

**On-wall hygrometers and humidity sensors ( $\pm 2.0\%$ ),  
electronic, one-step,  
with switching outputs**

Electronic hygrometer and humidity sensor **HYGRASREG® AH-40** with one switching output, adjustable switching threshold and display for displaying ACTUAL humidity (accuracy class  $\pm 2.0\%$  RH) and for setting the target humidity.

It is suitable for controlling and monitoring the relative air humidity, e.g. in laboratories, production rooms, climatic exposure test cabinets, swimming pools, greenhouses etc., for controlling humidifying and dehumidifying facilities. The measuring transducers are designed for exact detection of humidity. The AH-40 uses a digital, long-term stable sensor as a measuring element for measuring humidity. It is used in dust-free, unpolluted, non-aggressive air.

**AH-40**  
with display and  
metal sinter filter  
(optional)



**TECHNICAL DATA**

Power supply:	24 V AC ( $\pm 20\%$ ) 15...36 V DC
Power consumption:	< 1.1 VA / 24 V DC < 2.2 VA / 24 V AC
Sensors:	<b>Digital humidity sensor</b> , small hysteresis, high long-term stability
Sensor protection:	<b>Plastic</b> sinter filter, $\varnothing$ 16 mm, L = 35 mm, exchangeable (optional <b>metal</b> sinter filter, $\varnothing$ 16 mm, L = 32 mm)
Setting range:	5...95 % RH
Output:	potential-free changeover contact (24 V), 1 A ohmic load
Accuracy, humidity:	typically $\pm 2.0\%$ (20...80 % RH) at +25 °C, otherwise $\pm 3.0\%$
Ambient temperature:	storage -35...+85 °C; operation -30...+75 °C, non-precipitating
Long-term stability:	$\pm 1\%$ per year
Housing:	Plastic, UV-resistant, material polyamide, 30 % glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent!
Housing dimensions:	72 x 64 x 43.3 mm (Tyr 1 with display)
Electrical connection:	0.14 - 1.5 mm <sup>2</sup> , via terminal screws
Cable connection:	<b>Cable gland</b> , plastic (M 16 x 1.5; with strain relief, exchangeable, max. inner diameter 10.4 mm) <b>or</b> <b>M12 connector</b> according to DIN EN 61076-2-101 (optional on request)
Protective tube:	<b>stainless steel V2A</b> (1.4301), $\varnothing$ 16 mm, NL = 55 mm
Prozessanschluss:	by screws
Protection class:	III (according to EN 60730)
Protection type:	<b>IP65</b> (according to EN 60529) Housing tested, TÜV SÜD, Report No. 713139052 (Tyr 1)
Standards:	CE conformity according to EMC directive 2014/30/EU
Display:	<b>two-line display with illumination</b> , cutout approx. 36 x 15 mm (W x H), for displaying actual humidity and for setting the target humidity
Displaying:	The 1 <sup>st</sup> line of the display shows the <b>relative humidity</b> . The 2 <sup>nd</sup> line shows on the left side the information regarding the <b>switching status of the relay</b> (as a circuit), as well as the <b>switching value</b> readout in % RH on the right side (adjustable using the set potentiometer).  ○ <b>Circuit, empty</b> = relay in idle state ● <b>Circuit, full</b> = relay energised
<b>FUNCTION</b>	<b>actual humidity &lt; switching value</b> contact 11-12 closed (LED OFF)  <b>actual humidity &gt; switching value</b> contact 11-13 closed (LED ON)

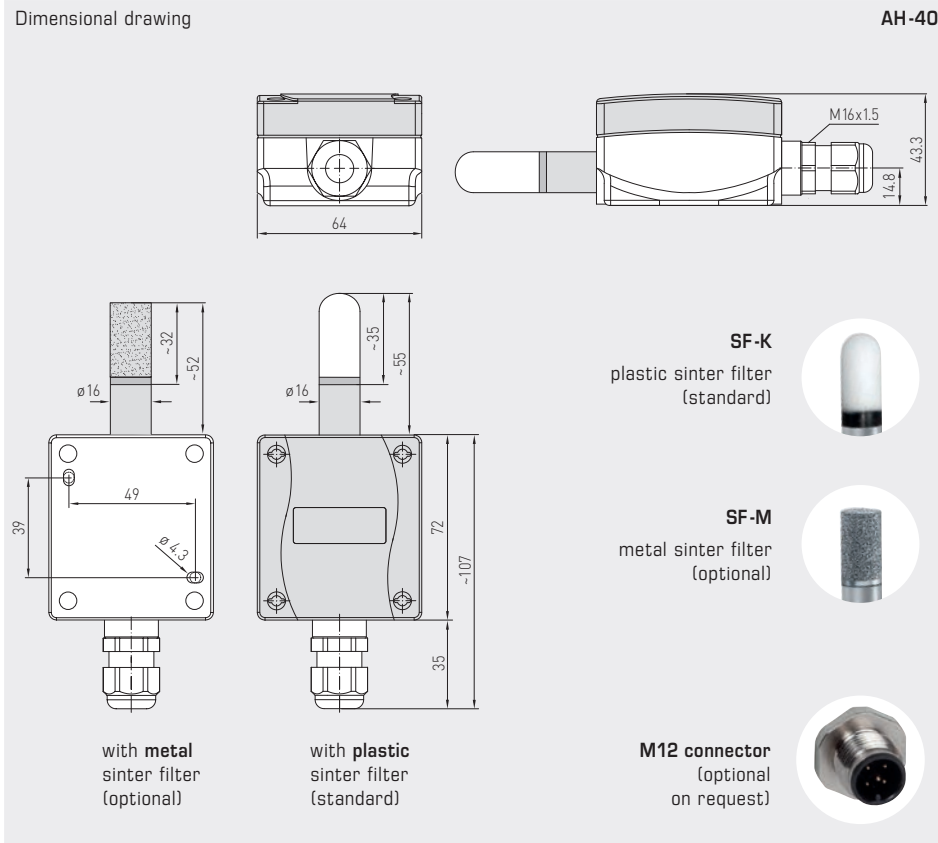




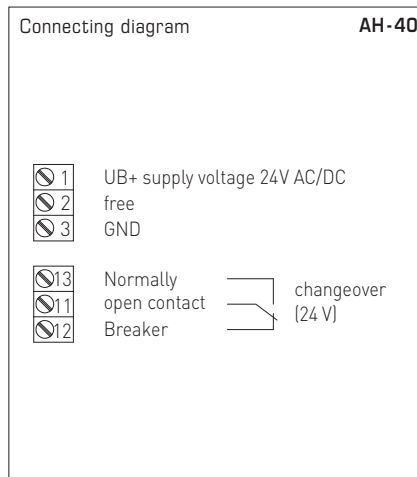
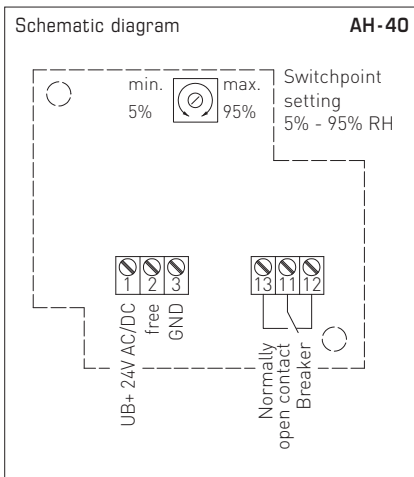
S+S REGELTECHNIK

HYGRASREG® AH-40

On-wall hygrometers and humidity sensors ( $\pm 2.0\%$ ),  
electronic, one-step,  
with switching outputs



**AH-40**  
with display and plastic sinter filter (standard)



HYGRASREG® AH-40 On-wall hygrometers and humidity sensors ( $\pm 2.0\%$ ), <i>Premium</i>						
Type / WG01	Setting Range Humidity	Output	Steps	Display	Item No.	Price
<b>AH-40-U</b>						
AH-40W LCD	5...95% RH	1 x Changeover contact	one-step	■	1202-1065-0221-000	<b>200,15 €</b>
Optional:	Cable connection with <b>M12 connector</b> according to DIN EN 61076-2-101					on request
ACCESSORIES						
<b>SF-M</b>	<b>Metal sinter filter</b> , $\varnothing$ 16 mm, L = 32 mm, exchangeable stainless steel <b>V4A</b> (1.4404)				7000-0050-2200-100	<b>46,70 €</b>