

RHS301/302

Relative Humidity and Temperature Detectors

The RHS301 and RHS302 are highly accurate and highly reliable humidity detectors that use the latest polymer humidity sensor for superior sensing, response and reproducibility.

Each RHS sensor has a built-in temperature sensor, measuring temperature, calculating relative humidity and transmitting a 1 to 5V or 4 to 20mA output signal.



Specifications

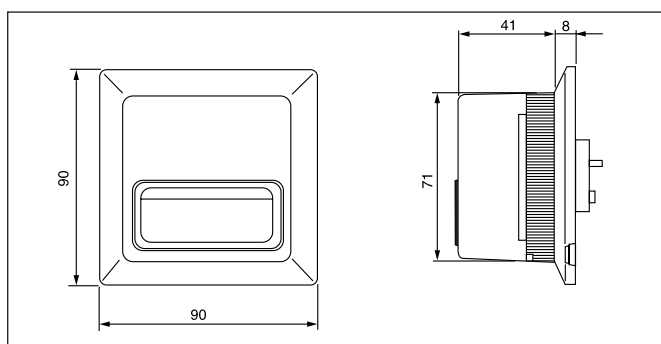
Model No.		RHS301	RHS302
Type		Indoor wall-mount type	Insertion mounting type
Sensor	Humidity	Polymer (high molecular film)	Polymer (high molecular film)
	Temperature	DIN PT100Ω	DIN PT100Ω
Measuring range	Humidity	0 to 100% RH (no condensation allowed)	0 to 100% RH (no condensation allowed)
	Temperature	0 to 50°C	-20 to +80°C
Accuracy	Humidity	0 to 80% RH: ±2% RH 80 to 100% RH: ±3% RH (at 20°C)	0 to 80% RH: ±2% RH 80 to 100% RH: ±3% RH (at 20°C)
	Temperature	±0.2°C (at 20°C)	±0.2°C (at 20°C)
Hysteresis	Humidity	1% RH max.	1% RH max.
	Temperature	0.1°C max.	0.1°C max.
Output	Humidity	1 to 5Vdc linear external load resistance 10kΩ min.	4 to 20mAdc external load resistance 500Ω max.
	Temperature	1 to 5Vdc linear external load resistance 10kΩ min.	4 to 20mAdc external load resistance 500Ω max.
Operating temperature		Case: -5 to +55°C, Sensor: -20 to +80°C	
Power		12Vdc	24Vdc
Power consumption		120mW max.	800mW max.
Mass		120g	500g

Selection Guide

Model No.	Description
RHS301	0 to 100% RH, 0 to 50°C
RHS302	0 to 100% RH, -20 to +80°C

Dimensions

(Unit: mm)



SENSORS

WN790A

12/24Vdc Power Supply for RHS301/302

Specifications

Frequency	47 to 440Hz
Rated power	100Vac, (90 to 132Vac)
Rated output voltage and current	WN790A101: 12Vdc 1.2A, WN790A105: 24Vdc 0.6A
Overcurrent protection	Rectangular current limit (automatic reset)
Overvoltage protection	Squelch type
Inrush current prevention	Resistance type
Ambient temperature	0 to 71°C
Ambient humidity	30 to 85%RH
Power consumption	15W max.
Mass	Approx. 250g

Selection Guide

Model No.	Specifications
WN790A101	12Vdc power supply (output voltage)
WN790A105	24Vdc power supply (output voltage)



Dimensions

(Unit: mm)

