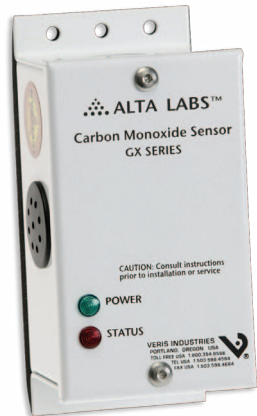# G SERIES

G SERIES
Carbon Monoxide Transmitter and Fan Controller

Installer's Specifications

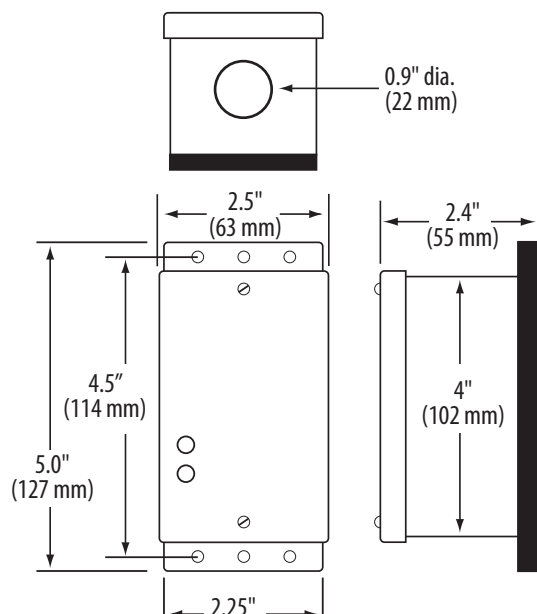|	
Sensor	Digitally profiled Metal Oxide Semiconductor (MOS)
Sensor Life	5-year expected sensor element life, replaceable
Supply Power	15-30VDC, 24VAC, 250mA
Detection Range	0 to 200 ppm
Analog Output	User selectable 100 ppm F.S. or 200ppm F.S.
Relay Setpoint	25ppm
Relay Output	N.O. Form A (SPST) 8A@30VAC/VDC; (Use with N.C. contactor)
High Limit Setpoint	100ppm for 30 minutes
High Limit Alarm	Audible, 85dB, resets below 100ppm (solid-state contact for A ver)
LED Indicators	Normal=Green LED; Call for ventilation = Red LED; High-limit alarm = Flashing Red LED; Sensor life has expired = Flashing Green LED
Operating Environment	-20° to 50°C (-4° to 122°F); 0 to 90% RH non-condensing
Coverage	5000 sq ft typical

NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing this product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.

QUICK INSTALL

1. Lock out all power supplies prior to installation.

2. Select a location for the sensor in a secure area where it will be accessible only to qualified service personnel. The G Series sensor should be installed centrally in the parking structure, near the main traffic paths, but away from outside air vents and excessive drafts. Mount the unit securely to a wall or column at a height of about 5 ft. (1.52 m) from the floor.

3. Connect wiring as shown in the Wiring Diagram.

4. Apply power to the unit. A green LED on the circuit board indicates proper operation of the power supply.

Note: Coverage is NOT dependant on the sensor. Coverage is a function of the building structure and air flow patterns. A minimum of one sensor for 5000 sq. ft. is recommended. Wide open areas where the air is well mixed may require a few sensors.

PRODUCT IDENTIFICATION

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

DIMENSIONS

0.9" dia. (22 mm)

2.5" (63 mm)

2.4" (55 mm)

4.5" (114 mm)
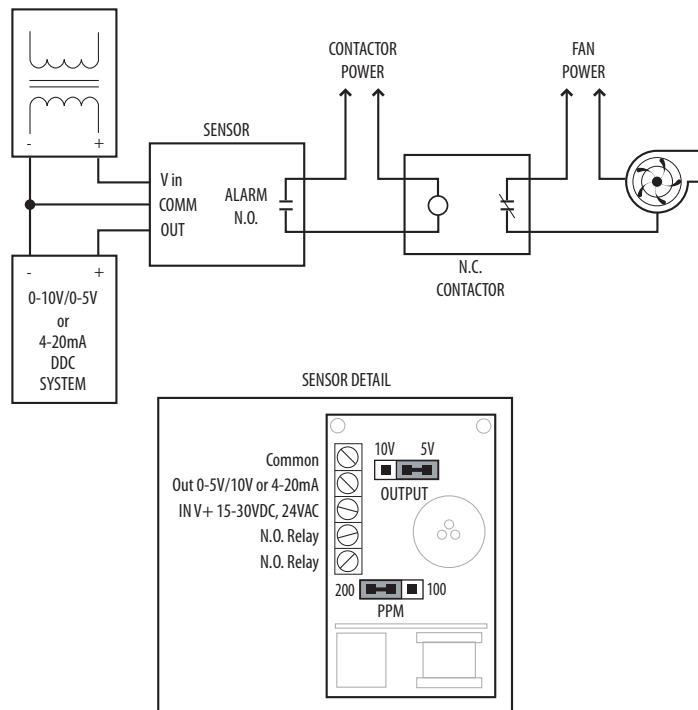
4" (102 mm)

5.0" (127 mm)

2.25"

OPERATION

The G Series carbon monoxide detectors measure CO levels and signal control systems to provide an inlet of fresh air optimal for the space at a given time. 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 (when used with a normally closed contactor). 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.

LED Indicators:

LED	Description
Green	Normal operation
Flashing Green	Sensor life has expired
Red	Call for ventilation
Flashing Red	CO level above 100ppm for 30 minutes

WIRING DIAGRAM

TROUBLESHOOTING

Problem	Solution
4-20 mA output does not function	• Verify that the unit is a 4-20 model. • Verify that the unit is wired for sourcing output.
Output is half or twice what is expected	• Verify span jumper is set to desired scale. • For voltage units, verify jumper is set to desired voltage output scale.
Output is inaccurate or unstable	• Allow 96 hours for sensor to burn in and stabilize.

SERVICE

For any service or installation, consult qualified service personnel. To assure continued reliable operation, the sensor module should be replaced every five years with a Veris Industries CO sensor replacement module.

Replacement instructions:

1. Disconnect power from the unit.

2. Carefully remove the old sensor module.

3. Install the new module firmly into the socket.

4. Reconnect power to the unit.

5. The replacement sensor requires 72 hours after initial power application to stabilize.

The sensor module is factory calibrated. No field calibration is required or possible. Verify proper operation by observing LED indicators.