CO₂ sensor
Type A2G-85

Applications

- The CO₂ sensing system uses real time CO₂ measurements to determine actual occupancy during the day. A system using the CO₂ sensor adjusts outside air delivery to provide only the amount of ventilation needed, thus virtually eliminating 100% of excessive amount of outside air used in a building.
- For the CO₂ measurement, a "Non Dispersive InfraRed (NDIR)" technology with automatic self-calibration is used.

Special Features

- Easy installation
- Maintenance-free
- Compact and robust design
- Standard offering includes mounting flange

Standard Features

Wherever people are staying in rooms, the CO₂ concentration is an evident indicator for the room quality. The higher the CO₂ content, the worse the air quality.

Design standards
Per 2004/108/EC Electromagnetic compatibility
Product safety: 2001/95/EC Product safety
EMC: EN 60730-1:2002
Product safety: EN 60730-1:2002

Analog outputs
0 ... 10 V, analog output max. 10 mA

Temperature dependency
<0.2 % of the full scale value every 1.8 °F

Accuracy
Typically ±40 ppm + 4% of the measured value

Permissible temperature
Ambient: +32 ... +122 °F
Operation: +32 ... +122 °F, max. 85% rH, non-condensing

Ingress protection
IP 20 per EN 60529 / IEC 529

Weight
approx. 2.9 lbs
Standard features

**CO₂ sensor**
- 0 ... 2000 ppm (parts per million)
- Sensor functional principle: NDIR (non dispersive infrared)

**Housing**
- Connection head: PC, 120 x 120 x 85 mm, with cover (crystal-clear)
- Sensor tube: Steel, galvanized, length 11.89", Ø1.18", incl. mounting flange

**Electrical connection**
- PG gland M16

**Supply voltage**
- DC 15 ... 24 V (±10 %) or AC 24 V (±10 %) safety extra-low voltage (SELV)

**Power consumption**
- max. 3 W / max. 6 VA

**Installation instructions**

The instruments are supplied in an operational status. The instrument is already equipped with a 1.5 m long connection cable and there is no need to open it. If an opening of the cover becomes necessary, make sure that the case is hermetically sealed again afterwards.

The mounting to the ventilation duct is made by means of the flange included (mounting screws are not included)

**Options**

- LC display for indicating the measured values and parameter settings
- 3 LEDs for displaying the CO₂ content
  - 0 ... 750 ppm: Green LED is on = good
  - 751 ... 1250 ppm: Yellow LED is on = moderate
  - 1251 ... 2000 ppm: Red LED is on = poor

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**Mounting flange**

**Connection cable 5 feet**

**Air velocity max. 1968 FPM**
Dimensions in inches

Ordering information
Model / Options