PROTRONIX
SENSE & EASY

ADS-RH-24 | Relative humidity sensor 24V

ADS-RH-24 is used to control ventilation, heat recovery and air conditioning systems. It can also be used for relative humidity (RH) measuring in industry, warehouses and likewise.

〉 relative humidity measuring
〉 analog output 0 - 10 VDC (0-100% RH)
〉 output relay
〉 fully calibrated
〉 good long-term stability
〉 easy wall mounting

Description:

ADS-RH is a capacitive relative humidity (RH) sensor. It is equipped with an output relay with adjustable switching level and with 0 - 10 V analog output. The measurement is performed periodically after about 7s.

Based on these measurements it is possible to directly control the ventilation, air conditioning and heat recovery units.
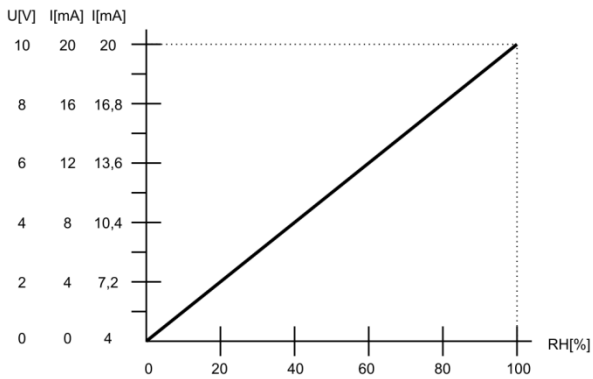
Table of parameters:

Parameter	Value	Unit
Supply voltage range	14 – 24 24	V DC V AC
Input	max. 1	VA
Measuring range	0 – 100 %	RH
Resolution	0,5 %	RH
Accuracy	±4 % in range of 20 – 80 % RH	
Measurement period	7	s
Voltage output	0 – 10	V DC
Current output 1	0 – 20	mA
Current output 2	4 – 20	mA
Switched voltage	max. 250	V AC
Switched current	max. 5	A
Switching hysteresis	1,5	V
Working temperature	0 to +40	°C
Working humidity	0 to 100 %	RH
Storage temperature	-20 to +60	°C
Dimensions	125x83x37	mm

Explanation of abbreviations and technical terms can be found on our website in the Glossary section.
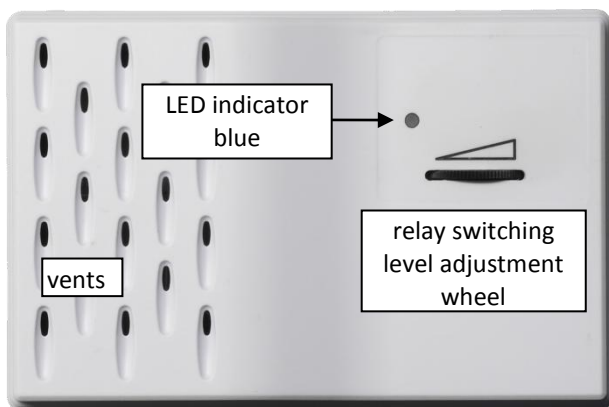
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Output voltage/current dependence graph:

Front view:

Relay switching level adjustment wheel:

- turn to the left to decrease the relay switching level of RH, the relay will switch at lower RH level

- turn to the right to increase the relay switching level of RH, the relay will switch at higher RH level

To avoid fast relay switching around the adjusted level the hysteresis of 15% is added automatically.

LED indicator:

Blue

− continuous light = relay contacts closed
− no light = relay contacts opened

Blue LED indicator settings - jumper JP4:

JP4 fitted = blue LED enabled.
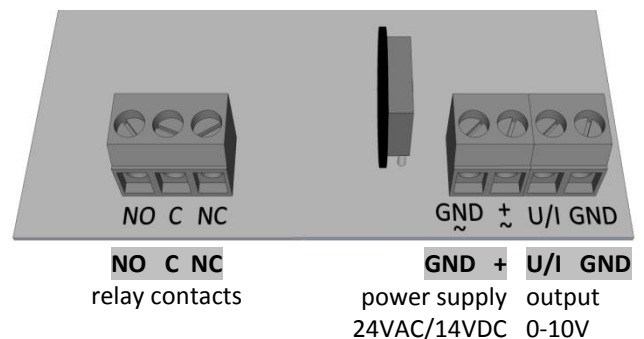JP4 not fitted = blue LED disabled.

Voltage / current output setting - jumper JP5:

Jumper in position 1-2 = voltage output.
Jumper in position 2-3 = current output.

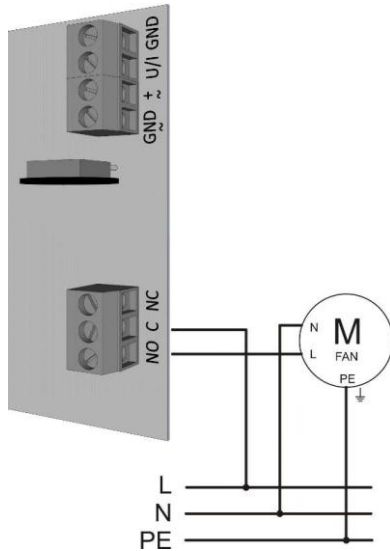**Jumper JP1 current output setting:**

JP1 fitted = output current range 4-20mA.
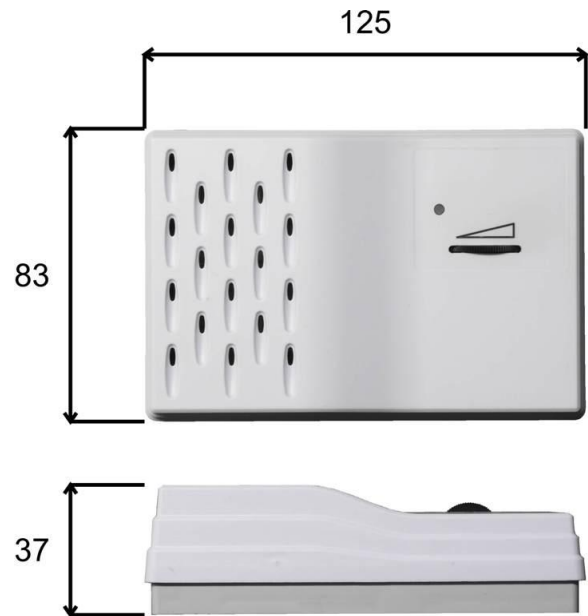JP1 not fitted = output current range 0-20mA.

Terminals:

NO C NC		**GND +**	**U/I GND**
relay contacts		power supply 24VAC/14VDC	output 0-10V

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Connection example:

Dimensions (mm):

Way to use

The product is intended for indoor use only. You can read the [recommendations for sensor placement](#) on our web pages.

What to do at the end of lifetime of this product

Discard the product in according to the electronic waste law and the EU directives.

The producer reserves the right of technical changes in order to product improvements its properties and functions without previous notice.