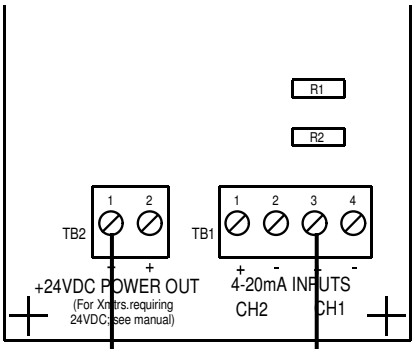
Quickstart Guide

C2 Protector Controller with Remote GDS-49 Sensor Transmitter

C2 ANALOG INPUT BOARD
P/N #10-0221



Ground Shield at C2 Controller (Recommended)

Wiring & Initial Setup Instructions

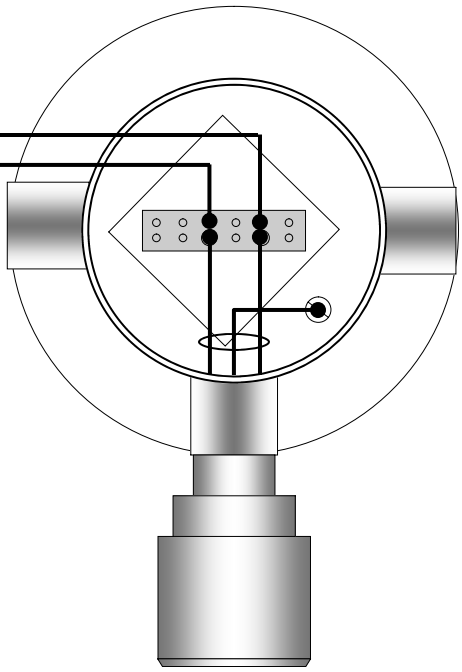
1) Install the C2 *Protector* controller and GDS-49 remote sensor transmitter. As with all sensors, avoid locations subject to excessive heat, directed water spray or dust. A splash guard is recommended on all externally-mounted sensors.

2) Connect the GDS-49 loop output to the C2 Analog Input Board as shown.

3) **IMPORTANT:** If the GDS-49 is to be installed intrinsically safe, then an approved isolation barrier must be wired between the C2 and GDS-49. See drawing on back or contact GDS Corp for more information.

4) Make sure the selected C2 channel is set to "ON" (see the C2 manual, section 2.2.4d).

5) Calibrate the unit and bump test to verify proper operation

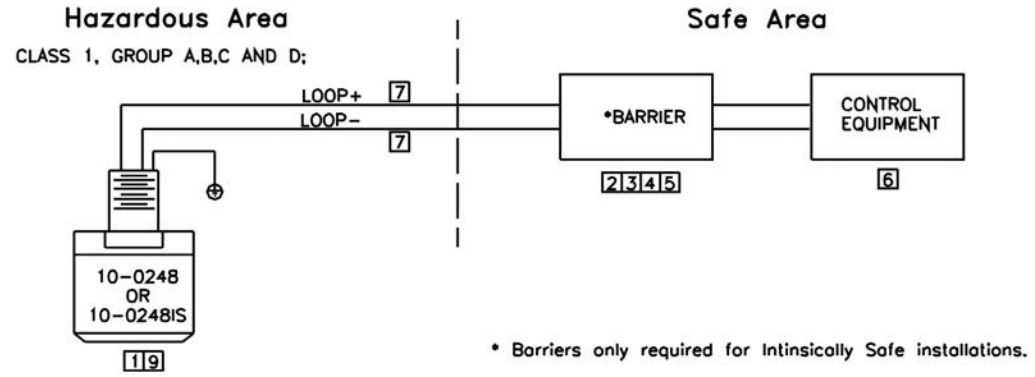


GDS-49
REMOTE SENSOR TRANSMITTER

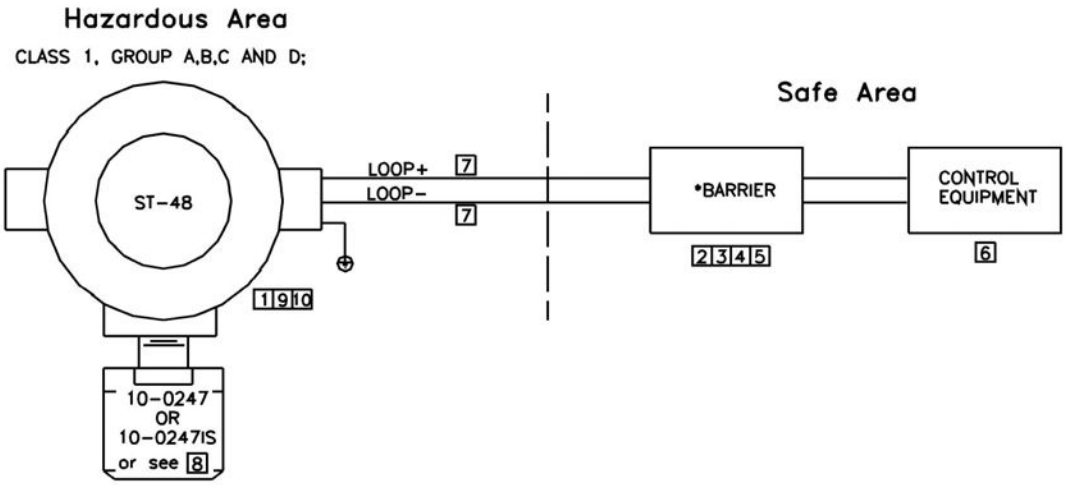
Important:

The GDS-49 output is non-polarized. Either wire may be connected to the C2 +24VDC terminal.

If moisture is present, do not install junction box with unused inlet facing UP! Water WILL leak into junction box!



* Barriers only required for Intinsically Safe installations.



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.

8 The ST-48 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 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.

Table 1:

I.S. Equipment		Barrier
Vmax	≥	Voc
Imax	≥	Isc
Ci + Ccable	≤	Ca
Li + Lcable	≤	La

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

REVISIONS:

Rev	Description	Appr	Date
A	ADDED NOTE 8		082205
B	CHANGED NOTE 7		091405
C	REVISED TITLE BLOCK		091605
D	ADDED NOTE 9		091905
E	ADDED NOTE 10		091905

RC SYSTEMS

ST-48,10-0248,10-0248IS
INSTALLATION DRAWING

dwg by TWL | app by | date 063005
scale NONE | drawing 11-0100
sz A | file: 1101000E.DWG | sheet 1 of 1