



## Features & Options

- Field Replaceable Electrochemical Sensor with Self-Test
- Optional BACnet MS/TP Output of CO, Temp and Humidity
- Field Selectable Voltage Outputs
- Optional Temperature and Humidity Measurement

BAPI's Carbon Monoxide Rough Service Sensor offers enhanced electrochemical sensing with outstanding accuracy at low concentrations. It features a ventilated BAPI-Box and is ideal for parking ramps, equipment rooms and warehouses.

The sensor has a CO range of 0 to 500 ppm with field selectable outputs of 0 to 5, 1 to 5, 0 to 10 and 2 to 10 VDC. It includes optional humidity measurement with one of the above voltage outputs, and temperature via a 10K-2, 10K-3 or 20K Thermistor. The CO, temperature and humidity outputs are also available via BACnet MS/TP.

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



**CO Rough Service Sensors**  
(Bottom unit shown with temp and %RH sensing)

## Specifications

### Power:

0 to 5 or 1 to 5 VDC Output  
9 to 40 VDC, 10 mA Max  
12 to 28 VAC, 1.4 VA Max

0 to 10 or 1 to 10 VDC Output  
12 to 40 VDC, 10 mA Max  
12 to 28 VAC, 1.4 VA Max

BACnet Output  
9 to 40 VDC, 35 mA Max  
12 to 28 VAC, 1.7 VA Max

**CO Measurement Range:** 0 to 500 ppm

**Field Wiring Terminals:**  
Flying Leads, 20 AWG

**Response Time:**  
<80 seconds from 10% to 90% of range

**Sensor Element Life:** 7 Years Typical

### Field Selectable Voltage Outputs

0 to 5, 1 to 5, 0 to 10 and 2 to 10 VDC

### Carbon Monoxide Sensor 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)

### Temperature Sensor Accuracy:

BACnet Units:  $\pm 0.3^\circ\text{C}$  from -40 to 257°F (-40 to 125°C)  
Thermistor Units: See "Sensors" section for specs

### Humidity Sensor Accuracy:

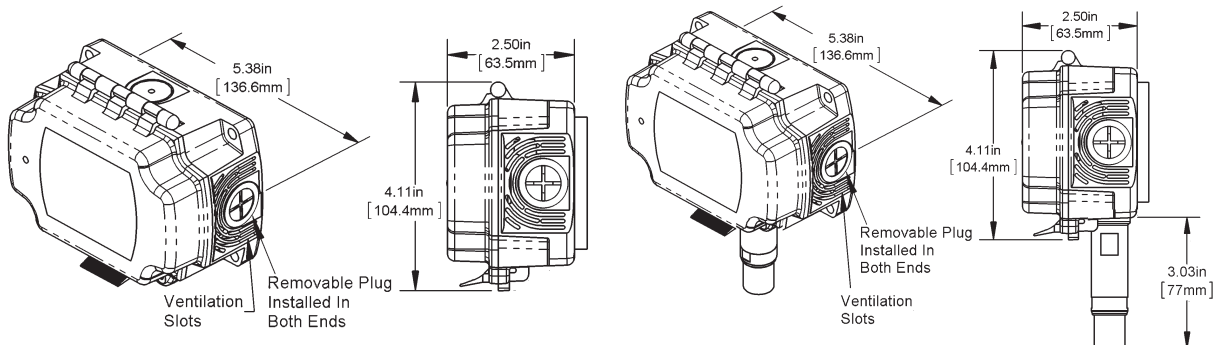
$\pm 2\%$  RH (20% to 80%) @ 25°C, Fully Compensated

### Environmental Operation Range

Continuous: 14 to 122°F (0 to 50°C)  
5 to 95%RH Noncondensing

Intermittent: -40 to 131°F (-40 to 55°C)  
5 to 95%RH Noncondensing

**Certifications:** RoHS and CE





### Ordering Information

<u>Part #</u>	<u>Description</u>
BA/BBV-CO .....	Rough Service CO Sensor
BA/BBV-COV-102-H .....	Rough Service CO Sensor with 10K-2 Thermistor Temp and %RH
BA/BBV-COV-103-H .....	Rough Service CO Sensor with 10K-3 Thermistor Temp and %RH
BA/BBV-COV-20-H .....	Rough Service CO Sensor with 20K Thermistor Temp and %RH
BA/BBV-COBN .....	Rough Service CO Sensor with BACnet Output
BA/BBV-COBN-H .....	Rough Service CO Sensor with Temp, %RH and BACnet Output

