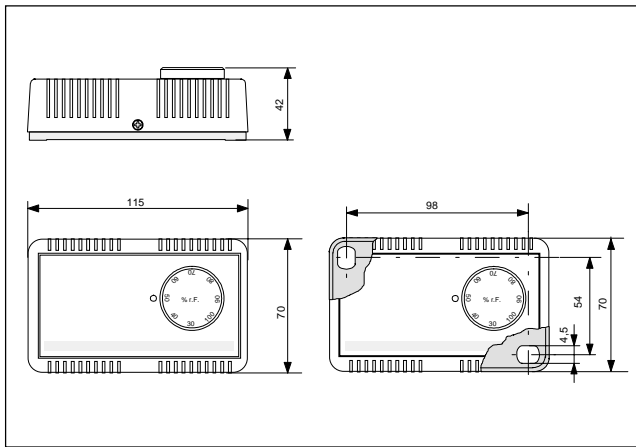


Dimensions diagram



Type Survey

Type	Order No.	switching
HG120 HG120i	42042011 42042012	1 changeover switch for humidification or dehumidification
HG120S	42042013	with adapter plug 1x normally closed contact (hum) 1x normally open contact (dehum)
HG120-2 HG120-2i	42042221 42042222	2x changeover switch with neutral zone (adjustable) 2x humidification or dehumidification 1x humidification and 1x dehumidification

Note:
Moving the adjuster screw nullifies the guarantee.

Slot diagram

HG120

Set value adjusting knob

$F_x > F_w \leftrightarrow F_x < F_w$

ON

OFF

approx. 5%rh

$\varphi <$

1 2 4 5

230VAC 5(2)A

HG120-2

Set value relative to adjusting knob

$F_x > F_w \leftrightarrow F_x < F_w$

ON

OFF

approx. 5%rh

approx. 5%rh

adjustable zone between the steps

$\varphi <$

1 2 4 5 6 7

230VAC 5(2)A

F_x rel. humidity of the air (process value)
 F_w adjusted humidity at the set value generator (set value).
 If the rel. humidity F_x falls below the adjusted set value F_w , then contact 1/4 [7/5] opens and contact 1/2 [7/6] closes.

Adjusting the 2nd set value

The hygrostats HG120-2(i) are set by the factory such that the 2nd set value is 6%rh higher than the 1st set value. The neutral zone (distance between the 1st and 2nd set value) can be adjusted after removing the housing cover using a screwdriver. If turned to the right the 2nd set value goes up, if turned to the left it goes down. As soon as the colour points of the 2nd set value regulator are facing, both microswitches are switching at the same time. The neutral zone can be read using the rotary knob.

Mounting

- > The hygrostats must not come into direct contact with water, e.g. splashed water when cleaning the climatic chamber etc.
- > The mounting location should be chosen so that a representative measurement of the air humidity can be guaranteed, i.e. the humidity readings at the mounting location should correspond to those in the room as far as possible.
- > The hygrostat should be exposed to the flow of air.

Influence of the relative air humidity

at a temperature fluctuation of $\pm 1^\circ\text{C}$ referred to various room temperatures.

	10°C	20°C	30°C	50°C
10%rh	$\pm 0,7\%rh$	$\pm 0,6\%rh$	$\pm 0,6\%rh$	$\pm 0,5\%rh$
50%rh	$\pm 3,5\%rh$	$\pm 3,2\%rh$	$\pm 3,0\%rh$	$\pm 2,6\%rh$
90%rh	$\pm 6,3\%rh$	$\pm 5,7\%rh$	$\pm 5,4\%rh$	$\pm 4,6\%rh$

It is thus of extreme importance that the temperature is constant for measurements of the relative air humidity. The air must be homogenous, e.g. possess constant humidity and temperature for the whole duration of the measurement.

The measurement location of the humidity controller should be selected such that there is no build-up of condensate on or in the device. This applies particularly for operation with a voltage higher than 48V. If the voltage is higher, there is a risk of voltage arcing in the event of water condensation on the microswitch or connecting terminals which might destroy the controller. In the case of voltage below 48V, the humidity controller can be used up to 100%RH. The humidity controller should not be used in aggressive media.