



### 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), 0,55% FS adjustable (with Display)	
Electrical connection	screw terminals max. 1,5 mm²	
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.	098% 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			
СО	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	

#### Accessories

SB/E



Snap-on mounting for DIN rails





AX350: touchMATRIX® Process Indicator with two 16 bit Analog Inputs

motrona AX020



AX020: Process Indicator for Analog Signals



# **Dimensional Drawing**







