



Rev. 03/19/18

CO Duct & Rough Service Sensor

D23

Air Quality Sensors

Features & Options

- Field Replaceable Electrochemical Sensor with Self-Test
- Field Selectable Ranges and Outputs
- Large Display and Two Independent Alarm Contacts

BAPI's Carbon Monoxide Sensor offers enhanced electrochemical sensing with outstanding accuracy at low concentrations. The Duct unit samples duct air using an aspiration tube. The Rough Service unit features a ventilated BAPI-Box and is ideal for parking ramps, equipment rooms and warehouses.

The sensor has field selectable CO ranges of 0 to 100, 0 to 200, 0 to 300 and 0 to 500 ppm. It also has field selectable outputs of 0 to 5, 1 to 5, 0 to 10, 2 to 10 VDC and 3-wire 4 to 20 mA output. The large LCD is backlit for 10 seconds after any button push.

Two independent SPDT alarm contacts switch at field selectable CO concentrations of 25, 35, 50, 100 and 200 ppm. An alarm timer can hold the output relays on for one to ten minutes after the CO level has fallen below 80% of setpoint. This allows additional fan run time to be sure that the CO has been purged.

The field replaceable sensor element lasts approximately 7 years and is self tested daily.



Rough Service (top) and Duct CO Sensors

Part # Description

- BA/CO-V-BB ...** Rough Service Carbon Monoxide Sensor
- BA/CO-D-BB...** Duct Mount Carbon Monoxide Sensor
- BA/COS.....** Factory Calibrated Replacement CO Module

Specifications

Power:

18 to 28 VAC, 7.2 VA Max
18 to 40 VDC, 180 mA Max

Field Selectable Ranges:

0 to 100, 0 to 200, 0 to 300 & 0 to 500 ppm

Alarm Relays:

2 Independent, Dry SPDT (Form C)
2 Amps at 24 VAC/DC, Resistive
140 VA Inrush, 48 VA Holding at 24 VAC

Field Wiring Terminals:

Pluggable Screw Terminals, 14 to 24 AWG

Response Time:

<80 seconds from 10% to 90% of range

Alarm Relay Setpoints:

25, 35, 50, 100 or 200 ppm

Alarm Timer:

0, 1, 5 & 10 minutes

Sensor Element Life:

7 Years Typical

Field Selectable Outputs:

3-wire 4 to 20 mA
0 to 5, 1 to 5, 0 to 10, 2 to 10 VDC

Certifications:

RoHS and CE

Accuracy:

<200ppm = $\pm 3\%$ FS, 32 to 122°F (0 to 50°C)
201 to 500 ppm = $\pm 5\%$ FS, 50 to 122°F (10 to 50°C)

Environmental Operation Range

14 to 122°F (-10 to 50°C) • 5 to 95%RH Noncondensing

