PolyGard® Carbon Monoxide CO Analog Transmitter AT02 1110

Description

Analog CO- gas transmitter for the detection of carbon monoxide (CO) in the ambient air.

Stainless steel

Application

For the detection of carbon monoxide (CO) within a wide range of commercial applications such as vehicle exhaust in parking structures (e.g. underground garages), engine repair shops, tunnels, equipment rooms and ventilation systems etc. Due to the analog signal, (4 – 20 mA / 2 – 10 V) the CO -transmitter is compatible to any electronic analog control, DDC/PLC control or automation system (e.g. PolyGard Series MGC by the MSR-E).

Features

- Continuous monitoring
- Low zero point drift
- Poisoning stable
- Long life sensor
- Modular plug-in technology
- Easy maintenance / calibration
- Reverse polarity protected
- Overload protected
- 4 – 20 mA analog signal output (Standard)
- 2 – 10 V analog signal output (optional)
- Relay package (optional)
- Duct mounting (optional)
- IP65 protected (optional)

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Specifications

Electrical	
Power supply	18 - 28 VDC (reverse polarity protected)
Power consumption	22 mA, max. (0,6 VA)
Sensor Performance	
Detected gas	Carbon monoxide (CO)
Sensor element	Electrochemical, diffusion
Measuring range	0 – 300 ppm factory set, 0 - 150 to 0 – 300 ppm, adjustable via calibration
Stability & resolution	± 3 ppm
Repeatability	± 3 % of reading
Long term output drift	< 5% signal loss/year
Response time	$t_{90} \leq 50$ sec.
Sensor life expectancy	5 years, normal operating environment
Sensor coverage	465 m^2, (5,000 sq.ft.), to 930 m^2 (10,000 sq.ft.) “ideal conditions” assumed
Mounting height	1.5 to 1.8 m (5 to 6 ft.) above floor
Storage time	6 months
Type of Control	
Analog output signal 4 – 20 mA (standard) 2 – 10 V: (optional)	Proportional, 4 – 20 mA, load ≤ 500 Ω overload and short-circuit proofed Proportional, 2 – 10 V, load ≥ 50 k Ω overload and short-circuit proofed
Operating Environment	
Humidity Range: Continuous	15 to 90 % RH non-condensing
Short-time	0 to 99 % RH non-condensing
Working temp.: Continuous	-10 °C to + 50 °C (14 °F to 122 °F)
Short-time	-20 °C to + 50 °C (-4 °F to 122 °F)
Storage temperature	5 °C to + 50 °C (41 °F to 122 °F)
Pressure range	Atmospheric ±10%
Physical characteristics	
Enclosure material*	Stainless Steel
Enclosure color*	Natural, untreated
Dimensions (HxWxD)*	135 x 113 x 45 mm (5.35 x 4.5 x 1.8 in.)
Weight*	0.5 kg (1.1 lbs.)
Protection class*	IP 55
Mounting*	Wall mounted, pillar mounted
Cable entry	1 x M 20
Wire connection	Screw type terminal, min. 0.25 mm^2 (24 AWG) max. 2.5 mm^2 (14 AWG)
Wire distance	Max. loop resist. 500 Ω (= wire resistor + controller input resistor)
Approvals/Listings	
	VDI 2053 German air treatment systems for car parcs
	EMV- Directive 89/336/EWG, CE
Warranty	One year on material and workmanship (Without sensor)

*For option "stainless steel" and further enclosure types see datasheet AT-DT Enclosure.

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Ordering Information

AT-02-1110–0–0010

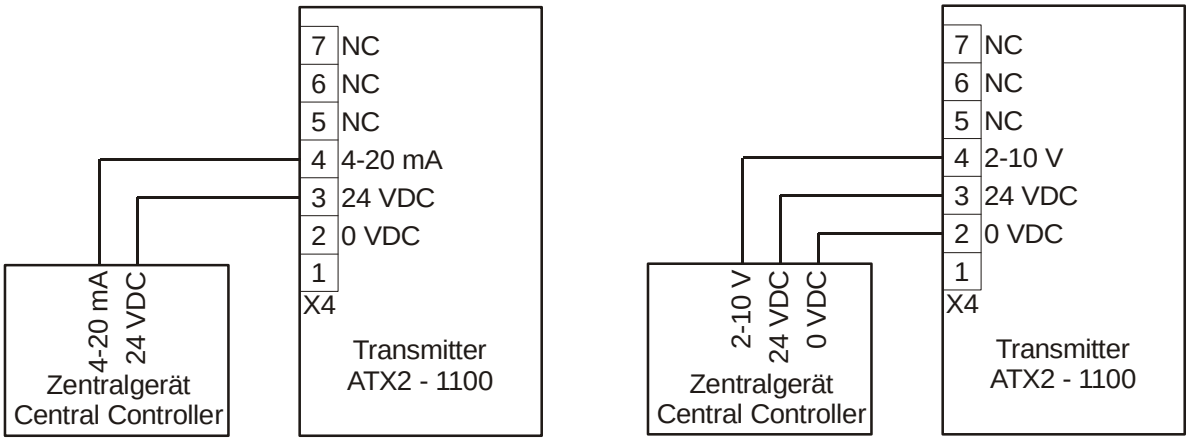
Options	
1XX	Relay package[1]
X5X	Heating[1]
XX1	With calibration 0 - 300 ppm
XXX0	4 – 20 mA Output
XXX1	2 – 10 V Output

Enclosure[2]	
0	Plastic enclosure
1	Duct mounting
2	Steel galvanized
3	Aluminium
4	IP 65 protected
5	Stainless steel

[1] See Data sheet “AT-Options“
[2] See Data sheet “PolyGard AT/DT Enclosure”

Example: CO – transmitter, stainless steel enclosure, with calibration 0 – 300 ppm, 4 – 20 mA Output
Ordering Number: AT-02-1110-5–0010

Connecting Diagram



Dimensions

See Data sheet “PolyGard AT/DT Enclosure”

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