

# Flameproof Carbon Dioxide Detector-Transmitter E2670-CO2



## Features

- Aluminium pressure die-casting enclosure
- Suitable for ATEX Zones 2 and 22
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option

## Specifications

Calibration	Carbon dioxide CO <sub>2</sub>
Sensor type	Photoacoustic or Dual beam NDIR
Sampling method	Diffusion
Typical detection range	0...10 000 ppm (ordering code 10K) 0...40 000 ppm (ordering code 40K) 0...5% vol (ordering code 50KN) Up to 100% CO <sub>2</sub> on request
Resolution / digital unit	1 ppm for 10K range 10 ppm for 40K range 0.01% vol for 50KN
Response time T60	T60 ≤ 60 s for 10K/40K T50 ≤ 20 s; T90 ≤ 60 s for 50KN
Signal update	Every 5 seconds for 10K/40K Every 1 second for 50KN
Maintenance interval	No field recalibration if ABC algorithm is enabled for 10K/40K 12 months for 50KN
Sensor lifetime	~ 10 years for 10K/40K ~ 5 years for 50KN
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	12...36 VDC (default), 24 VAC or 230 VAC as options
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case
Enclosure	Grey die-cast aluminium, wall-mount, protection class IP65
Dimensions	H155 × W145 × D110 mm
Operating environment	Industrial indoor and outdoor locations ATEX Zones 2 and 22 as well as explosion-safe areas
Operating conditions	-40...+60 °C, 0...100 %RH; 0,9...1,1 atm; Safe areas and ATEX Zones 2 and 22 Non-aggressive atmosphere

### Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	Determined by user within 5-95% of the range

## Approvals

### Enclosure:

ATEX / IECEx  
FTZU 03 ATEX 0207U  
IECEX FTZU 12.0017U

II 2 G Ex db IIC Gb  
II 2 D Ex tb IIIC Db

### Glands:

ATEX / IECEx  
EESF 19 ATEX 023X  
II 2G Ex db IIC Gb  
II 2D Ex tb IIIC Db IP66

### CE conformity

Flameproof to IEC EN 60079-0, EN 60079-1,  
EN 60079-31  
EMC Emissions to EN 61000-6-3, EN 61326-1  
EMC Immunity to EN 61000-6-1, EN 61000-6-2

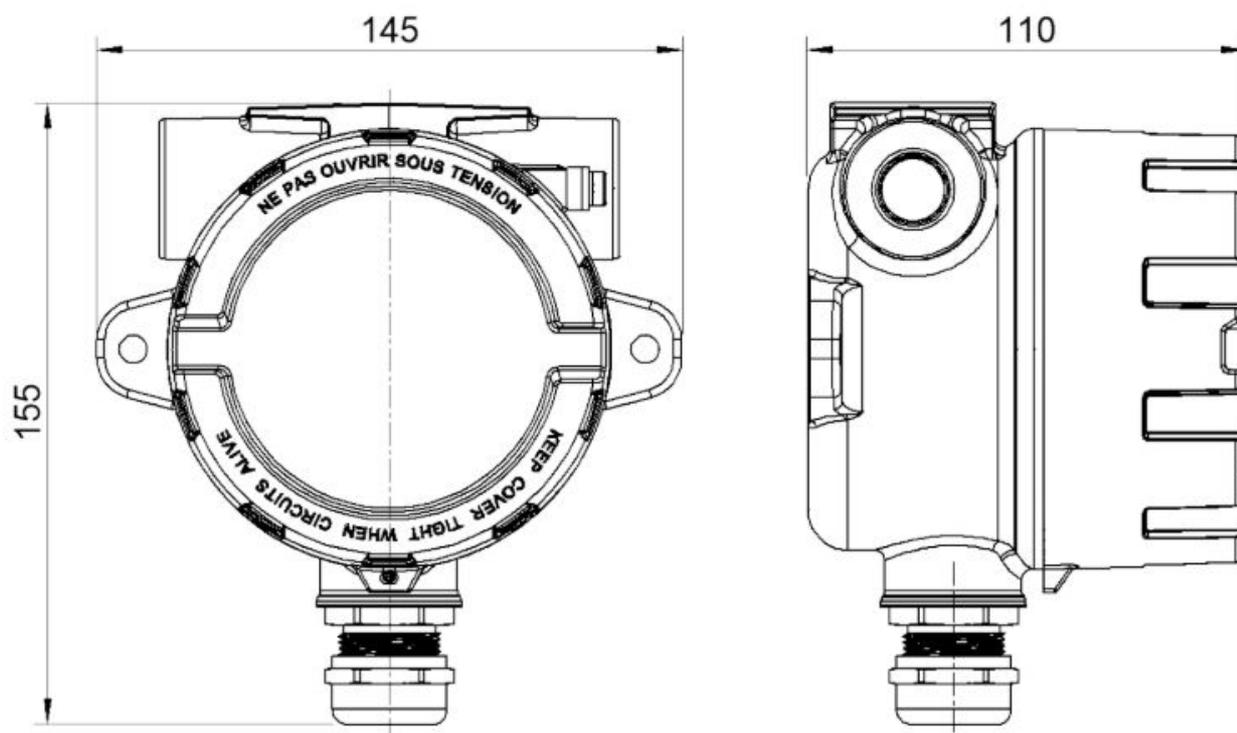


## Additional options

Ambient pressure compensation In the range 0,5...2 bar of absolute pressure

Ask for other versions or custom designed products

## Dimensions



## Mounting holes

