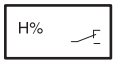
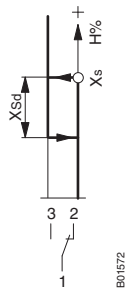
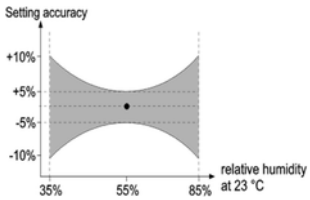
HSC 101: Panel-mounted humidistat (packing unit: 50 pieces)



HSC101F001







How energy efficiency is improved

Enables humidity control devices to be switched on according to needs.

Features

- Monitoring and regulation of relative air humidity by controlling fans, drying units and air humidifiers
- Adjustment of change-over point via setpoint adjustment axis
- Suitable for fitted applications with protection class II
- Measurement via a measuring element of stabilised synthetic textile tape
- Secured with bolting hole and fixing hole (blind hole)
- Micro-switch with single-pole change-over contacts and fixed switching difference
- Suitable for panel-mounted units only

Technical data

Power supply		
	Max. load	5(3) A, 250 V~
	Min. load	100 mA, 24 V
Parameters		
	Setting range	25...95% rh
	Setting accuracy[1]	±5% rh
	Humidity calibration at	55% rh, 23 ℃
	Switching difference[2]	6% rh
	Long-term stability	–1.5% rh/a
	Time constant in moving air (0.2 m/s)	Approx. 3 min
	Temperature influence	0.5% rh/K
Ambient conditions		
Operation	Humidity (non-condensing)	25...95% rh
	Temperature	0...70 ℃
Storage and transport	Humidity (non-condensing)	10...95% rh
	Temperature	-20...70 ℃
Construction		
	Weight	0.03 kg
	Baseplate	Thermoplastic
	Electrical connection	AMP terminals 2.8 mm
Standards and directives[3]		
	Type of protection	IP 00 (EN 60529)
	Protection class	0 (IEC 60730)
CE conformity as per	EMC directive 2004/108/EC	EN 55014 Art. 4.2
	Low-voltage directive 2006/95/EC	EN 60730-1, EN 60730-2-13

1 *The setting accuracy of the humidistat is valid for the calibration point ±5% rh at 55% rh and 23 ℃ f ollowing 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*

2 *Can be substantially improved by recalibration during usage*

3 *The fitting method must adhere to the relevant safety standards*

SAUTER **Right of amendment reserved © 2014 Fr. Sauter** AG

Overview of types

Type	Properties
HSC101F001	Panel-mounted humidistat

Additional information

Fitting instructions	P100013225

Description of operation

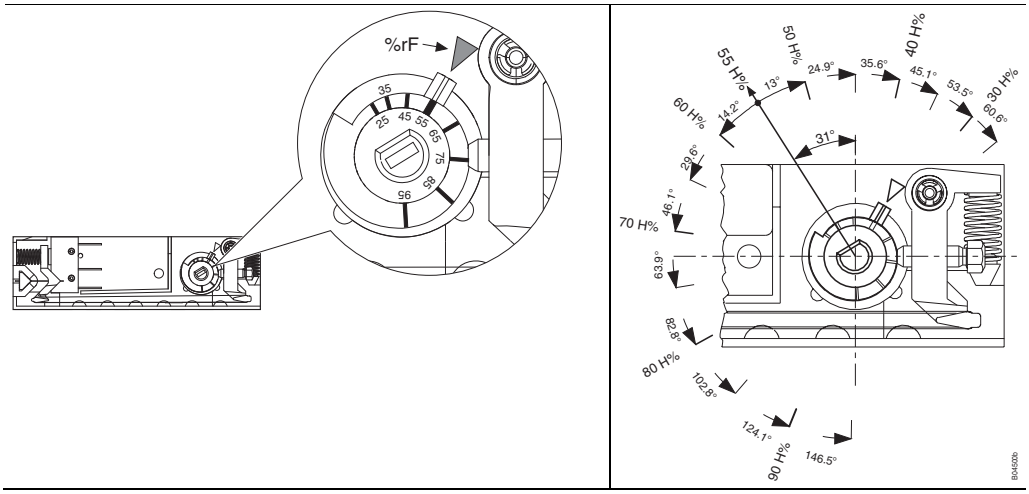
When the relative air humidity is increasing and setpoint X_S is reached, the single-pole change-over contacts are activated (contact 1-2 is opened and 1-3 closed). The setpoint corresponds to the upper change-over point. The contacts are reset when the humidity value falls below the upper change-over point again by the amount of the fixed switching difference X_{Sd}.
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

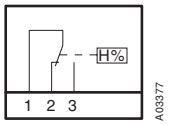
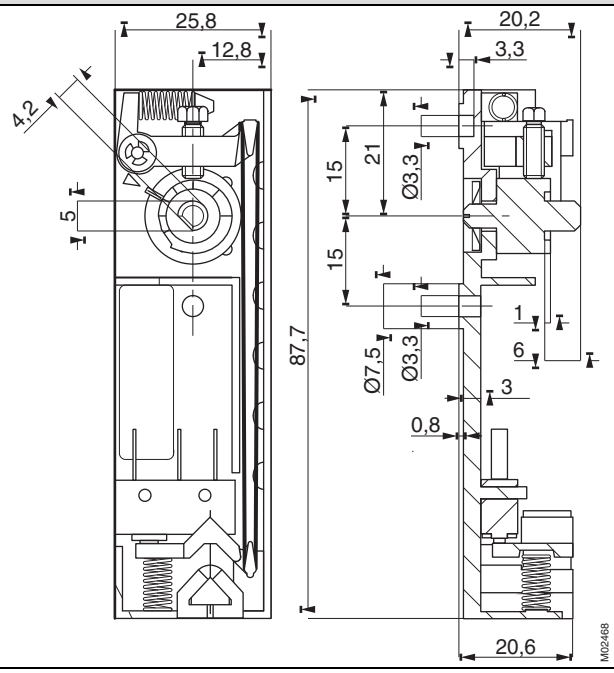
Fitting:
Open switching element to be fitted in a housing or a device. The fitting method must ensure the electrical protective measures, specified in the safety standards, are adhered to. The basic insulation meets the required standard in the band mounting area.
Scale:
Scale marks without numbers on the setting axis. Marking arrow on the baseplate. The scale marks are explained in the image below left. The drawing below right shows the space available for printing on a housing or a front plate. The angles relate to the reference position (55 %rh) of the setting axis.



Disposal

When disposing of the product, observe the currently applicable local laws.
More information on materials can be found in the Declaration on materials and the environment for this product.

SAUTER **Right of amendment reserved © 2014 Fr. Sauter** AG

Connection diagram	Dimension drawing
	

Fr. Sauter AG
Im Surinam 55
CH-4016 Basel
Tel. +41 61 - 695 55 55
www.sauter-controls.com

SAUTER **Right of amendment reserved © 2014 Fr. Sauter** AG