



# HR1/HR2

Room humidistat, 1 or 2 steps

HR1 and HR2 is a series of electro-mechanical room humidistats for controlling humidifying and/or dehumidifying in HVAC systems.

- One or two steps
- Protection class IP21 (can be used in bathrooms)
- Changeover contact 250V AC 5A (HR1-DH: 10A)

## Function

The humidistat uses 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).

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 95% RH.

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

### 1 step humidistat for 10A

HR1-DH is specially designed to control dehumidifying units and manage rated currents up to 10A. The humidistat has a closing contact which activates when the humidity begins to increase.

### 2 step humidistat

This model has two micro switches. The step differential between them can be set by means of an adjustment screw.

As the contacts are of the change-over type, the humidistat can control both humidification and dehumidification.

- High level of reliability
- Settings can be locked

## Calibration

The humidistats are calibrated at the factory before delivery to the customer, but should be precision calibrated after installation to ensure optimal results. After this, 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 instructions 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**

HR1	Room humidistat, 1 step, 5A
HR1-DH	Room humidistat, 1 step, 10 A. Only to control dehumidifying
HR2	Room humidistat, 2 steps

**Technical data**

Material	Polycarbonate/ABS = Bayblend. Cover in white.
Ambient temperature	-20...+40°C
Mounting	Wall mounting. Can be mounted in a bathroom zone 3
Weight	0.125 kg
Protection class	IP21



**Low Voltage Directive (LVD) standards:** This product conforms with the requirements of European LVD standards IEC 669-1 and IEC 669-2-1 and carries the CE mark.

**RoHS:** This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.

**Output**

Relay contact data	5A, 250 VAC, changeover contact. HR-DH, 10 A, 250 VAC, closing
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**Settings**

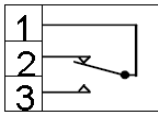
Setpoint	10...95%RH
Hysteresis	4%RH at 45%RH
Step differential (HR2)	0...30%RH

**Spare parts and accessories**

1606	Hair element, length 107 mm.
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**Wiring and dimensions**

**HR1**



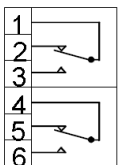
On HR1 the contact between terminals 1 and 3 closes when the humidity exceeds the setpoint value.

**HR1-DH**

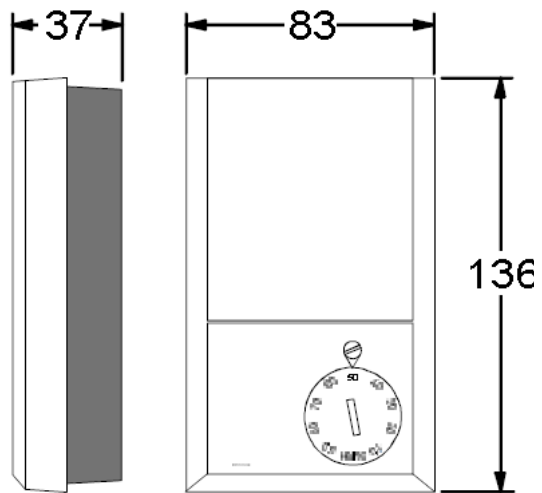


On HR1-DH the contact between terminals 1 and 2 closes when humidity exceeds the setpoint value.(Dehumidification)..

**HR2**



On HR2 the contact between terminals 1 and 3 closes when the humidity exceeds the setpoint value. When the humidity continues to rise and exceeds the setpoint value for step 2 the contact between terminals 4 and 6 closes..



in mm