

Features and Benefits

- Concealed or exposed setpoint adjustment
- Suitable for swimming pool environments

Technical Overview

The RH-SH range of humidistats are designed for wall or duct mounting for the ON/OFF control of humidification and dehumidification equipment, or the initiation of alarms or override controls.

Well suited in domestic, commercial and industrial areas with light pollution for various applications in the air conditioning field.

Product Codes

<i>Space</i> RH-SH-1R	Single stage humidistat with concealed adjustment
RH-SH-1RE	Single stage humidistat with exposed adjustment
<i>Duct</i> RH-SH-1D	Single stage humidistat with concealed adjustment
RH-SH-1DE	Single stage humidistat with exposed adjustment

Specification

Switch rating	
<i>Space:</i>	
Humidify	2(1)A @ 250Vac
Dehumidify	5(1)A @ 230Vac
<i>Duct</i>	15(2)A @ 24-250Vac
Differential:	
Space	3...5%RH (non-adjustable)
Duct	5%RH
Accuracy:	
>50%RH	±3%RH
<50%RH	±4%RH
Time constant:	
Space	t50 @ 2m/s 72 seconds
Duct	t63 @ 2m/s 120 seconds
Operating range	30-100%RH
Maximum air speed	8 m/s
Housing material	ABS
Sensing element	Synthetic fabric bands
Dimensions:	
Space	115 x 35 x 70mm
Duct	108 x 72 x 72mm
Probe	220mm x 16mm dia.
Ambient range:	
Temperature	0 to +60°C
Humidity	<95%RH non-condensing
Protection:	
Space	IP20
Duct	IP65 (concealed adjust)
	IP20 (exposed adjust)
Country of origin	Italy
Conformity	LVD, CE & UKCA Marked

WEEE Directive:



At the end of the products useful life please dispose as per the local regulations.
Do not dispose of with normal household waste.
Do not burn.



Installation

Common Spec

1. The RH-SH range should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc)
2. Ensure that all power is disconnected before carrying out any work on the RH-SH.
3. Select a location where contaminants are at a minimum, and which will give a representative sample of the prevailing condition.

Space

4. Undo the tamperproof screw at the bottom of the housing and gently pull the front panel from the base.
5. Using the base as a template mark the hole centres and fix to the wall with suitable screws.

Duct

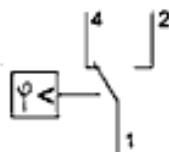
4. If the sensor is to be mounted outside, it is recommended that the unit be mounted with the cable entry at the bottom. If the cable is fed from above then into the cable gland at the bottom, it is recommended that a rain loop be placed in the cable before entry into the sensor.
5. Remove the front cover, and separate from the main body.

Common Spec (continued)

6. Feed cable in the housing and terminate the cores at the terminal block, leaving some slack inside the unit.
7. Replace the front cover to the base plate/main body, and tighten screws.

Connections

- | | |
|---|--------|
| 1 | Common |
| 2 | N/O |
| 4 | N/C |



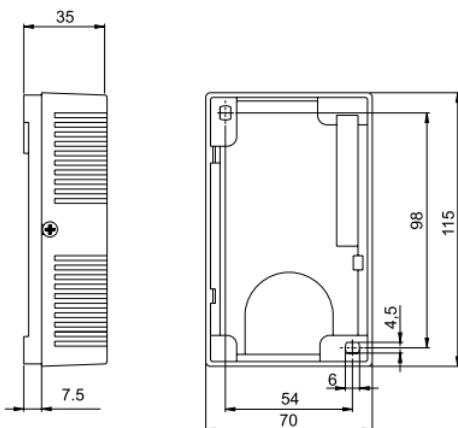
The contact 1-2 closes and 1-4 opens when the relative air humidity drops below the setpoint.

Warning

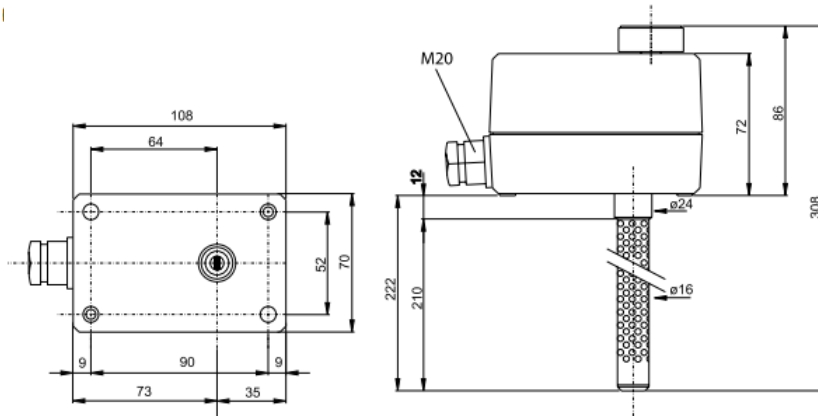
The measurement location of the humidity controller should be selected so that no water can condense on or in the device. This applies particularly for operation with voltage higher than 48V. Failure to comply with this can result in damage to the controller.

Dimensions

Space types:



Duct types:



Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense resulting from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.