

Carbon Monoxide Sensors

Low Profile Package Mounts Directly To Conduit

APPLICATIONS

- Controlling parking garage ventilation
- Ensuring OSHA air quality compliance in commercial buildings and factories

FEATURES

High accuracy and stability

- Microprocessor controlled...excellent stability
- No calibration required...easy maintenance and worry-free operation
- Metal oxide semiconductor (MOS) sensor

Versatile outputs for popular applications

- Interface to DDC system, GM panel, or direct fan control
- Onboard relay for direct ventilation fan control
- Selectable output: 4-20mA or 0-5V/0-10VDC for operation flexibility

Ventilation control in parking garages for energy savings

- 5-year, long-life replaceable sensor element
- Interface to control system via 4-20mA or 0-5/0-10VDC output
- Fail-safe alarm relay handles 5 amps for direct fan control
- Audible exposure alarm 100ppm, 30 minutes per UL 2034... easy troubleshooting



DESCRIPTION

G Series carbon monoxide sensors maximize energy savings, while ensuring optimal ventilation. The sensors allow ventilation systems to be controlled by the amount of CO present in a location. The G Series detects fluctuations in CO levels, and it signals air systems to provide an inlet of fresh air optimal for the space at a given time. In this manner, the ventilation fan does not need to run continuously, saving energy and reducing maintenance costs. If there is an excess CO level in a location, the G Series will alert those in the area with both an audible and a visual alarm.

The G Series devices are equipped with a relay contact that closes when CO level is below 25ppm and opens when the CO level is above 25ppm. Removal of the sensor, interruption of power, or cut wires cause the relay circuit to open and start the fan. Minimum relay cycle time is 3 minutes to prevent fan short-cycling.

Audible Alarm: 85dB alarm sounds if CO level rises above 100ppm for 30 minutes.

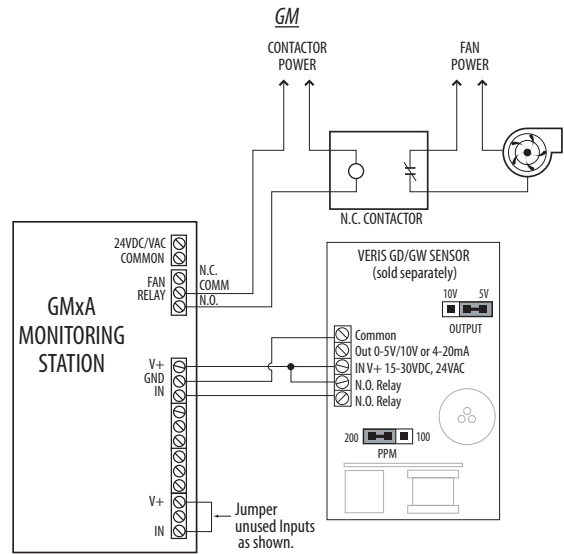
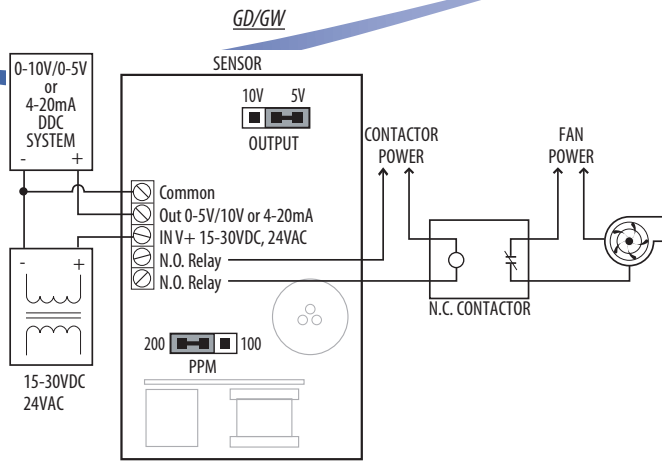
SPECIFICATIONS (G Series Sensor)

Input Power	12-30VDC/24VAC, 0.3A@12VDC, 0.3A@24VDC
Sensor	Digitally-profiled Metal Oxide Semiconductor (MOS)
Sensor Life	5-10 years typical, replaceable
Detection Range	0 to 200ppm
Analog Output	3-wire sourcing 4-20mA, or user-selectable 0-5/0-10V (Specify mA or voltage)
Output Scaling	User-selectable 100ppm F.S. or 200ppm F.S.
Response Time	2 minutes 30 second sample interval cycle
Relay Output	N.O. Form A (SPST) 8A@30VAC/VDC (Use with N.C. contactor)
Relay Setpoint	25ppm
High Limit Setpoint	100ppm for 30 minutes
High Limit Alarm	Audible, 85dB, resets below 100ppm; (Solid-state contact for -AS version)
High Limit Contact (-AS models)	250VAC/DC, 120mA max. Ron 35Ω
LED Indicators	Normal=Green; Call for ventilation=Red; High-limit alarm=Flashing Red
Operating Environment	-20° to 50°C (-4° to 122°F); 0 to 90% RH non-condensing
Coverage	5000 sq. ft. typical (465 sq. m)
Physical	white powder coat over steel

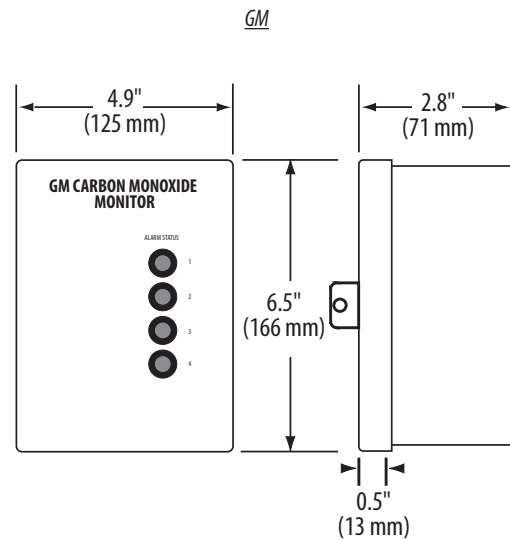
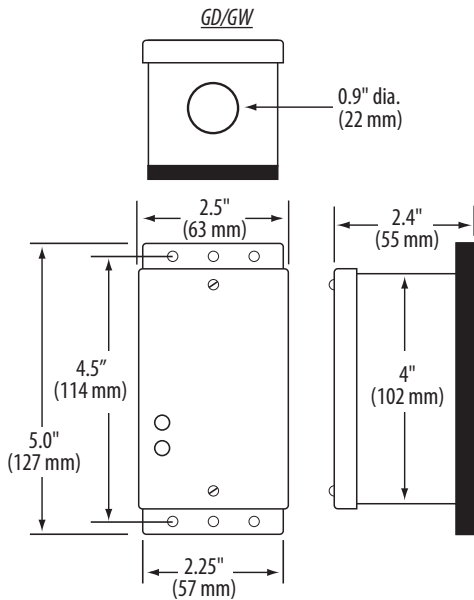
SPECIFICATIONS (GMxA Monitor)

Input Power	24VAC/VDC@0.5A
Inputs	Detect contact closure from sensor relay. Four channels. 24VDC loop
Output	Form C (SPDT) relay. 5A@30VAC
Alarm Indicators	Four, 10mm Red LED; indicates alarm status
Power Indicator	Green LED; indicates power supply operation
Operating Environment	-20° to 50°C (-4° to 122°F); 0 to 90% RH non-condensing
Physical	NEMA 1, metal enclosure, white

APPLICATION/WIRING DIAGRAMS

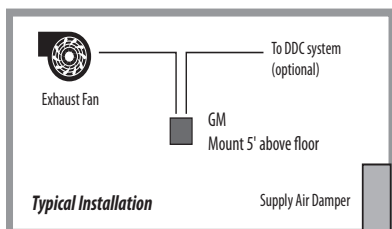


DIMENSIONAL DRAWINGS



GMxA Monitoring Station

The GMxA monitoring station accepts digital inputs from up to four sensors to provide alarm status indication for each channel, and a Form C (SPDT) fan actuation relay. If any of the sensors detects CO levels above 25ppm, or if a fault is detected, the corresponding alarm status indicator lights and the fan relay de-energizes (failsafe).



Ventilation control for energy savings and OSHA compliance in parking garages and service bays

ORDERING INFORMATION

Sensor

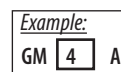
G Enclosure	V Output	A Auxiliary Alarm Output	S US or EU
D = Duct mount W = Wall mount	V = Field-selectable, 0-5/0-10VDC M = 4-20mA R = Relay only	A = Auxiliary Contact X = None	S = Standard

Example:



Monitoring Station

GM Sensors = GWRXS	A
Gas Monitoring Station	0 = Station Only 1 = Includes 1 Sensor 2 = Includes 2 Sensors 3 = Includes 3 Sensors 4 = Includes 4 Sensors



ACCESSORIES

- Verification Kits (AA32, AA39)
- Replacement sensors (AA09)
- Calibration gases (AA37, AA38)
- Power Supplies: For a complete product offering check out our PS Series.