH)
Humidity sensor precision	±3% at 40 %RH and 23°C [73°F]
On/Off high limit setpoint range	20 to 90 %RH
Temperature transmitter output	0-10 Vdc (0-100°C) [32-212°F]
Temperature sensor precision	±0.4°C [0.72°F]
Operating temperature	-40°C to 80°C [-40°F to 176°F]
Weight	0.35lb [160g]
Contact rating	Dry contact, 1A max, 24 Vac
Storage temperature	-10°C to 50°C [14°F to 122°F], 0-95% RH
Status LED (right)	Flashes if the device is powered on. Turns OFF if the device is powered off.
High Limit On/Off LED (left)	Turns ON if there is a high limit cutout. Turns OFF if there is no high limit cutout.
Dimensions	
$\begin{array}{l} A = 3.50" & \ 89mm \\ B = 3.00" & \ 76mm \\ C = 2.16" & \ 55mm \\ D = 1.30" & \ 33mm \\ E = 3.95" & \ 100mm \\ F = 0.37" & \ 9.5mm \\ G = 0.44" & \ 11mm \\ H = 0.80" & \ 20mm \\ I = 0.75" & \ 19mm \\ \end{array}$	

Mounting Instructions

Install the SHS80 directly on the supply air duct using the accessories. For standard humidifier applications, power the unit using the 24 Vac power supply provided from the humidifier.

This product is subject to the terms and conditions described at http://www.neptronic.com/Sales-Conditions.aspx.

Any installation or maintenance work must be carried out by suitably qualified personnel.

Disconnect the main supply on the unit and external loads before proceeding with any installation or maintenance.





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Operation

- The contact is normally open when not powered.
- The contact opens without delay when the %RH reading is above the setpoint, i.e., reading > setpoint.
- The contact opens for a minimum of two minutes for anti-cycling purposes.
- The contact closes when reading is below the setpoint hysteresis of 5%RH, i.e., reading < (setpoint 5%RH).
- A change in the setpoint of more than 5%RH immediately updates the status of the contact.

Wiring Diagrams

