

EX Series

Explosion Proof Gas Detectors

Reliable, Exceptional Performance, Effortless Interface



The **Macurco EX Series of Explosion Proof Gas Detectors** are used for Class 1 Division 1 applications or harsh environments. A brilliant digital display indicates STEL, TWA and peak daily value concentrations as well as relay status. A three-color backlight will flash depending on the level of alarm for operator safety. Set-up and calibration is accomplished via non-intrusive magnetic interface that allows programming of all parameters. A remote sensor option is available for difficult or remote monitoring applications. Compatible sensor types include electrochemical and catalytic bead options to provide monitoring solutions for a wide variety of toxic and combustible gas applications. Standard outputs include Modbus RS-485, 4-20 mA and three user programmable relay contacts.

FEATURES & BENEFITS

- RS-485 Communication
- Three Onboard Relays
- 4-20 mA Output
- Non-Intrusive Magnetic Calibration
- Status Indicating Warning Screens
- Display of TWA, STEL, Peak Daily Value
- Electrochemical & Catalytic Bead Sensor Technologies
- Built-in Clock

APPLICATIONS

- Chemical / Petrochemical
- Food & Beverage
- General Industry
- Oil & Gas Upstream
- Oil & Gas Midstream
- Oil & Gas Downstream
- Extraction Facilities
- Environmental Monitoring
- Pharmaceutical
- Power Generation
- Pulp & Paper
- Water & Wastewater
- Cold Storage / Warehousing
- Alcohol Distilleries

GENERAL SPECIFICATIONS

Size: 5.7 x 7.5 x 5.1 in. (14.5 x 19.1 x 13 cm)

Weight: 4.2 lb. (1.95 kg)

Operating Temp: -40° to 158° F (-40° to 70°C)
*Consult Factory for Sensor Specification

Ambient Humidity: 5-95% RH Non-Condensing

Sensor Type: Combustible Gases: Catalytic
Toxic Gases & Oxygen: Electrochemical

ELECTRICAL SPECIFICATIONS

Input Power: 24 VDC nominal, range 18 to 30 VDC, 0.3 A DC Total Max.
24 VAC nominal, range 12 to 24 VAC, 0.3 A AC Total Max.
(AC must not be grounded)

Fuse: F2 on Main Board: Polyswitch 750 mA
Polyswitch device resets after fault is cleared and power to the circuit is removed

Relays: Three Relays, SPDT, Dry Contacts

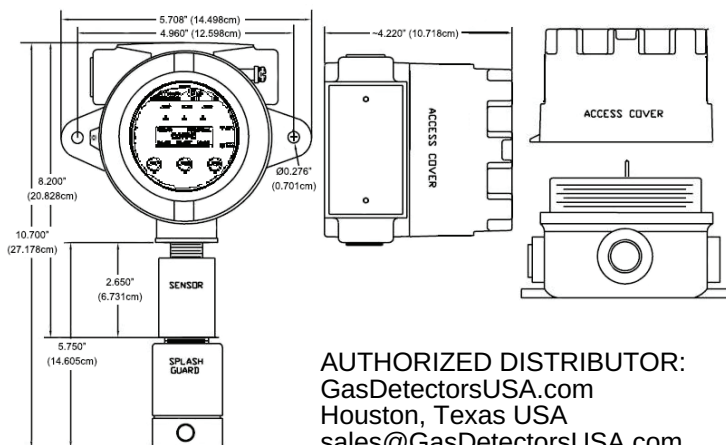
- 1.0 A maximum at 30 VDC (resistive load)
- 0.3 A maximum at 125 VAC (resistive load)

ACCESSORIES

Combustible Splash Guard EX-28030-012

Cal-Adaptor EX Comb. Gas EX-79030-103

Cal-Adaptor EX Toxic Gas EX-6395-0003



AUTHORIZED DISTRIBUTOR:
GasDetectorsUSA.com
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832-615-3588

MECHANICAL SPECIFICATIONS

Display: LCD graphic display with backlight

Keypad: Three Non-Intrusive Magnetic switches - F1, F2, F3

Enclosure: Aluminium Pressure Die-Casting
Entries: 2 x 3/4" NPT

Certificate: FM 3615, CSA C22.2 No.30
Class I, Groups A, B, C, D, Class II, Groups E, F, G; Class III
Enclosure Type: 4X, Division 1 Division 2
ANSI/ISA 12.22.01
Class I, Zone 1 AExd II C, IP66 Zone 1
CSA E60079-1 Ex d II C, Class I, Zone 1, IP66

Status Indicators: Five Status LED's

- RS-485 TX Status (Green)
- RS-485 RX Status (Green)
- Relay 1 Status (Red)
- Relay 2 Status (Red)
- Relay 2 Status (Red)

GAS OPTIONS

Gas Type , Technology, Span Range	Model #
Acetone, Catalytic Bead, 0-100%LEL	EX-CH3CO-100L-O
Ammonia, Electrochemical, 0-1000PPM	EX-NH3-1000P-O
Ammonia, Electrochemical, 0-100PPM	EX-NH3-100P-O
Benzene, Catalytic Bead, 0-100%LEL	EX-C6H6-100L-O
Butanol, n-Butane, Catalytic Bead, 0-100%LEL	EX-BUTAN-100L-O
Carbon Monoxide, Electrochemical, 0-1000PPM	EX-CO-1000P-O
Carbon Monoxide, Electrochemical, 0-250PPM	EX-CO-250P-O
Chlorine Dioxide, Electrochemical, 0-2PPM	EX-CLO2-2P-O
Chlorine, Electrochemical, 0-5PPM	EX-CL2-5P-O
Combustibles, Catalytic Bead, 0-100%LEL	EX-GENL-100L-O
Ethylene, Catalytic Bead, 0-100%LEL	EX-C2H4-100L-O
Hydrogen Chloride, Electrochemical, 0-30PPM	EX-HCL-30P-O
Hydrogen Cyanide, Electrochemical, 0-50PPM	EX-HCN-50P-O
Hydrogen Sulfide, Electrochemical, 0-25PPM	EX-H2S-25P-O
Hydrogen, Catalytic Bead, 0-100%LEL	EX-H2-100L-O
Hydrogen, Electrochemical, 0-1000PPM	EX-H2-1000P-O
Hydrogen, Electrochemical, 0-2000PPM	EX-H2-2000P-O
Iso-Butane, Catalytic Bead, 0-100%LEL	EX-C4H10-100L-O
Iso-Pentane, Catalytic Bead, 0-100%LEL	EX-C5H12-100L-O
Methane, Catalytic Bead, 0-100%LEL	EX-CH4-100L-O
Methanol, Catalytic Bead, 0-100%LEL	EX-CH3OH-100L-O
Nitric Oxide, Electrochemical, 0-100PPM	EX-NO-100P-O
Nitrogen Dioxide, Electrochemical, 0-10PPM	EX-NO2-10P-O
Oxygen, Electrochemical, 0-25%VOL	EX-O2-25V-O
Ozone, Electrochemical, 0-1PPM	EX-O3-1P-O
Propane, Catalytic Bead, 0-100%LEL	EX-C3H8-100L-O
Sulfur Dioxide, Electrochemical, 0-6PPM	EX-SO2-6P-O

*Substitute "R" in place of "O" at the end of the model # for remote sensor option