FuehlerSysteme eNET International
Die Marke für Sensorik

COT-K/A

CO and temperature sensor for ducts with measurement range switch

Measuring size: temperature, CO

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

Highlights: easy to install with included mounting flange

MADE IN GERMANY · CE · RoHS COMPLIANT

Description

The duct air quality sensor COT-K/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

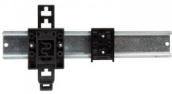|	
Measurement range CO	0-1000 ppm
Measurement range temp.	0...+50°C
Scales	0-200/500/1000 ppm
Accuracy	±5 ppm + max. ±5% f. mv (at 20°C, 50% r.H.), ±1 K
Temperature dependency	CO: ±2 ppm / K
Running-in time	1 min
Response time (t90)	< 5 min
Long term stability	±1% FS/year
Sensor	CO: electrochemical 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 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
Material	Protection tube: stainless steel V2A
Dimensions	Housing: L 89 x W 80 x H 47 mm, Protection tube: Ø 25 x 190 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	mounting flange (in scope of delivery)
Approvals	CE, EAC, RoHS

Variants

Article Number			
CO	Temperature	Output	Version

COT-K/A-U			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V	without display

COT-K/A-UD			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V	with display

COT-K/A-UR			
0-200/500/1000 ppm	0...+50°C	2 x 0-10 V, changer	without display

COT-K/A-URD			
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