



# CO DUCT

## Carbon Monoxide Duct Sensor

The CO Duct Series monitors carbon monoxide (CO) levels and is designed for the continuous monitoring of vehicle exhaust in non-hazardous areas. This series uses a wide spectrum, long life electrochemical sensor to measure the amount of carbon monoxide in the environment. It is offered with an operating range of 0 to 125 ppm. Duct CO transmitters are offered in a standard NEMA 1 rated ABS Polycarbonate plastic enclosure. Other options include an LCD display with (2) SPDT Form 1C relays and a buzzer. Calibration gases and a 0.2 to 1 liter/minute flow limiting gas regulator are not available through ACI. These should be purchased through your local gas supply company or on-line companies such as Portagas® (Praxair®, Inc.) or Mesa

Specialty Gases®. Refer to all applicable Federal, State, Provincial and Local Health and Safety laws and regulations before using these products.

**Applications:** Parking Garages, Arenas, Kitchens, Laundry Rooms, Warehouses, Loading Docks, Service Garages, School Bus Parking Areas

**The CO Duct Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [www.workaci.com](http://www.workaci.com).**

### PRODUCT SPECIFICATIONS

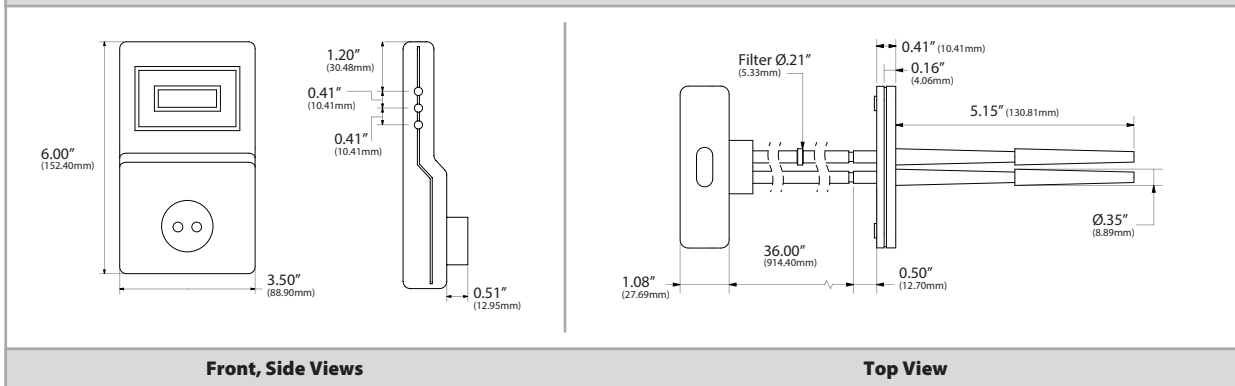
<b>Supply Voltage:</b>	24 VAC +/- 10% Floating; 24 VAC +/- 10%, One side Grounded; 24 VDC
<b>Supply Current:</b>	100 mA nominal   250 mA maximum
<b>Power Usage:</b>	6.6 Watts maximum
<b>Operating Temperature:</b>	-4°F to 104°F (-20°C to 40°C)
<b>Operating Humidity:</b>	15 to 90% RH Continuous, non-condensing; 0 to 99% RH Intermittent, non-condensing
<b>Accuracy:</b>	+/- 2.5% of Reading
<b>Repeatability:</b>	+/- 1% of Reading
<b>Operating Pressure:</b>	1 Atmosphere (14.7 psi) +/- 10%
<b>Response Time:</b>	Less than 60 Seconds for 90% of step change
<b>Sensor Type:</b>	Electrochemical
<b>Sensor Life:</b>	~ 5 years under Normal Conditions
<b>Factory Set:</b>	0 – 125 ppm / 0 – 250 ppm Field Adjustable
<b>Indicators:</b>	Alphanumeric – 2 line X 8 digit LCD / (2) Red LED's for Relay Status
<b>Outputs:</b>	Analog 4-20 mA or 2-10V Jumper Selectable; Digital RS-485
<b>Relay &amp; Buzzer (Optional):</b>	Two SPDT Form C, Dry Contact, 1A @ 30 VDC/0.5A @ 125 VAC (Resistive Load), Buzzer Rating 85 dB @ one foot
<b>Relay Life Expectancy:</b>	200,000 cycles minimum with 1A @ 30 VDC
<b>Time Delays:</b>	<b>Actuation / De-Actuation:</b> 0 to 60 Minutes in 5 minute Increments
<b>Storage:</b>	32° to 68°F (0°C to 20°C)
<b>Shelf Life:</b>	6 Months from date of purchase
<b>Duct Kit Tubing Material:</b>	Vinyl
<b>Duct Kit Tubing Length:</b>	18"
<b>Duct Kit In-Line Filter:</b>	5 micron
<b>Duct Kit Pitot Tube:</b>	3 5/32", Polycarbonate/ABS Blend / UL94V
<b>Enclosure:</b>	Polycarbonate/ABS Blend, UL94V-0
<b>Terminal Blocks:</b>	Fixed, Power wiring: 16 to 26 AWG (0.2 to 1.00 nm <sup>2</sup> ) Shielded Twisted Pair
<b>Terminal Block Torque Rating:</b>	0.37 ft-lbs (0.5n-3m) Nominal
<b>RS-485 Wiring:</b>	Beldon 9841 or equal
<b>Calibration Equipment:</b>	0.5 lpm Regulator, zero & span gas (supplied by local vendor) Calibration adapter (Part # 83830-020-000)
<b>Product Dimensions:</b>	(H) 6.00" (152.4 mm) x (W) 3.5" (88.9 mm) x (D) 1.6" (40.6 mm)
<b>Product Weight:</b>	1.00 lbs (0.45 kg)

**Note:** Sensors and system should be scheduled to be tested for accuracy and functionality every 6 months for toxic, and every 3 months for combustible | Recalibrate or replace sensor boards if necessary | When installed @ > 3000' above sea level, the gas transmitters must be verified for accuracy & re-calibrated as needed after installation





**DIMENSIONAL DRAWING**



**STANDARD ORDERING**

Model # Example: **CO-D-RB-D** -OR- **107557**

Model #	Item #	Description
<b>CO-D</b>	102147	CO Duct Mount, Standard Enclosure
<b>CO-D-RB-D</b>	107557	CO Duct Mount with Display, Relay, Buzzer, Standard Enclosure

**ACCESSORIES ORDERING**

Model # Example: **83830-020-000** -OR- **127649**

Model #	Item #	Description
<b>83830-020-000</b>	127649	Calibration Adapter
<b>6300-0041</b>	134187	Replacement Sensors