REGIN

HMH / HPH

Humidistat, 1 step and 2 step or proportional
For duct or wall mounting

HMH / HPH is a series of electro-mechanical humidistats for controlling humidifying and/or dehumidifying in HVAC systems.

- 1 or 2 steps
- Changeover contact 250 V AC 10 A
- Proportional output 148 or 1000 Ohms
- High degree of accuracy and reliability
- For duct or wall mounting
- Form of protection IP54

Function

Construction
The humidistat has human hair as the sensor medium. The hair stretches as the humidity increases and shrinks as the humidity decreases.These changes are transmitted to a micro switch (two switches) or, in the case of the HPH, to a pin on a potentiometer.

The setpoint switch affects the position of the micro-switches in relation to the hair element. The setpoint can be set at between 10 and 100% RH.

This tried and tested construction with few movable parts gives a high degree of reliability and accuracy.
As the contacts are of the changeover type the humidistat can control both humidification and dehumidifcation.

2 step humidistat
This has two microswitches. The step differential between them can be set by means of the adjustment screw.
As the contacts are of the changeover type the humidistat can control both humidification and dehumidification.

Proportional humidistat
HPH148 and HPH1000 are humidistats with proportional resistance output.
Depending on the setpoint chosen and the current humidity these give output signals of 0 to 148 Ohms and 0 to 1000 Ohms to control installations intended for this type of signal.

Mounting
HMH/HMH2/HPH can be mounted in a ventilation duct or on a wall. The humidistat is supplied with a flange which is suitable for both positions.

Calibration
The humidistats are calibrated at the factory before delivery to the customer, but should be precision calibrated after installation to ensure the best results. After that annual checks and re-calibration are recommended.

Maintenance
The hair element should be dusted off with a soft brush once a year.
Do not rinse the hair element in water as this changes the calibration point.
For further information concerning maintenance see the instructions which are supplied on delivery.

Typical applications
Can be used to control a humidifier or a dehumidifier or for on/off controlling of a fan. Can also be used to alarm when the humidity exceeds or falls below a pre-set level.

Models

HMH	1 step, change-over contact
HMH2	2 step, change-over contact
HPH148	Proportional, 0-148 Ohm
HPH1000	Proportional, 0-1000 Ohm

Technical data

General

Material	Housing: Extruded aluminum (Brown) Plastic parts: Self extinguishing Macrolon (White)
Ambient temperature	Sensor, maximum 70°C Housing, maximum 60°C
Mounting	With a universal bracket, for both wall and duct mounting
Weight	0.6 kg
Form of protection	IP54
CE	This product conforms with the requirements of European LVD standards IEC 669-1 and carries the CE mark

Output

Relay contact data	10 A, 250 VAC resistive at 25°C ambient 8 A, 250 VAC resistive at 60°C ambient Not suitable for DC circuits.

Settings

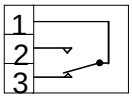
Setpoint	10...100%RH
Hysteresis	3%RH at 45%RH
Step differential (HMH2)	0...25%RH
Proportional band (HPH148, HPH1000)	7%RH

Spare parts and accessories

1608	Hair element, length 182 mm
1609	Microswitch
375	Protection tube.To be used when the humidistat is placed in ducts where the air flow exceeds 10 m/s.

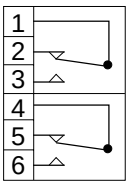
Wiring and dimensions

HMH



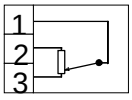
The contact between terminals 1 and 2 closes when the humidity exceeds the setpoint value.

HMH2

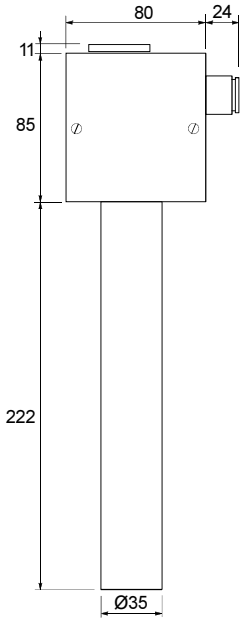


On the HMH2 the contact between terminals 1 and 3 closes when the humidity exceeds the setpoint value. When the humidity continues to rise and exceeds the sepoint value for step 2 the contact between terminals 4 and 6 closes.

HPH148
HPH1000



When the humidity increases the resistance increases between terminals 1 and 3 while the resistance between terminals 1 and 2 falls.



In mm

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