

## Temperature and humidity regulator with RS485 output





Humidistat, thermostat with two relay outputs. Outdoor, indoor use. Built-in relative humidity, temperature sensors. Measured values are also converted to other humidity interpretation: dew point temperature, absolute humidity, specific humidity, mixing ratio, specific enthalpy. Three two-state inputs.

## **Technical data**

Accuracy ±0.4 °C Resolution 0.1 °C HUMIDITY SENSOR  Measuring range 0 to 100 % RH  Accuracy ±2.5 % RH from 5 to 95 % at 23 °C Resolution 0.1% RH  DEW POINT  Measuring range -60 to +80 °C  Accuracy ±1.5 °C at ambient temperature T <25 °C and RH >30 % Resolution 0.1 °C  RELAY OUTPUTS  Quantity 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Signal. Minimum pulse duration on binary input 500 ms  Voltage across open contact <3,3,3 V  Low voltage level 0 to +0.5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	TEMPERATURE SENSOR	
Resolution 0.1 °C HUMIDITY SENSOR  Measuring range 0 to 100 % RH  Accuracy ±2.5 % RH from 5 to 95 % at 23 °C Resolution 0.1% RH  DEW POINT  Measuring range -60 to +80 °C  Accuracy ±1.5 °C at ambient temperature T <25 °C and RH >3i %  Resolution 0.1 °C  RELAY OUTPUTS  Quantity 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Signal. Minimum pulse duration on binary input 500 ms  Voltage across open contact 3,3,3 V  Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 °C  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	Measuring range	-30 to +80 °C
HUMIDITY SENSOR  Measuring range  O to 100 % RH  Accuracy  Esolution  O.1% RH  DEW POINT  Measuring range  -60 to +80 °C  Accuracy  ±1.5 °C at ambient temperature T <25 °C and RH >30 %  Resolution  O.1 °C  RELAY OUTPUTS  Quantity  Quantity  Aximal current  Maximal power  BINARY INPUTS  Quantity  3 Signal for binary inputy  Ary contact, open collector or two-state voltage signal. signal. Signal sor binary inputs are not galvanically isolated.  Minimum pulse duration on binary input  Low voltage level  O to +0.5 V  High voltage level  +3.0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature  -30 to +80 °C	Accuracy	±0.4 °C
Measuring range 0 to 100 % RH  Accuracy ±2.5 % RH from 5 to 95 % at 23 °C  Resolution 0.1% RH  DEW POINT  Measuring range -60 to +80 °C  Accuracy ±1.5 °C at ambient temperature T <25 °C and RH >30 %  Resolution 0.1 °C  RELAY OUTPUTS  Quantity 2 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Minimum pulse duration on binary input 500 ms  Voltage across open contact 3,3 V  Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	Resolution	0.1 °C
Accuracy ±2.5 % RH from 5 to 95 % at 23 °C Resolution 0.1% RH  DEW POINT  Measuring range -60 to +80 °C  Accuracy ±1.5 °C at ambient temperature T <25 °C and RH >30 %  Resolution 0.1 °C  RELAY OUTPUTS  Quantity 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Abrilland are not galvanically isolated.  Minimum pulse duration on binary input 500 ms  Voltage across open contact 3,3 V  Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	HUMIDITY SENSOR	
Resolution 0.1% RH  DEW POINT  Measuring range -60 to +80 °C  Accuracy ±1.5 °C at ambient temperature T <25 °C and RH >30 °C  RESOlution 0.1 °C  RELAY OUTPUTS  Quantity 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. signal. Signal for binary inputy 500 ms  Voltage across open contact Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	Measuring range	0 to 100 % RH
DEW POINT  Measuring range  Accuracy  \$\frac{\text{\$\text{total ambient temperature T < 25 °C and RH > 30 °C }}{\$\text{\$\t	Accuracy	±2.5 % RH from 5 to 95 % at 23 °C
Measuring range Accuracy  #1.5 °C at ambient temperature T <25 °C and RH >30 %  Resolution  0.1 °C  RELAY OUTPUTS  Quantity  2  Maximal voltage  50 V  Maximal current  2 A  Maximal power  60 VA  BINARY INPUTS  Quantity  3  Signal for binary inputy  dry contact, open collector or two-state voltage signal. signal. Minimum pulse duration on binary input  500 ms  Voltage across open contact  < 3,3 V  Low voltage level  1 43,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature  -30 to +80 °C	Resolution	0.1% RH
Accuracy ±1.5 °C at ambient temperature T <25 °C and RH >30 %  Resolution 0.1 °C  RELAY OUTPUTS  Quantity 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Signal. Minimum pulse duration on binary input 500 ms  Voltage across open contact <3,3 V  Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	DEW POINT	
Resolution 0.1 °C  RELAY OUTPUTS  Quantity 2  Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Signal for binary inputy 500 ms  Voltage across open contact < 3,3 V  Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	Measuring range	-60 to +80 °C
RELAY OUTPUTS Quantity 2 Maximal voltage 50 V Maximal current 2 A Maximal power 60 VA BINARY INPUTS Quantity 3 Signal for binary inputy dry contact, open collector or two-state voltage signal. signal. Voltage across open contact Low voltage level High voltage level GENERAL TECHNICAL DATA Operating temperature  50 V 2 A Minimum pulse GENERAL TECHNICAL DATA Operating temperature  50 V A A A A A A A A A A A A A A A A A A A	Accuracy	$\pm 1.5$ °C at ambient temperature T <25 °C and RH >30 %
Quantity  Maximal voltage  50 V  Maximal current  2 A  Maximal power  60 VA  BINARY INPUTS  Quantity  3  Signal for binary inputy  dry contact, open collector or two-state voltage signal. signal. Minimum pulse duration on binary input  500 ms  Voltage across open contact  Low voltage level  43,3 V  Low voltage level  43,0 to +0,5 V  High voltage level  500 ms  CENERAL TECHNICAL DATA  Operating temperature  -30 to +80 °C	Resolution	0.1 °C
Maximal voltage 50 V  Maximal current 2 A  Maximal power 60 VA  BINARY INPUTS  Quantity 3  Signal for binary inputy dry contact, open collector or two-state voltage signal. Signal for binary inputy 500 ms  Voltage across open contact < 3,3 V  Low voltage level 0 to +0,5 V  High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	RELAY OUTPUTS	
Maximal current  Maximal power  Maximal power  BINARY INPUTS  Quantity  Signal for binary inputy  Minimum pulse duration on binary input  Voltage across open contact  Low voltage level  High voltage level  GENERAL TECHNICAL DATA  Operating temperature  2 A  60 VA  3  dry contact, open collector or two-state voltage signal. dry contact, open collector or two-state voltage signal. 4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  500 ms  4 your contact, open collector or two-state voltage signal. 500 ms  500 ms  6 your contact, open collector or two-state voltage signal. 500 ms  7 your contact, open collector or two-state voltage signal. 500 ms	Quantity	2
Maximal power  BINARY INPUTS Quantity  Signal for binary inputy  Minimum pulse duration on binary input  Voltage across open contact  Low voltage level  High voltage level  GENERAL TECHNICAL DATA  Operating temperature  60 VA  3  dry contact, open collector or two-state voltage signal. dry contact, open collector or two-state voltage signal. 47  BINARY INPUTS  3  dry contact, open collector or two-state voltage signal. 47  BINARY INPUTS  3  47  47  47  47  47  47  47  47  47	Maximal voltage	50 V
BINARY INPUTS  Quantity  Signal for binary inputy  Signal for binary inputy  Minimum pulse duration on binary input  Voltage across open contact  Low voltage level  High voltage level  GENERAL TECHNICAL DATA  Operating temperature  3  dry contact, open collector or two-state voltage signal. signal. Signal contact, open collector or two-state voltage signal. 9 ignal contact, open contact	Maximal current	2 A
Quantity  Signal for binary inputy  Minimum pulse duration on binary input  Voltage across open contact  Low voltage level  High voltage level  GENERAL TECHNICAL DATA  Operating temperature  3  dry contact, open collector or two-state voltage signal. 500 ms  500 ms  0 to +0,5 V  +3,0 to +30 V  -30 to +80 °C	Maximal power	60 VA
Signal for binary inputy  dry contact, open collector or two-state voltage signal. Minimum pulse duration on binary input  500 ms  Voltage across open contact  Low voltage level  High voltage level  GENERAL TECHNICAL DATA  Operating temperature  dry contact, open collector or two-state voltage signal. 0 to +0,5 Inputs are not galvanically isolated.  0 to +0,5 V  +3,0 to +30 V  -30 to +80 °C	BINARY INPUTS	
signal. Minimum pulse duration on binary input Voltage across open contact Low voltage level High voltage level GENERAL TECHNICAL DATA Operating temperature signal. 500 ms < 3,3 V 0 to +0,5 V +3,0 to +30 V -30 to +80 °C	Quantity	3
Voltage across open contact  Low voltage level  High voltage level  GENERAL TECHNICAL DATA  Operating temperature  -30 to +80 °C	Signal for binary inputy	
Low voltage level 0 to +0,5 V High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	Minimum pulse duration on binary input	500 ms
High voltage level +3,0 to +30 V  GENERAL TECHNICAL DATA  Operating temperature -30 to +80 °C	Voltage across open contact	< 3,3 V
GENERAL TECHNICAL DATA  Operating temperature  -30 to +80 °C	Low voltage level	0 to +0,5 V
Operating temperature -30 to +80 °C	High voltage level	+3,0 to +30 V
3 - 1	GENERAL TECHNICAL DATA	
Channels internal temperature and humidity sensor	Operating temperature	-30 to +80 °C
	Channels	internal temperature and humidity sensor

Counted values	dew point, absolute humidity, specific humidity, mixing ratio, specific enthalpy
Acoustic alarm	from built-in beeper - switchable
Output	RS485
Range of humidity sensor temperature compensation	all temperature range
Available temperature units	degrees Celsius, degrees Fahrenheit
Communication protocol	ModBus RTU, ARION, Advantech ADAM
Power	9-30 Vdc
Protection class	IP65 electronics; IP40 sensors
Dimensions	136 x 159 x 45 mm; length/diameter of external probe 88/18 mm
Weight	approx. 500 g
Warranty	3 years