



149-DCV-H1 is an electro-mechanical room humidistat for controlling humidification and/or dehumidification in HVAC systems.

- * 1-step
- * Protection class IP30
- * Changeover contact 250 V AC, 5 A
- * High reliability and accuracy
- * Setpoint settings can be locked

Function

The humidistat uses a synthetic element as sensor medium. The synthetic element stretches as the humidity increases and shrinks as the humidity decreases. These changes are transmitted to a microswitch.

The setpoint knob affects the position of the microswitch in relation to the synthetic element. The setpoint can be set at between 20...90% RH.

Synthetic Element

We have developed a new synthetic element that gives a high accuracy at a low cost.

Setpoint knob can be locked

In order to eliminate the risk of tampering, the setpoint knob can be locked by means of a locking screw under the cover.

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.

Technical data

General

Material casing	Polycarbonate
Ambient temperature	0...40°C
Mounting	Wall mounting
Protection class	IP30



This Product confirms with the requirements of European LVD standards EN 60730-1:2000+A11+A12, EN 60730-2-13:1998+A1 and carries the CE-mark

Outputs

Changeover contact	250 V AC, 5 A
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Settings

Setpoint	20...90% RH
Hysteresis	+/- 4% RH

Installation and maintenance

Installation

Mount the humidistat in a location with an even temperature and good air circulation. The mounting holes have a c:c distance of 60 mm in order to fit on a wall box.

Maintenance

Calibrate the humidistat after it has been mounted. Thereafter it should be calibrated at regular intervals, for example at the beginning of each heating season.

If dust or other matter is permitted to accumulate on any type of sensing material (hair, cotton or plastic) its hygroscopic interchange with the surrounding air is impaired. So remove all deposits at regular intervals using a soft brush.

Calibration

1. Measure the relative humidity close to the humidistat using for example a psychrometer or other accurate instrument.
2. Remove the front and loosen the setpoint locking screw.
3. Twist the setpoint knob until you find the switching point. Should the setpoint need calibration the knob rim with the scale can be detached from the hub and remounted in a new position. Grip across the rim and pull out at the same time as maintaining an inward pressure on the hub.
4. Remount the scale with the correct measured value horizontally to the right so that it is displayed even with the front cover in place. Make sure the parts snap together properly.
5. Set the setpoint knob to the desired control value and, if desired, lock the knob using the locking screw.

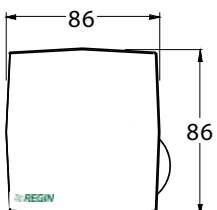
Wiring and Dimensions

Wiring

Humidification Closing contact between terminals 1 and 2

Dehumidification Closing contact between terminals 1 and 3

Dimensions



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