



# TCO<sub>2</sub>C

CO<sub>2</sub> transmitters, air duct mounting

*Measures the concentration of carbon dioxide in ducts.*

*Exempt from periodic calibration.*

- Combined CO<sub>2</sub> transmitter and temperature sensor
- Infrared technology (NDIR)
- CO<sub>2</sub> concentration 0...2000 ppm
- Excellent long-term stability

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## Function

Detection and transduction of carbon dioxide and temperature values:

- 0...10 V, 0...5 V (for CO<sub>2</sub>)
- passive sensor (for temperature)

## Applications

Designed for air treatment systems in domestic areas and commercial buildings.

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TCO<sub>2</sub>C

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## Technical data

<b>SUPPLY VOLTAGE</b>	15...35 V DC / 24 V AC $\pm$ 10% 50-60 Hz
<b>CO<sub>2</sub> SENSOR TYPE</b>	NDIR (Non-Dispersive Infrared Technology)
<b>ACCURACY CO<sub>2</sub></b>	$\pm$ (50 ppm +2% of the measuring value)
<b>LONG TERM STABILITY</b>	$\pm$ 20 ppm/year
<b>CO<sub>2</sub> SAMPLING</b>	15 s
<b>MAX AIR SPEED</b>	10 m/s
<b>VOLTAGE OUTPUT</b>	0...10 V DC or 0...5 V DC, RL>10 kOhm
<b>POWER CONSUMPTION</b>	< 2.5 W
<b>ENERGY</b>	< 0.5 Wh
<b>TRANSFORMER POWER</b>	5 VA
<b>WORKING RANGE, CO<sub>2</sub></b>	0...2000 ppm
<b>WORKING TEMPERATURE</b>	0...+50 °C
<b>WORKING HUMIDITY</b>	10...90 % RH (non-condensing)
<b>TEMPERATURE DEPENDENCE:</b>	2 ppm CO <sub>2</sub> /°C
<b>STORAGE TEMPERATURE</b>	-20...+70 °C
<b>STORAGE HUMIDITY</b>	< 95% RH
<b>MATERIAL</b>	cover: white polycarbonate base: gray polycarbonate
<b>PROTECTION CLASS</b>	IP65 connection box side, class III
<b>WEIGHT</b>	160 g

TYPE	DESCRIPTION	OUTPUT SIGNAL	ACCURACY °C
TCO2C	CO <sub>2</sub>	0...10 V	
TCO2C-05	CO <sub>2</sub>	0...5 V	
TCO2C-PT100	CO <sub>2</sub> + PT100, 100 Ohm/0°C	0...10 V / ohm	$\pm$ 0,3
TCO2C-PT1000	CO <sub>2</sub> + PT1000, 1000 Ohm/0°C	0...10 V / ohm	$\pm$ 0,3
TCO2C-NTC1.8	CO <sub>2</sub> + NTC 1.8, 1800 Ohm/25°C	0...10 V / ohm	$\pm$ 0,5
TCO2C-NTC2.2	CO <sub>2</sub> + NTC 2.2, 2252 Ohm/25°C	0...10 V / ohm	$\pm$ 0,2
TCO2C-NTC10-01	CO <sub>2</sub> + NTC 10, 10 kOhm/25°C	0...10 V / ohm	$\pm$ 0,2
TCO2C-NTC10-02	CO <sub>2</sub> + NTC 10, 10 kOhm/25°C	0...10 V / ohm	$\pm$ 0,3
TCO2C-NTC10-03	CO <sub>2</sub> + NTC 10, 10 kOhm/25°C	0...10 V / ohm	$\pm$ 0,25
TCO2C-NTC20	CO <sub>2</sub> + NTC 20, 20 kOhm/25°C	0...10 V / ohm	$\pm$ 0,2
TCO2C-Ni1000-01	CO <sub>2</sub> + Ni1000, 1000 Ohm/0°C	0...10 V / ohm	$\pm$ 0,5
TCO2C-Ni1000-02	CO <sub>2</sub> + Ni1000, 1000 Ohm/0°C	0...10 V / ohm	$\pm$ 0,5
<b>ACCESSORY</b>	DBZ-22 - Mounting bracket for air duct transmitters TCO2C		

Note: the transmitters model TCO2C are supplied with mounting bracket model DBZ-22

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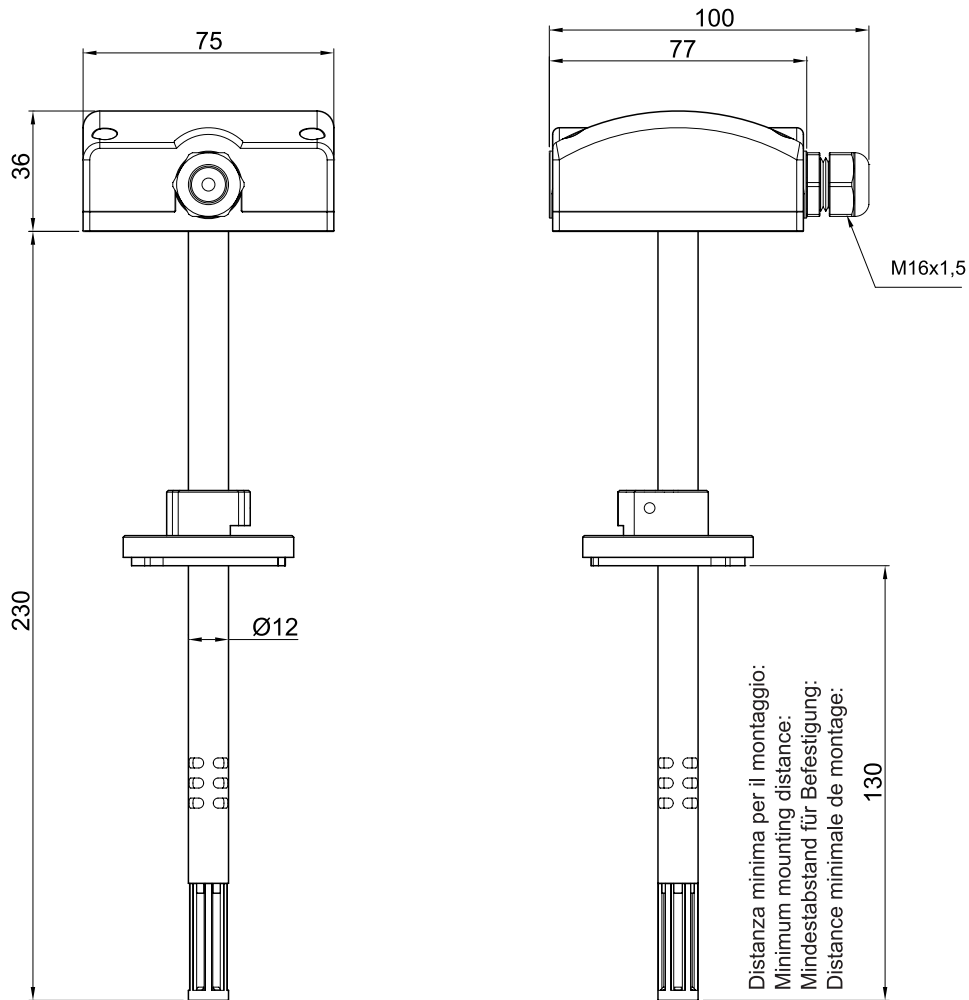
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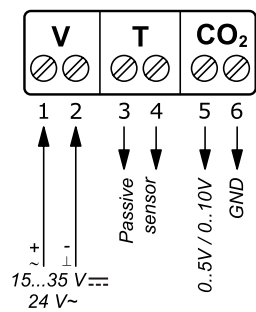
TCO2C

- 2 -

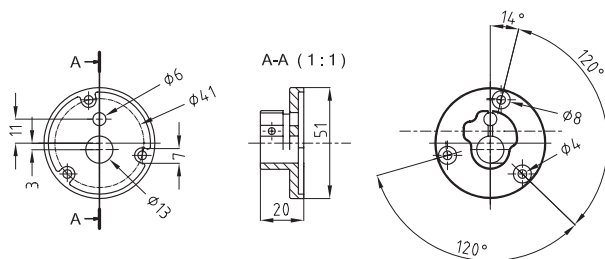
## Dimensions (mm)



## Electrical diagram



## Mounting bracket



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- 3 -