RESPIRATORY AIR LINE MONITORS

ISA-300RAL Compressed Air Line Monitor/Alarm

Available for monitoring carbon monoxide, oxygen, carbon dioxide and a range of other toxic gases

FEATURES

■ Audio and Visual Alarms

■ Two Alarms per Channel

■ Display of Gas Concentration

■ Continuous Monitoring

■ Menu-Driven Controls

■ Menu-Driven Calibration

■ Programmable Alarm Relay Contacts

■ Fault Relay and Visual Fault Alarm

■ Low-Flow Fault Indication

■ Alarm Acknowledgement Capability

■ 4-20 mA Output

■ Modbus Output

OPTIONAL EQUIPMENT:

ENMET offers a complete line of air purification and monitoring systems for supplied-air respirators; many models are available including portable and stationary air filtration panels. Instruments are also available for explosion-proof and high-pressure applications. Contact ENMET for more information.

ISA-300RAL

The ISA-300RAL respiratory air line monitor automatically and continuously monitors compressed air lines for CO and activates audio and visual alarms if the concentration of the contaminant rises above preset limits. The instrument is designed to alarm at a concentration of 10 ppm CO in Grade D breathing air as specified by Federal OSHA guidelines. (5 ppm in Canada, per CSA Z88)

With the addition of an oxygen sensor, the ISA-300RAL can also continuously monitor compressed air for oxygen content. The instrument is modular and can be custom configured to detect many other toxic gases, including carbon dioxide.

The ISA-300RAL provides protection for the employer and workers using supplied-air respirators by warning personnel of a carbon monoxide hazard, oxygen deficiency/enrichment condition, or other toxic gases it can be set up to monitor.

P.O. Box 979, Ann Arbor, MI. 48106-0979
Phone: 734-761-1270   FAX: 734-761-3220
www.enmet.com   info@enmet.com

RESPIRATORY AIR LINE MONITORS

ISA-300RAL

STANDARD CALIBRATIONS

Alarm Points: **Range:**
- 10 and 20 ppm CO   0-50 ppm CO
- 19.5% O_2 Deficiency   0-30% O_2
- 23.5% O_2 Abundance   0-30% O_2
- 500 and 1000 ppm CO_2 0-5000 ppm CO_2

All alarm points are adjustable

SPECIFICATIONS

Operating Power: 100 to 240 Vac and/or 12 Vdc, 15 Watts

Display: 2 line, 16 character, dot matrix LCD

Alarms: Visual: LEDs; Audible: piezo electric

Alarm Points: Two alarms per gas (adjustable), plus fault alarm

Alarm Relays: 5 programmable relays plus fault. All relays are programmable latching or non-latching, dry DPDT, 10 amps (resistive load only) at 110 Vac.

Temperature Limits: -10° to 100° F

Sensors: Electrochemical sensors for both CO and oxygen. 1-2 years typical life.

Sensor Options: NDIR sensor for CO_2, PID for VOCs 3-5 years typical sensor life

Response Time: T_{90} = 30 seconds

Inlet Pressure: 60 to 150 psi, air supply lines, 55 psi regulated to monitor

Enclosure: Thermoplastic box with clear, hinged front cover, designed for NEMA 12 and 4X

Size: 10.5"H x 8.5"W x 5.8"D

Weight: 8 lbs.

Wiring: Board mounted terminal strip
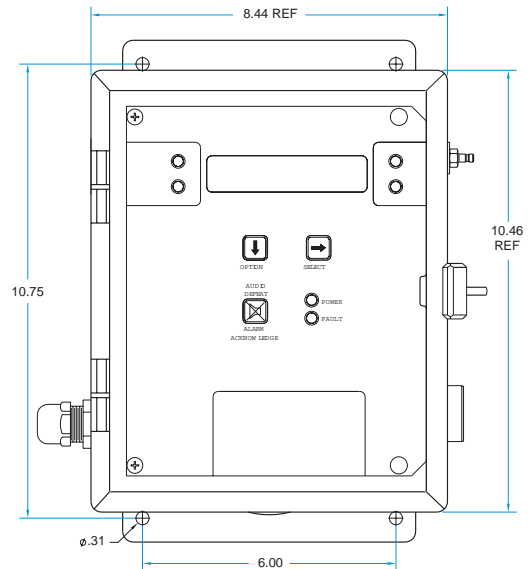
Horn: 95 dB at 2 feet

ACCESSORIES

FILTRATION SYSTEM
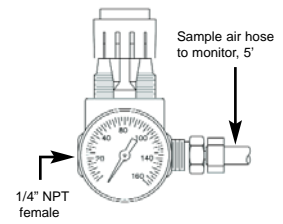The ISA-300RAL can also be supplied with the AFS-50 air filtration system.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISA-300RAL MOUNTING DIMENSIONS

Dimensions are in inches

The ISA-300RAL is supplied with a regulator and 5 foot hose for connection to the monitor. Connection from the facility air supply to the regulator is 1/4 inch NPT female.

High-pressure regulator available; consult Enmet.

Sample air hose to monitor, 5'

1/4" NPT female

ORDERING INFORMATION

Description	Part No.
ISA-300RAL, CO Monitor	03408-300
ISA-300RAL, CO & Oxygen Monitor	03408-301
ISA-300RAL, configured for other gases	Contact factory

Calibration Equipment	Part No.
Calibration Adapter	03700-500
Calibration Gas, 20 ppm CO	03219-020
Calibration Gas, 20.9% Oxygen	03296-209

WARNING: *The ISA-300RAL, without the oxygen monitoring circuitry, should be used only where there is complete assurance that inert gas cannot be accidentally injected into the breathing air line.*