

ADS-RH-D | Duct mounted relative humidity sensor

ADS-RH-D is used to control ventilation, heat recovery and air conditioning systems by measuring relative humidity in the air duct.

- > relative humidity measuring
- > analog voltage / current output
- > output relay
- > fully calibrated
- > long-term stability



Description:

ADS-RH-D is a capacitive relative humidity (RH) sensor. It is equipped with an output relay with adjustable switching level and with analog 0-10V voltage / 0-20mA (4-20mA) current output. The measurement is performed periodically after about 8s.

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

Table of parameters:

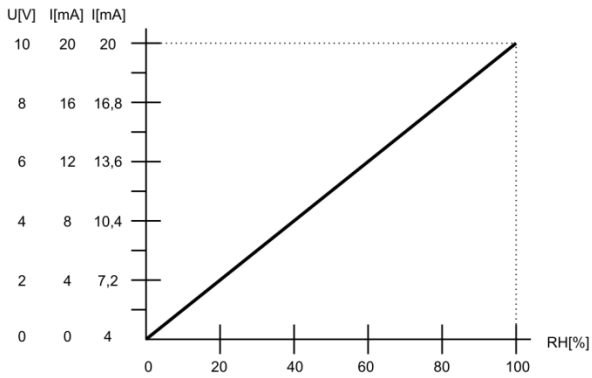
Parameter	Value	Unit
Supply voltage range	14 - 30	V DC
	18 - 30	V AC
Power consumption	1	VA
Operating range	0 – 100 %	RH
Accuracy 20 – 80 %	±4 %	RH
Accuracy 0 – 100 %	±6 %	RH
Measuring period	8	s
Voltage output	0 – 10	V DC
Current output 1	0 – 20	mA
Current output 2	4 – 20	mA
Max. switching voltage	max. 250	V AC
Max. switching current	max. 5	A
Working temperature	0 to +40	°C
Storage temperature	-20 to +60	°C
Storage humidity	5 to 90 %	RH
Protection	IP20	-
Dimensions	257x100x60	mm

Explanation of abbreviations and technical terms can be found on our website in the [Glossary](#) section.

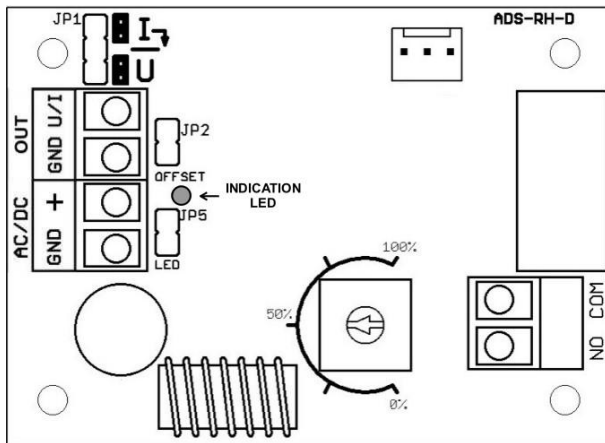


ADS-RH-D | Duct mounted relative humidity sensor

Output voltage/current dependence graph:



Internal layout:



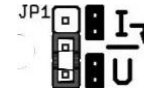
Relay switching level adjustment trimmer:

- 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

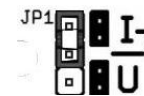
To avoid fast relay switching around the adjusted level the hysteresis of 15% is added automatically.

Voltage / current output petting - jumper JP1:

Jumper in position U = voltage output.



Jumper in position I = current output.



Current output petting - jumper JP2:

Jumper fitted = output 4-20mA.



Jumper not fitted = output 0-20mA.



LED indication:

Blue

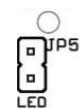
- relay contacts closed = indication is on
- relay contacts opened = indication is off

LED indication setting - jumper JP5:

Jumper fitted = LED enabled.

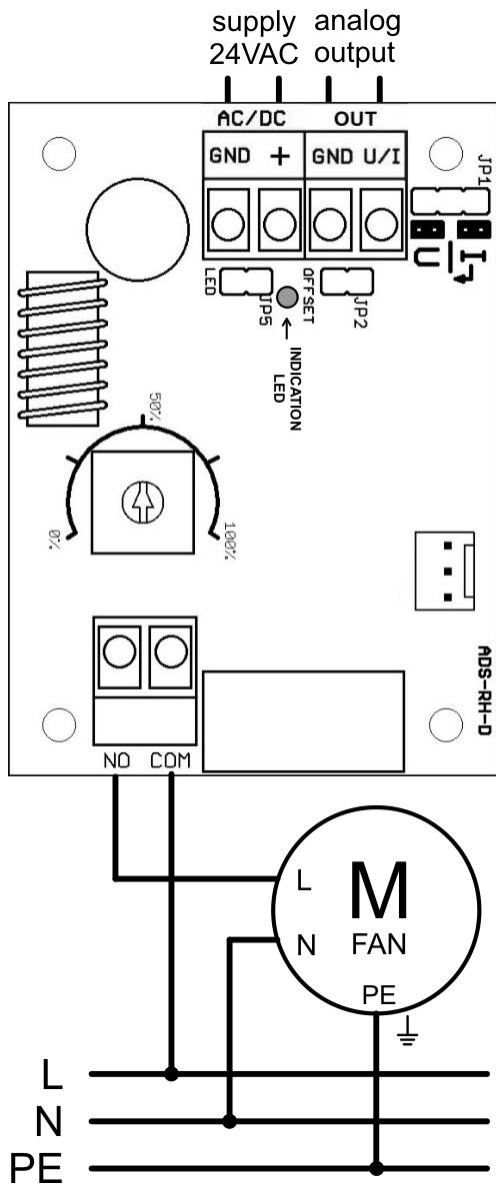


Jumper not fitted = LED disabled.

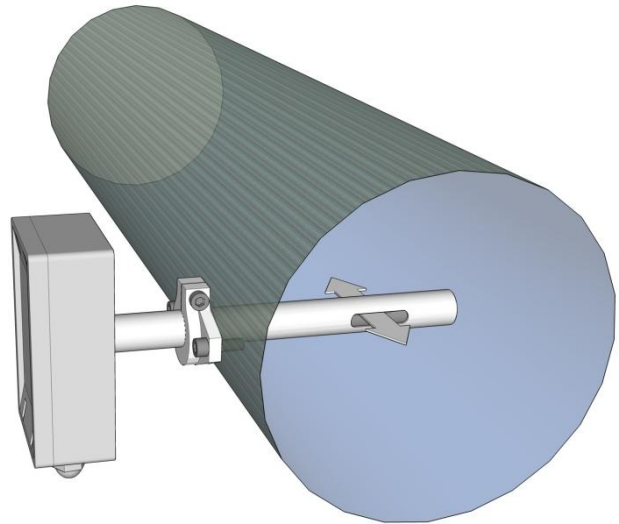


ADS-RH-D | Duct mounted relative humidity sensor

Connection example:

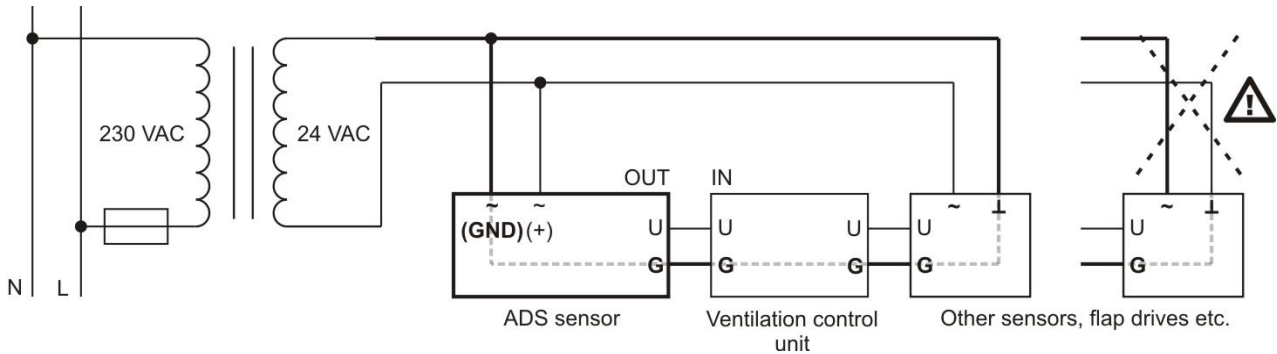


Installation:

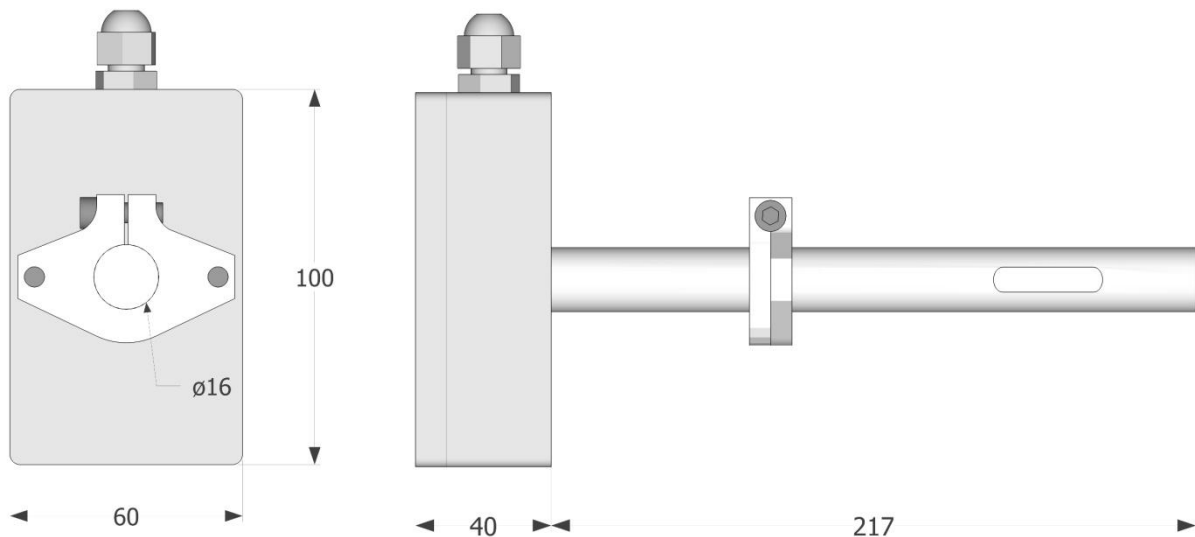


ADS-RH-D | Duct mounted relative humidity sensor

If you connect other devices to the same AC power source as the ADS sensor, it is necessary to meet GND wiring of all analog inputs and outputs, as well as power wires.



Dimensions (mm):



Way to use

The product is intended for indoor use only.

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.

