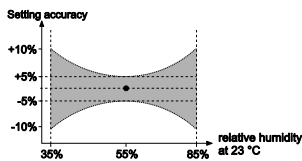
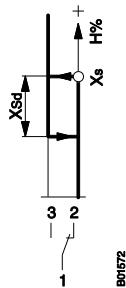
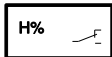


## HSC 120: Room humidistat



HSC120F0\*\*



### Improving energy efficiency

Enables humidity control devices to be switched on according to needs

### Properties

- Monitoring and regulation of relative air humidity in rooms by controlling fans, drying units and air humidifiers
- Variable relative humidity as setpoint based on printed scale in % rh
- Measurement taken via a measuring element of stabilised synthetic textile tape.
- Micro-switch with fixed switching difference  $X_{sd}$

### Technical data

Power supply		
Max. load		5(3) A, 250 V~
Min. load		100 mA, 24 V
Parameters		
Setting range		30...90% rh
Setting accuracy <sup>1</sup>		±5% rh
Humidity calibration at		55% rh, 23 °C
Switching difference		Typ. 6% rh
Long-term stability		Approx. -1.5% rh/a
Time constant in moving air (0.2 m/s)		Approx. 5 min
Temperature influence		0.5% rh/K
Ambient conditions		
Operation	Humidity (non-condensing)	30...90 %rh
	Temperature	0...50 °C
Storage and transport	Humidity (non-condensing)	10...95 %rh
	Temperature	-20...70 °C
Structural design		
	Weight	0.09 kg
	Housing	Pure white (RAL 9010)
	Housing material	Fire-retardant thermoplastic
	Screw terminals	For wire of up to 1.5 mm <sup>2</sup>
Standards and directives		
	Ingress protection	IP 20 (EN 60529)
	Protection class	II (IEC 60730)
CE conformity as per	EMC directive 2004/108/EC	EN 61000-6-1, EN 61000-6-2 EN 61000-6-3, EN 61000-6-4
	Low-voltage directive 2006/95/EC	EN 60730-1, EN 60730-2-13

### Overview of types

Type	Features
HSC120F001	External setpoint adjuster
HSC120F010	Internal setpoint adjuster



<sup>1</sup> The setting accuracy of the humidistat is valid for the calibration point ±5% rh at 55% rh and 23 °C following initial calibration at the factory. See diagram "Setting accuracy". In general, humidity sensors (humidistats) are subject to increased ageing if they are used and/or stored in very contaminated air or aggressive gases. The humidistat may start to drift and its linearity may change under these conditions. If the humidistats are used in very contaminated air, the warranty does not cover a premature re-calibration or the replacement of the complete humidistat

## Accessories

Type	Description
0362225001	Intermediate plate, pure white, for wall mounting on recessed junction box

## Additional information

### Fitting instructions

F001	P100013519
F010	P100013250

## Description of operation

When the relative air humidity is increasing and after the upper change-over point is reached, contacts 1-2 are opened and 1-3 closed. Setpoint  $X_S$  corresponds to the upper change-over point. The contacts are reset when the humidity value falls below the upper change-over point again by the amount of the fixed switching difference  $X_{sd}$ .

The ageing effect of the measuring element causes the change-over point to shift gradually and permanently. Therefore, recalibration may be necessary.

At temperatures other than the compensation temperature, the change-over point is shifted systematically (effect of temperature). Similarly, if the humidity changes quickly, the switching point is shifted temporarily.

## Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the "Description of function" section.

All related product documents must also be adhered to. Changing or converting the product is not admissible.

## Notes on engineering and installation

The housing base allows cables to be inserted from behind and when the unit is fitted on recessed junction boxes. With surface mounting, openings can be made above or below as required.

## Disposal

The local, currently valid laws must be observed when disposing of the device.

You will find more information on the materials and substances in the declaration of materials used for this product.

## Connection diagrams

F001, F010

