

# Dew-point monitor and transducer

Effective protection against humidity damage and excessive cooling. Control system for a regulating unit using a holding relay, which interrupts the flow of cold water or raises the temperature of the cooling water.

## Features

- Measurement is effected by a spring-loaded dew-point sensor.
- Active measured value acquisition.
- Versions with external sensor.

## Technical description

- Housing made of pure-white, flame-retardant thermoplastic (RAL 9010).
- Holding relay with change-over contact.
- Screw terminals for wire of up to 1.5 mm<sup>2</sup>.
- Strap retainer for 10 to 100 mm ø pipe and heat-conducting paste are included in supply.

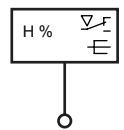
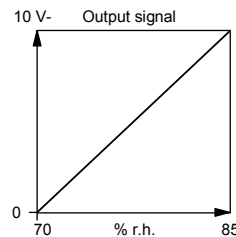
## Operation

The resistance of the dew-point sensor rises in accordance with the relative humidity. The resistance value is evaluated with the aid of the electronics unit and then (via a holding relay) used to control the change-over contacts. When power is applied, contacts 4-6 close as soon as the switching point is reached or exceeded. At the same time, contacts 4-5 open. If the switching point is undercut by the amount of the switching difference, contacts 4-6 open and contacts 4-5 close. In addition, there is an analog output signal (Pin 3) available. If no power is applied, contacts 4-6 are closed and contacts 4-5 are open.

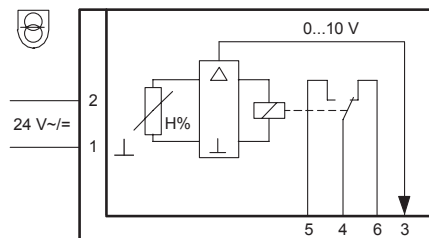
Switching point	Sensor	Measuring range %RH	Power supply	Weight (kg)
95 ± 4	On housing	70-85	24 V~±	0.1

## Specifications

- Power supply 24 V~±: ± 20%
- Switching difference: Fixed, approximately 5% RH
- Power consumption: Max. 1 VA
- Changeover contacts: 1A, 24 V~±
- Output signal approximately 70-85% RH: 0-10 V, load > 10 kΩ
- Response time in still air:
  - ◆ 80-99 %RH: Maximum 3 minutes
  - ◆ 99-80 %RH: Maximum 3 minutes
- Exposure to dew: Maximum 30 minutes
- Ambient temperature: 5-60 °C
- Degree of protection: IP 40 (EN 60529)



## Wiring diagram



## Dimensions

