

OEM 120 CO Panel Mounted Carbon Monoxide Analyzer



For safety critical applications in the workplace



DESCRIPTION

The MSA OEM 120 CO Series, powered by Neutronics Technology, is a panel mounted analyzer that accurately measures carbon monoxide in the range of 0 to 200 ppm. Designed for continuous operation, this analyzer measures and displays the level of carbon monoxide in a workplace area and provides audible and visual alarms if the level exceeds predetermined setpoints.

Features

0 to 200 ppm measurement range

Electrochemical sensor is unaffected by background gases

Two adjustable alarm setpoints with relays

Alarm horn with silence switch

Large 1/2" high LED display

The electrochemical sensor ensures reliable performance and fast response for safety critical measurements. The sensor is a small fuel cell that measures carbon monoxide directly. It is easily replaceable and unaffected by most background gases.

As the sample gas from the area passes across the CO sensor, the CO sensor produces a small current proportional to the amount of CO in the sample stream. The current is amplified, filtered, and electronically conditioned by the analyzer circuit board. The resulting signal is then shown on the led display and compared with the two adjustable alarms. The alarms are triggered if the signal reaches the predetermined setpoints.

Each alarm has a dedicated relay with both normally open and normally closed contacts. Alarm led status indication is provided for each alarm on the front panel. Both alarms activate a piezoelectric horn mounted on the left side of the front panel. The alarms are configured at the factory as low and high level alarms with settings of 20 ppm and 50 ppm. The "set alarms" switch and potentiometers are used to adjust the setpoints.

Both alarms have a 1 ppm CO hysteresis, which is positive for the high and low alarms. If the low alarm is set to 20 ppm, the alarm relay will activate at 21 ppm and deactivate at 20 ppm. This prevents excessive wear of the mechanical devices interfaced with the alarm relays. The alarm circuitry, alarm relays, alarm leds, and horn can be tested simultaneously by pressing the "press to test" switch on the front panel. A 90 dB alarm horn is mounted on the front panel. The "horn silence" switch will disable the horn. The alarm horn will stay disabled as long as it remains in the silence position.

The low power/switch open (lps) alarm detects a power supply problem and the status of an external switch or relay. The lps red led will illuminate if the supplied power drops below 6.5 VDC or if an external switch or relay wired to the main terminal block is in the open state.

Ensuring safe and reliable operation of the OEM 120 CO Series monitor requires periodic calibration and sensor replacement. The sensor has an expected service life of 2 years but may vary depending on the application. The sensor will need to be replaced when the monitor cannot be adjusted to match the span gas during calibration. A new filter screen and O-ring should be installed when replacing the sensor.



MORE INFORMATION:

Scan the QR code to learn more about the OEM 120 CO Panel Mounted Carbon Monoxide Analyzer and other MSA products.

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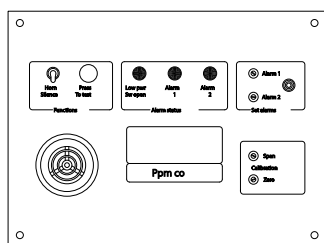
The OEM 120 CO Series monitor should be calibrated every month. The calibration procedure requires the use of a zero gas and a span gas with a known level of carbon monoxide. The zero and span potentiometers located on the front panel are used to adjust the display to match the correct gas concentrations. The OEM 120 CO Series analyzer is available with loop powered 4-20mA current output calibrated to 0 to 200 ppm co.

Description	Part Number
Model OEM 120 Series CO monitor	7-06-1200-01-0
Model OEM 120 series CO monitor (4-20mA output)	7-06-1200-00-0
Sensor replacement kit (sensor, filter, screen, and O-ring)	6-01-1001-37-0
Replacement fuse	1-11-1120-03-0
Potentiometer adjustment tool	2-03-1000-00-0
90 dB horn	1-15-3002-00-0

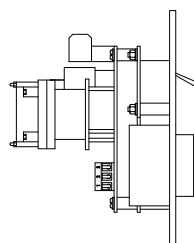
Specifications	Description
Type	Panel mount carbon monoxide analyzer
Operating range	0 to 200 ppm CO
Maximum overload	500 ppm CO
Sensor type	Electrochemical
Expected sensor service life	2 years in air
Resolution	1 ppm
Response time	T90 < 40 seconds
Linearity	±1%
Pressure range	Atmospheric ±10%
Temperature range	35 to 122° F (2 to 50° C)

Specifications	Description
Relative humidity	0 to 90%, non-condensing
Warm up time	5 seconds
Low alarm factory setpoint	20 ppm
High alarm factory setpoint	50 ppm
Power supply	115/230 VAC ±20%, 50/60 Hz @ 50mA or 9 -15 VDC @ 400mA
Analyzer warranty	12 months from date of shipment
Sensor warranty	6 months from date of shipment
Dimensions	6.75" (171mm) length x 5.00" (127mm) width x 3.81" (97mm) height
Weight	5.0 lbs. (2.3 Kg)

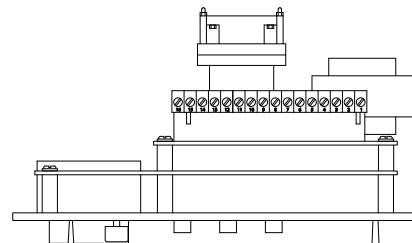
Specifications are subject to change without notice.



Front view



Side view



Top view

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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