

Duct Sensor CO₂

For CO₂ measurement in duct applications.
Dual channel CO₂ technology.
NEMA 4X / IP65 rated enclosure.


Type Overview

Type	Output signal active CO ₂	Output signal active temperature
22DC-13	4...20 mA	-
22DTC-13	4...20 mA	4...20 mA

Technical Data

Electrical data	Power Supply DC	15...24 V, ±10%, 1.5 W	
	Electrical connection	Removable spring loaded terminal block max. 2.5 mm ²	
	Cable entry	cable gland PG11 Ø6...10 mm, with strain relief Ø6...8 mm	
Functional data	Sensor Technology	NDIR (non dispersive infrared) with stainless steel wire mesh filter	
	Output signal active note	Current outout: max. 500 Ω load	
	Media	Air	
Measuring data	Measured values	CO ₂ Temperature	
	Measuring range CO ₂	0...2000 ppm	
	Accuracy CO ₂	±75 ppm; >750 ppm: ±10% of measuring value	
	Accuracy humidity	±2% between 10...90% rH @ 21 °C	
	Operating condition air flow	min. 0.3 m/s max. 10 m/s	
	Materials	Cable gland	PA6, black
		Housing	Cover: Lexan, Belimo orange NCS S0580-Y6OR Bottom: Lexan, Belimo orange NCS S0580-Y6OR Seal: 0467 NBR70, black
Probe material		PA6, black	
Safety data	Ambient humidity	85% r.h., non-condensing	
	Ambient Temperature	0...50 °C [32...122 °F]	
	Operating condition air flow	min. 0.3 m/s max. 10 m/s	
	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)	
	Protection class UL	UL Class 2 Supply	
	EU Conformity	CE Marking	
	Certification IEC/EN	IEC/EN 60730-1	
	Certification UL	pending	
	Degree of protection IEC/EN	IP65	
	Degree of protection NEMA/UL	NEMA 4X	
	Quality Standard	ISO 9001	

Remarks

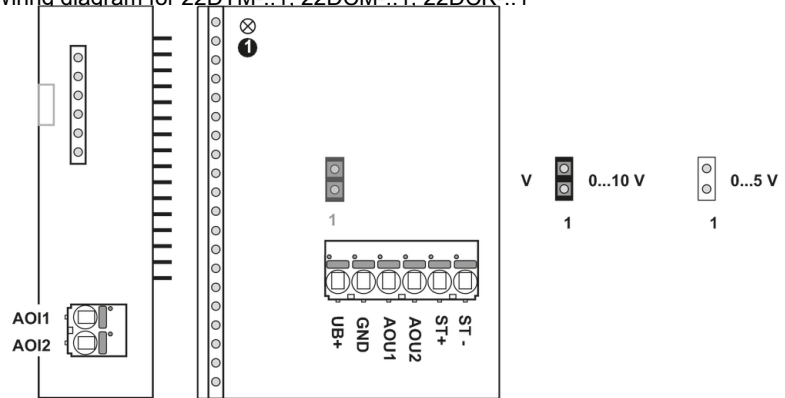
Information Self-Calibration Feature CO₂ All gas sensors are subject to drift caused by components, resulting in regular re-calibration or replacement units. However the dual channel technology integrates automatic self-calibration technology vs common used ABC-Logic sensors. Dual channel self-calibration technology is ideally suited for applications operating 24/7 hours such as hospitals or other commercial applications. Manual calibration is not required.

Accessories

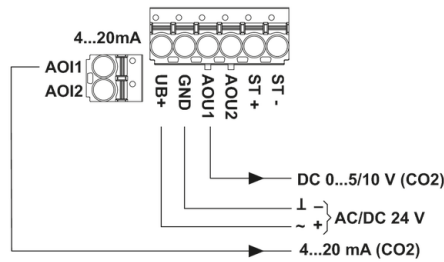
Optional accessories	Description	Type
	Mounting flange for duct humidity and CO ₂ sensor	A-22D-A35
Scope of delivery	Mounting flange	

Wiring diagram

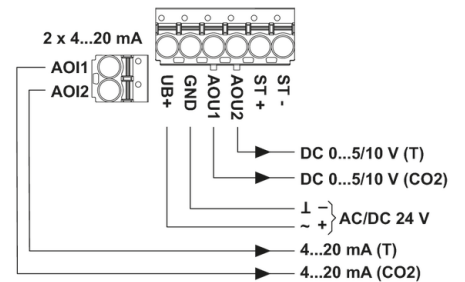
Wiring diagram for 22DTM-..1, 22DCM-..1, 22DCK-..1



22DC-13 / 22DC-53



22DTC-13 / 22DTC-53



① Status LED

Dimensions

