Quickstart Guide

GASMAX / EC Gas Monitor for EC Sensors



INSTALLATION

IMPORTANT - Before installing the GASMAX EC, make sure there are no toxic or combustible gases are present. Declassify the area if necessary.

Factors such as air movement by fans, prevailing winds, convection, gas density, emission sources and environmental variables should be taken into account when determining sensor location. As with all sensors, the GASMAX /EC should be protected from falling or directed water, snow, shock, vibration and dirt.

Use conduit and installation practices approved for the appropriate area classification. When installed with #10-0247 Stainless Steel sensor head, the GASMAX / EC is certified for use in areas rated Class 1, Div 1, Groups B, C & D.

If desired, the GASMAX / EC can be installed as 'intrinsically safe'. This requires the installation of a barrier in the wiring to limit the maximum current flow (see drawing on back). If equipped with #10-0247IS Aluminum sensor head, the GASMAX / EC must be installed as Intrinsically Safe if used in a rated hazardous area.

WIRING

Remove the GASMAX / EC display assembly by unscrewing the explosion-proof cover, loosening the two thumbscrews and removing the electronics assembly. The display board is located on the back of the electronics assembly (See Figure 1).

Attach the two current loop wires to the display board connector TB1. Polarity is NOT important.

Reattach the display assembly to the enclosure and replace the explosion proof cover.

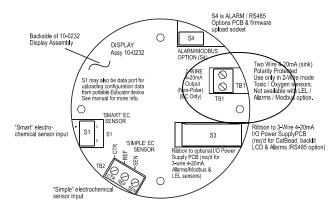


Fig 1. GASMAX / EC Display Board

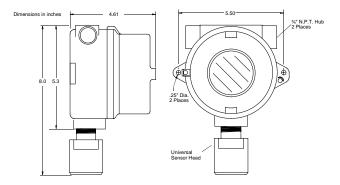


Fig 2. GASMAX / EC Dimensions

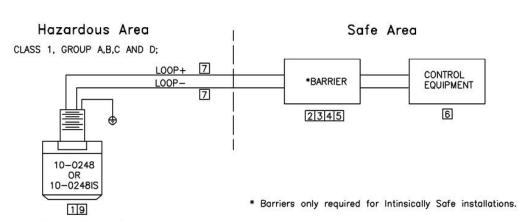
CALIBRATION

Apply power and allow the instrument to warm up for a minimum of three (3) hours.

Hold the magnetic wand next to the CAL button (lower left side of display) until the screen indicates CAL? Hold the wand over the EDIT button to confirm calibration mode.

Follow the on-screen instructions to calibrate the unit. When calibration is complete, the GASMAX / EC will indicate CAL DELAY and then resume normal operation. For more information, please read the GASMAX / EC Users Manual supplied with the unit.

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ST - 48,10 - 0248,10 - 0248IS

GASMAX INSTALLATION DRAWING

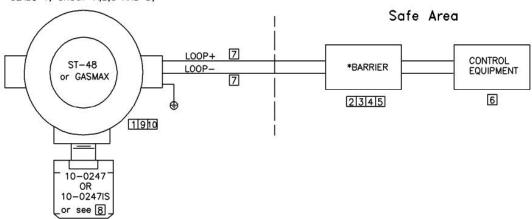
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REVISIONS

Hazardous Area

CLASS 1, GROUP A,B,C AND D;



- 10 A conduit seal within 18 inches of the enclosure is not required for Intrinsically Safe installations.
- 9 Warning: Substitution of components may impair intrinsic safety.
- The ST-48 or GASMAX may be fitted with any CSA certified compatible XP toxic sensor head. The hazardous location installation is limited to an area governed by the lowest group rating of the assembly's parts.
- [7] Intrinsically safe wiring. Important: Only ST-48 or GASMAX two wire models may be applied in intrinsically safe installations.
- 6 Control equipment must not use or generate more than 250 V with respect to earth.
- [5] Barriers must be installed in accordance with barrier manufacture's control drawing and artical of the National Electrical Code ANSI/NFPA 70, CEC Part 1 or other local installation codes, as applical.
- 4 Selected barriers must be third party approved as intrinsically safe for the application and have Vcc not exceeding Vmax and Isc not exceeding Imax of the intrinsically safe equipment, as shown in Table 1.

- 3 Cable capacitance plus intrinsically safe equipment capacitance must be less than the marked capacitance (Ca) shown on any barrier. The same applies for inductance. Capacitance and inductance of field wiring from the intrinsically safe equipment to the barrier should be calculated as (Ccable 60pF/ft and Lcable = 0.2 uH/ft) and should be included in system calculations.
- 2 Barrier may be in Division 2 location if so approved.
- 1 Entity parameters:

Vmax = 30 Vdc Imax = 100 mA Ci = 0 Li = 0