



## COT-A/A

### CO and temperature sensor with measurement range switch

Measuring size: temperature, CO

Output: 2 x 0-10 V, 2 x 4-20 mA, Relay

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



### Description

The air quality sensor COT-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 the air temperature 0...+50°C. The measuring transducer converts the measured values into a linear output signal 0-10 V.

As an option the air quality sensor has a potential-free changeover contact and a backlit display. The changeover contact can be defined for one of the two measured values. 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
Measurement range temp.	0...+50°C
Scales	0-200/500/1000 ppm
Accuracy	±5 ppm + max. ±5% f. mv (at 20°C, 50% r.H.), ±1 K
Temperature dependency	CO: ±2 ppm / K
Running-in time	1 min
Response time (t90)	< 5 min
Long term stability	±1% FS/year
Sensor	CO: electrochemical sensor, Temperature: resistance 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
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 <sup>2</sup>
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 minute. Within this time, the linear output signal deviates from the actual measured value.
Installation	screw fastening
Approvals	CE, EAC, RoHS



## Variants

Article Number			
CO	Temperature	Output	Version
<b>COT-A/A-U</b>			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V	without display
<b>COT-A/A-UD</b>			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V	with display
<b>COT-A/A-UR</b>			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V, changer	without display
<b>COT-A/A-URD</b>			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V, changer	with display

## Accessories

SB/E

Snap-on mounting for DIN rails



motrona AX350

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



motrona AX020

AX020: Process Indicator for Analog Signals





### Dimensional Drawing

