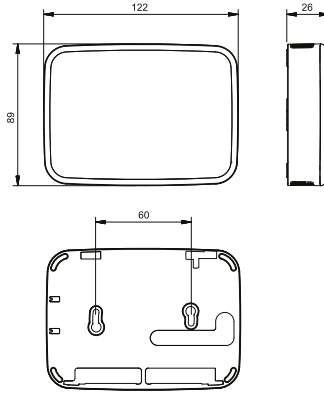


AIRSENS



IAQ (air quality)
level indication



IR method
CO2

Intelligent independent spatial sensors of carbon dioxide CO₂, free organic compounds VOC, relative humidity RH and temperature TEMP. CO₂, VOC and RH sensors enable temperature measurement at the same time (only via Modbus). These sensors are specially developed for controlling DCV systems and intelligent ventilation systems and intended for use in offices, classrooms, shopping centers, restaurants, homes, fitness centers and other commercial and non-commercial

objects. Protection IP30.

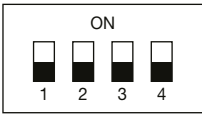
- easy installation, wall mount
- they do not require maintenance during operation
- long-term durability and stability

Operation is possible in 4 modes:

- switching output relay and Modbus (reading)
- 0–10V output and Modbus (read)
- 2–10V output and Modbus (read)
- Modbus full control

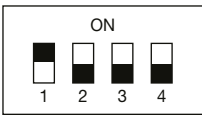
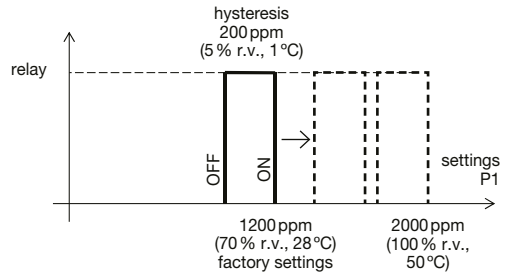
Intelligent CO₂, VOC, RH and TEMP sensors enable:

- work point setting
- indication of the IAQ level (air quality) with three colored LED lights located on the bottom of the sensor
green – good
orange – deteriorated
red – bad

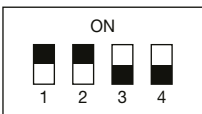
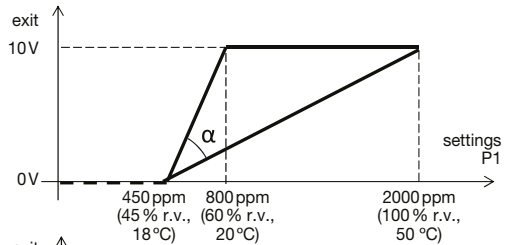


MODE 1: relay + Modbus (read)
relay switching setting by potentiometer P1

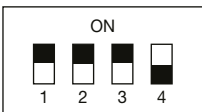
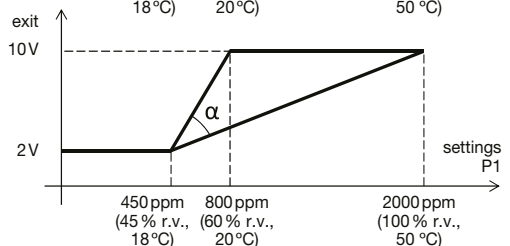
Status indication
green – lower than the set value
red – higher than the set value



MODE 2: 0–10V + Modbus (read)
adjustment of the measuring range using the angle α by potentiometer P1



MODE 3: 2–10V + Modbus (read)
adjustment of the measuring range using the angle α by potentiometer P1



MODE 4: Modbus control
access to all operating modes and parameters via the Modbus protocol (see user manual). There must be a position for AIRSENS-TEMP 5 and 6 in the ON position.

| | |
|---|----------------------|
| AIRSENS | |
| power supply range tension | 100V–240V AC |
| max. current | 0.01 A |
| average consumption | 0.7W |
| exit (max current 5 mA) | 0–10V DC 2–10V DC |
| relay – max. switching voltage | 250V AC |
| relay – max. switching current | 3A |
| ambient temperature | 0–50 °C |
| environmental humidity without condensation | 10–95 % |
| life expectancy | min. 10 years |
| degree of pollution | 2 |
| protection | class II |
| dimensions | 122 × 89 × 26 mm |
| mass | 150 g |

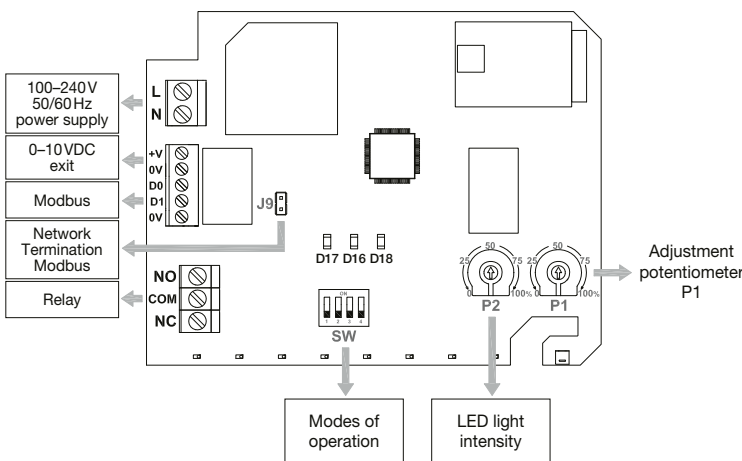
| | |
|--|--------------------------|
| AIRSENS-CO2 | |
| CO ₂ measuring range and measurement accuracy | 450–2000 ppm ± 50 ppm |
| CO ₂ relay hysteresis | 200 ppm |
| T measuring range | -10 until +50 °C |
| T measurement accuracy | ± 0,3 °C |

| | |
|-------------------------|------------------|
| AIRSENS-RH | |
| RH measuring range | 0–100 % RV |
| RH measurement accuracy | ±2 % RV |
| T measuring range | -10 until +50 °C |
| T measurement accuracy | ± 0,3 °C |

| | |
|--------------------------|--|
| AIRSENS-VOC | |
| VOC measuring range | 450–2000 ppm (CO ₂ equivalent) |
| VOC measurement accuracy | ± 100 ppm |
| T measuring range | -10 until +50 °C |
| T measurement accuracy | ± 0,3 °C |

| | |
|------------------------|---|
| AIRSENS-TEMP | |
| tempering time | 30 seconds (15 minutes for stabilization of the first temperature measurement after connecting the power supply) |
| T measuring range | 0 until +50 °C |
| T measurement accuracy | ± 0,4 °C |

Supplementary image



Also available wireless design
AIRSENS-RF
more information at
www.elektrodesign.cz

