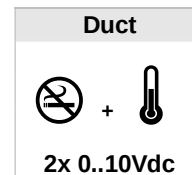




SCO2T-G

Duct sensors CO₂, type SCO2T-G (-LCD)

- Measurement of CO₂ concentration
- Measurement of the duct temperature
- Power supply : AC/DC 24 Volt
- Output signal CO₂ : 0..10Vdc @ 0..2'000ppm
- Output signal T° : 0..10Vdc @ 0..+50°C
- Mounting on the ventilation duct
- With auto calibration function (ABCLogic™)
- Optional with LCD display
- Optional with controller output



Description

The CO₂ sensors, series SCO2T-G (-LCD), are designed to detect the concentration of carbon dioxide and the air temperature in the ventilation systems in HVAC applications.

The two proportional outputs 0..10Vdc are used for ventilation control in buildings.

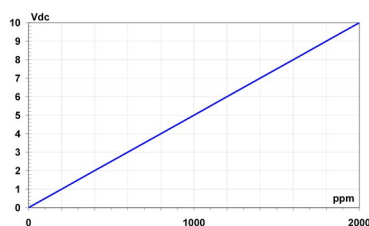
One proportional output signal 0..10Vdc is provided based on the concentration of CO₂ in the air from 0 to 2.000ppm. The CO₂ sensor is equipped with an auto-calibration using the ABCLogic™ function.

In addition, a second output signal proportional 0..10Vdc is provided as a function of the temperature of the air in the ventilation duct, corresponding to a temperature range T°: 0..+50°C.

SCO2T-G sensors are duct mounted in a dry environment.

Alternatively the SCO2T-LCD-G version is available. It is identical to the standard version SCO2T-G, but in addition is equipped with an LCD display. The LCD shows alternating (2 seconds) the temperature and CO₂ concentration. By pressing the button S1 inside the sensor, the desired value can be selected.

By changing the normal cover (and LCD) by the option SCO2T-GS, the sensor becomes a CO₂ controller. The output signal is available on terminal 5. The commissioning instructions are included in the installation instructions.

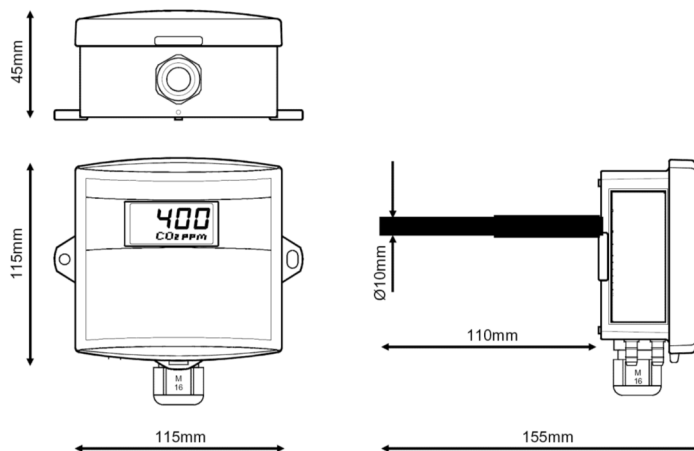


Technical data

SCO2T-G (-LCD)

Power supply	AC 24 Volt (15..28V) / 1 VA DC 24 Volt (15..36V) / 1 W	
Measuring range	CO ₂	0..2000ppm
	T°	0..+50°C
Precision	CO ₂	± 40ppm / 3% reading (ABCLogic™)
	T°	± 0,5 °C
Stability / year	< 2% FS (ABCLogic™)	
Temperature dependence	0,2% FS / °C	
Pressure dependence	0,17% of the value / mbar	
Ambient temperature	0..+50°C	
Relative humidity	0..95% rH, non condensing	
Time constant (t ₆₃)	< 1min	
Start-up time	< 10min	
Electrical wiring	terminals 5x 0,75mm ²	
Measuring probe	Ø10mm x 110mm	
Degree of protection	IP54	
Dimensions w x h x d	115 x 115 x 45mm	

Dimensions



Electrical wiring

1	24 VAC/DC	power supply
2	0 V	common (Gnd)
3	CO ₂	output signal CO ₂ : 0..10Vdc (0..2000ppm CO ₂)
4	TE	output signal T° : 0..10Vdc (0..+50°C)
5	AO3	controller output

ABC Logic™

ABC Logic™ is a patented self-calibration technique, which is designed to be used in applications where concentrations will drop to outside conditions (approximately 400ppm) at least twice a week (= an unoccupied building).

For applications that do not see periodic ambient conditions like described above, ABC Logic™ can be turned off but a regular single point calibration of the sensor in 6 -12 months is necessary.

Checking and calibration is recommended every 5th year even if ABC Logic™ is 'ON'.

Overview

Type	AC/DC 24 V	CO ₂	T°	duct	controller	LCD
SCO2T-G	●	0..2'000ppm	0..+50°C	●		
SCO2T-G-LCD	●	0..2'000ppm	0..+50°C	●		●
SCO2T-G-S	●	0..2'000ppm	0..+50°C	●	●	
SCO2T-G-S-LCD	●	0..2'000ppm	0..+50°C	●	●	●

Accessories & spare parts

Type	Description
SCO2T-G-C	Cover with display and navigation pad for the setting of the CO ₂ sensor parameters

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