

# 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)
- ✓ High level of reliability
- ✓ Settings can be locked

## Application

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

## 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.

### 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 more 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 preset level.

## Technical data

### I General

<b>Ambient temperature</b>	Maximum 40°C
<b>Mounting</b>	Wall mounting. Can be mounted in a bathroom zone 3.
<b>Weight</b>	0.125 kg
<b>Protection class</b>	IP21

### 2 Output

<b>Relay contact data</b>	5A, 250 VAC, changeover contact. HR-DH, 10 A, 250 VAC, closing
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### 3 Settings

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



This product carries the CE-mark. More information is available at [www.regincontrols.com](http://www.regincontrols.com).

## Material

<b>Material</b>	Polycarbonate/ABS = Bayblend
<b>Colour</b>	White

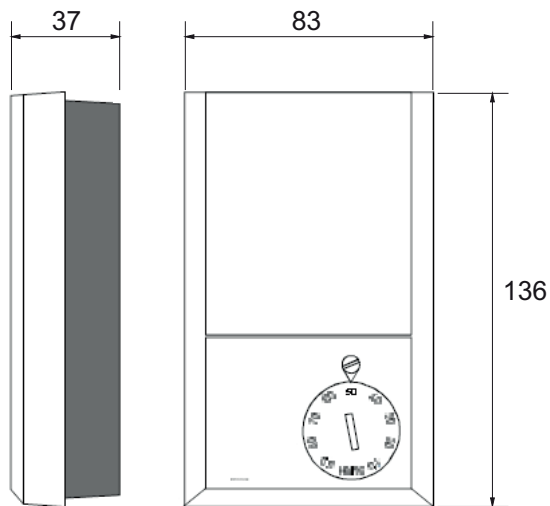
## Models

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

## Accessories

Article	Description
1606	Hair element, length 107 mm.

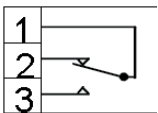
## Dimensions



[mm]

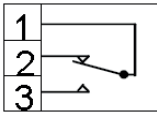
## Wiring

### HR1



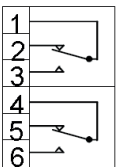
On HR1 the contact between terminals 1 and 3 closes when the humidity exceeds the setpoint value.

### 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.

## Documentation

All documentation can be downloaded from [www.regincontrols.com](http://www.regincontrols.com).