

# TEMPERATURE, HUMIDITY REGULATORS H30xx WITH RELAY OUTPUTS

## APPLICATIONS - temperature and humidity control and monitoring:

in building management and automation, warehouses, glasshouses, air-conditioned rooms, museums, archives, galleries, weather stations



Note: cable glands location of particular models may differ

Humidistats are designed for two-state control of e.g. heating, ventilation, humidifier, dehumidifier, etc. Transmitter is equipped with two relay outputs for alarm indication or control of external devices. Each relay can be assigned to any measured or computed value. For each relay setting of delay, hysteresis, audible alarm is enabled.

Measured temperature and relative humidity is recalculated to other humidity interpretations - dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy.

Parameters are easy adjustable from regulator keyboard or from the computer. Large dual line LCD for simultaneous display of temperature, relative humidity or other calculated humidity interpretation is an advantage.

State-of-the-art capacitive polymer sensor ensures excellent calibration long term stability, inertia against water and condensation. Transmitter is designed for use in non-aggressive environment.

**Models H3061P and H3021P are designed for compressed air measurement up to 25 bars.**

### TECHNICAL PARAMETERS

Maximum switching voltage, current of relay output - models H3060, H3061:	250Vac, 8A, 2000VAac	<b>New !</b>
Maximum switching voltage, current of relay output - models H3020, H3021, H3023:	50V, 2A, 60VA	
Audible alarm:	from built-in beeper - switchable	
Supported temperature units:	degrees Celsius, degrees Fahrenheit	
Range of relative humidity measurement:	0 to 100%	
Accuracy of relative humidity measurement:	±2.5% relative humidity from 5 to 95% at 23 °C	
Accuracy of temperature measurement:	±0.4 °C from -30 to +100 °C, ±0.4% from reading over +100 °C	
Accuracy and range of dew point temperature:	±1.5 °C at ambient temperature < 25 °C and RH > 30%, range -60 to +80 °C	
Accuracy and range of absolute humidity:	±3g/m <sup>3</sup> at ambient temperature T < 40 °C, range 0 to 400 g/m <sup>3</sup>	
Accuracy and range of specific humidity:	±2g/kg at ambient temperature T < 35 °C, range 0 to 550 g/kg	
Accuracy and range of mixing ratio:	±2g/kg at ambient temperature T < 35 °C, range 0 to 995 g/kg	
Accuracy and range of specific enthalpy:	± 3kJ/kg at ambient temperature T < 25 °C, range: 0 to 995 kJ/kg	
Operating temperature range of case with electronics:	-30 to +80 °C	
Operating temperature range of LCD display:	readable up to operating temperature +70 °C	
Range of temperature compensation of RH sensor:	-30 to +125 °C	
Filtering ability of sensor cover:	0.025mm (air filter from stainless steel mesh)	
Power - models H3060, H3061:	110 to 240V/50 to 60Hz	<b>New !</b>
Power - models H3020, H3021, H3023:	9-30Vdc	
Dimensions of the case without glands (W x H x D):	135 x 136 x 45 mm	
Protection:	IP65 electronics with terminals, IP40 humidity and temperature sensors.	

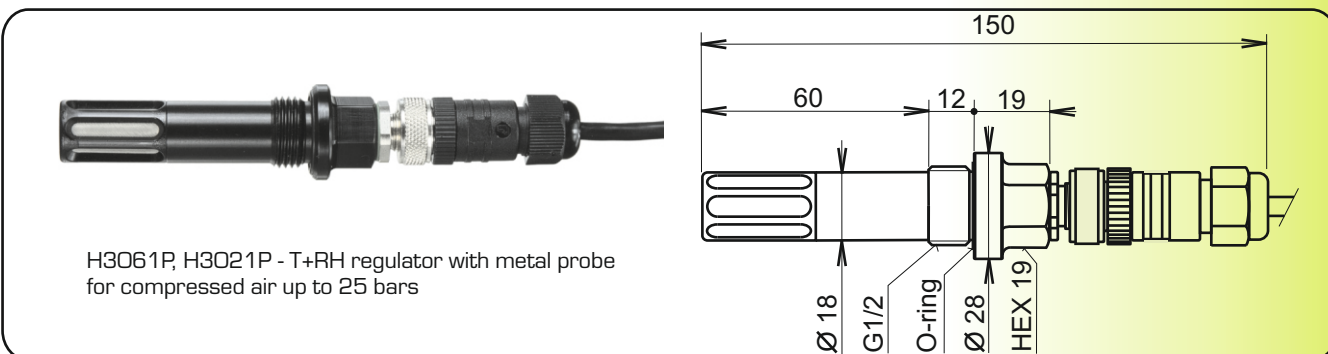
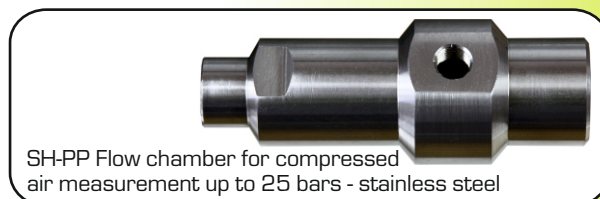
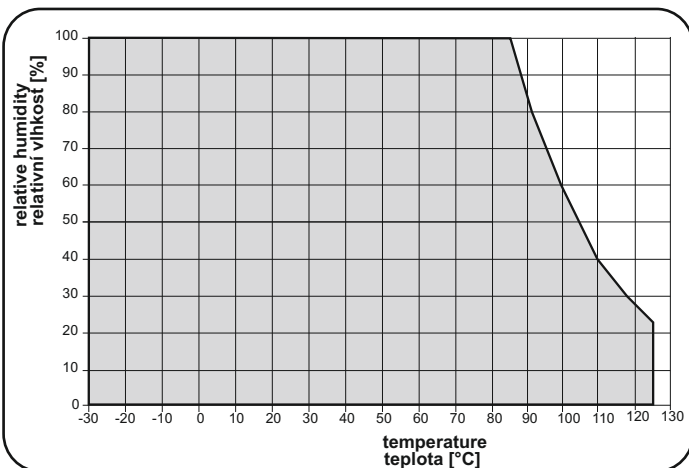
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## AVAILABLE MODELS:

MODEL	MEASURED VALUE	MAXIMUM MEASURING TEMPERATURE	STEM LENGTH	OUTPUT	DESCRIPTION
H3060	temperature+humidity	-30 to +80 °C	75mm	2x relay	<b>Thermostat-Humidistat</b> - outdoor indoor use
H3061	temperature+humidity	-30 to +105 °C <sup>1)</sup> probe including cable	probe cable 1,2,4m	2x relay	<b>Thermostat-Humidistat</b> - T+RH probe of 18mm diameter, 88mm length with 1m cable. Cable lengths 2m or 4m available optionally.
H3061P	temperature+humidity up to 25bars	-30 to +105 °C <sup>1)</sup> probe including cable	probe cable 1,2,4m	2x relay	<b>Thermostat-Humidistat</b> with compressed air probe up to 25 bars. T+RH metal probe with 1m cable. Cable lengths 2m or 4m available optionally. G1/2 thread.
H3020	temperature+humidity	-30 to +80 °C	75mm	2x relay	<b>Thermostat-Humidistat</b> - outdoor indoor use
H3023	temperature+humidity	-30 to +125 °C <sup>1)</sup>	150mm	2x relay	<b>Thermostat-Humidistat</b> - for duct mounting
H3021	temperature+humidity	-30 to +105 °C <sup>1)</sup> probe including cable	probe cable 1,2,4m	2x relay	<b>Thermostat-Humidistat</b> - T+RH probe of 18mm diameter, 88mm length with 1m cable. Cable lengths 2m or 4m available optionally.
H3021P	temperature+humidity up to 25bars	-30 to +105 °C <sup>1)</sup> probe including cable	probe cable 1,2,4m	2x relay	<b>Thermostat-Humidistat</b> with compressed air probe up to 25 bars. T+RH metal probe with 1m cable. Cable lengths 2m or 4m available optionally. G1/2 thread.

- 1) Maximum temperature range for models with T+RH probe on the cable is valid for the whole T+RH probe including the cable. Near plastic case with electronics maximum temperature is +80 °C. Relative humidity at temperature over +85 °C is limited in accordance with the graph.



**Included accessories:** traceable calibration certificate from the manufacturer, instruction manual. Calibration certificate with declared metrological traceability of etalons is based on requirements of EN ISO/IEC 17025 standard. Free program TSensor for configuring of the transmitter is ready to download from [www.cometsystem.cz](http://www.cometsystem.cz)

**Other optional accessories:** - see further in catalog

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