



CO-A/A

CO air quality sensor with measurement range switch

Measuring size: CO

Output: 0-10 V, 4-20 mA, Relay

Highlights: easy-to-install surface-mounted housing, sensor protection with sinter filter



Description

The air quality sensor CO-A/A registers the CO concentration in the air in the environment in the range of 0-1000 ppm via an electro-chemical sensor and converts this measured value into a linear output signal 0-10 V respectively. 4-20 mA.

As an option the air quality sensor has a potential-free changeover contact and a backlit display. The display content can be rotated in 90° steps using a menu and the measured value, the switching threshold set, the state of the relay, the MIN/MAX measured values for the selected intervals (1 h / 6 h / 12 h / 24 h) etc. can be read out.

3 different measuring ranges can be selected 0-200 ppm, 0-500 ppm, 0-1000 ppm which can be switched, according to requirements, by the innovative DIP switching technology.



Technical Specifications

Measurement range CO	0-1000 ppm
Scales	0-200/500/1000 ppm
Accuracy	±5 ppm + max. ±5% f. mv (at 20°C, 50% r.H.)
Temperature dependency	CO: ±2 ppm / K
Running-in time	1 min
Response time (t90)	< 5 min
Long term stability	±1% FS/year
Sensor	Electrochemical sensor
Sensor protection	sinter filter
Supply voltage	24 V AC/DC (±5%)
Current consumption	max. 100 mA
Analogue output 0-10 V	3-wire connection
Analogue output 4-20 mA	3-wire connection
Alarm output	1 x potential-free change-over contact, 48 V, 1 A
Switching Hysteresis Relay	2% FS (without Display), 0,5...5% FS adjustable (with Display)
Electrical connection	screw terminals max. 1,5 mm ²
Housing	Polycarbonate PC UL 94 V0 with hinge locks, color signal white similar to RAL 9003
Cable gland	PG11 high-strength cable gland with strain relief
Display	optional LCD display with backlight on/off/auto
Dimensions	Housing: L 89 x W 80 x H 47 mm
Protection type	Housing/electronic: IP65, Sensor: IP30
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	0...+50°C
Storage temperature	-20...+50°C
Initial operation	After switch-on of the device it runs a self-test and the zero-point calibration. This process takes, depending on ambient conditions, about 1 minutes. Within this time, the linear output signal deviates from the actual measured value.
Installation	screw fastening
Approvals	CE, EAC, RoHS



Variants

Article Number		
CO	Output CO	Version
CO-A/A-UI		
0-200/500/1000 ppm	0-10V, 4-20 mA	without display
CO-A/A-UID		
0-200/500/1000 ppm	0-10V, 4-20 mA	with display
CO-A/A-UIR		
0-200/500/1000 ppm	0-10 V, 4-20 mA, change-over contact	without display
CO-A/A-UIRD		
0-200/500/1000 ppm	0-10 V, 4-20 mA, change-over contact	with display



Dimensional Drawing

