

Z GARD® COmbo GAS MONITOR

Economical and Reliable Carbon Monoxide Gas Monitor



The MSA Z Gard COmbo Gas Monitor is a gas alarm monitor with an integrated solid state carbon monoxide sensor. Generally, this monitor is wall-mounted in an area where the target gas is to be measured. The Z Gard COmbo Gas Monitor can also act as a master panel, managing up to seven additional remote gas sensors via RS-485 serial data bus connections.

This monitor employs a metal oxide solid-state sensor, which is usually used for underground garage monitoring and ventilation control applications. Any of the MSA Z Gard S Sensors, operating as system with the Z Gard COmbo Gas Monitor are automatically recognized on a RS-485 network. The 4-20mA analog output can be integrated with PLC, DCS or building automation systems.

- ➔ Onboard solid-state (MOS) carbon monoxide sensor.
- ➔ 100 and 200 ppm full scale ranges available.
- ➔ Local audio/visual alarm status indication.
- ➔ Relay contact outputs can be employed to interface with air handling equipment to control the vehicle exhaust emissions or general air quality inside buildings.

- ➔ All relays are factory-configured to be normally de-energized. All relays will return to their inactive state once their condition has cleared.
- ➔ The alarm relay can be made to latch in the activated position even after the alarm has been cleared.
- ➔ Pushbutton to silence an audible alarm or to reset the latching alarm relay.
- ➔ Sensor status feature that provides an indication if either the integral sensor or any other remote sensor fails to communicate properly.
- ➔ Additional remote gas sensors may be connected to the monitor's RS-485 network port.
- ➔ 4-20mA output proportional to the calibrated operating range.
- ➔ Optional LED readout with auto-ranging is available which will display the internal sensor's gas concentration level.

Specifications

Power Requirements	
Standard:	110 VAC, 50/60 Hz at 0.5 amps
Optional:	220 VAC, 50/60 Hz at 0.25 amps or 24 VDC at 1.5 amps
Digital Signal Port	RS-485, 4-wire serial network for remote sensor connections
Optional 4-20mA Output	Exhibits the highest reading derived from all associated sensors
Optional Digital Readout	4-digit LED display. First digits for channel number and three digits for concentration readings
Status Display	Common LED for Power, Warning, Alarm and Sensor Status
Relay Contacts	All relays can be selected as normally-energized or de-energized. The alarm relay can also be selected as latching or non-latching
Relays	1-Warning SPDT, 1-Alarm SPDT and 1-Sensor Fail SPDT
10 amps	1/8 H.P., 125 VAC
6 amps	1/8 H.P., 277 VAC
5 amps	30 VDC
Warning & Alarm Set-Points	Field-adjustable and factory-set at 25 ppm and 50 ppm CO
Time Delays	5 minutes ON delay for alarm and 5 minutes OFF delay for warning or selected with NO delay action
Audible Device	93 dB at 0.3 meters with solid ON or user-selected variable option
Temperature	
Operating:	0° to 40°C (32° to 104°F)
Storage:	-10° to 50°C (14° to 122°F)
Pushbutton	Alarm reset and audible device silence feature
Enclosure	
Standard:	Metal NEMA 1
Optional:	Fiberglass NEMA 4
Dimensions	
	8.25" H (210 mm) x 8.25" W (210 mm) x 4.0" D (102 mm)
Certification	
	CSA Certificate of Compliance No. LR51078-5

Z-Gard COmbo Solid State Gas Monitor

Specifications

Sensing Technology	Solid state, MOS element
Operating Range	0-100 & 0-200 ppm available
Accuracy	±5%, full scale (FS)
Humidity	0 - 95% RH
Sensor Life	5 to 7 years

Ordering Information

10063786	Z Gard COmbo Monitor	0-100 ppm
10063787	Z Gard COmbo Monitor	0-100 ppm w/readout
10063788	Z Gard COmbo Monitor	0-200 ppm
10063789	Z Gard COmbo Monitor	0-200 ppm w/readout

Note: This Data Sheet contains only a general description of the product shown. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel, and not until the instructions, labels or other literature accompanying the product have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product.

Data Sheet 07-2088-MC
June 2006

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