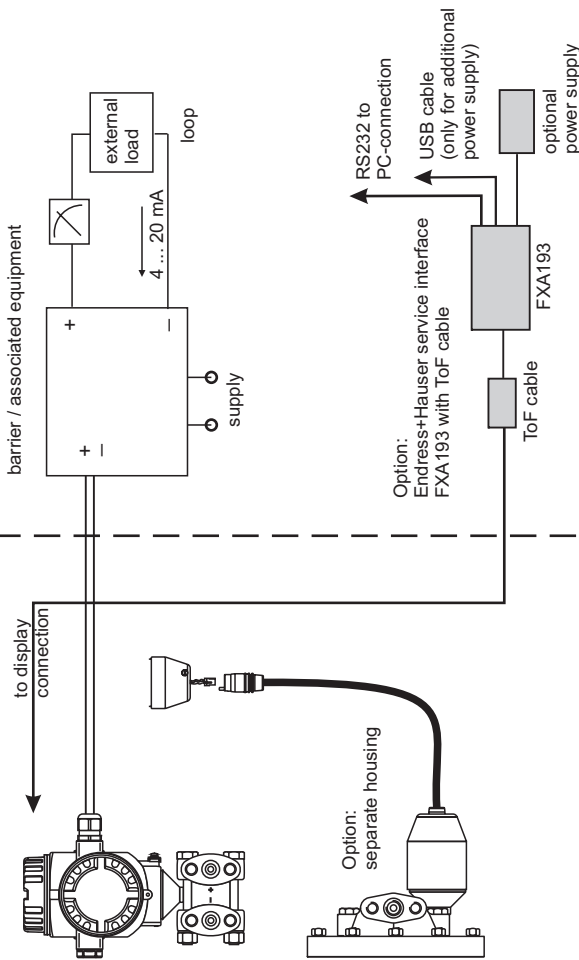


Hazardous location

Class I, Div. 1, Groups A, B, C, D
Zone 0
Class II, Div. 1, Groups E, F, G
Class III



Entity parameter:

Ui / Vmax. = 30 VDC
Ii / Imax. = 300 mA
Pi / Pmax = 1 W
Ci ≤ 11.8 nF
Li ≤ 225 µH

Warning:
Connection of FXA193 without ToF cable
may impair intrinsic safety!

Note:
FXA193 with ToF cable provides intrinsically safe circuits for
connection to the display connector of Deltabar S transmitters,
when they are installed in Class I, Div. 1, Groups A, B, C, D
hazardous locations.

Non hazardous location

Intrinsically safe Ex ia for Cl. I, Div. 1, Groups A, B, C, D, Cl. II, Div. 1, Groups E, F, G, Cl. III;
Ex ia IIC T6

Hazardous Locations Installations

Division 1 Installation:

- Control room equipment may not use or generate over 250 V.
- Install per the Canadian Electrical Code or National Electrical Code (ANSI/NFPA70) and ISA RP 12.06.01.
- For entity installations: Use CSA certified intrinsic safety barrier or other associated equipment that satisfy the following conditions: $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_{cable}$
 $L_a \geq L_i + L_{cable}$.

Transmitter entity parameters are as follows: Ui / Vmax = 30 VDC
Ii / Imax = 300 mA
Pi / Pmax = 1 W
Ci ≤ 11.8 nF
Li ≤ 225 µH
for T-code see table

4. Note: Type of protection for FMD76:

Intrinsically safe (Ex ia), Cl. I Div. 1, Groups A, B, C, D, Cl. II, Div. 1, Group G + coal dust;
Ex ia IIC T6.

5. For System Installation:

Use: CSA certified safety barriers as follows:

- 28 V / 300 Ω + ground or
- 28 V / 300 Ω + 28 V / diode or
- 28 V / 300 Ω + 10 V / 50 Ω

6. Warning: Substitution of components may impair intrinsic safety.

Avertissement : La substitution de composants peut compromettre la sécurité intrinsèque.
7. Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment. The configuration of the intrinsic safety barrier(s) must be CSA approved.

- Use supply wires suitable for: 5 °C above surrounding.
Utiliser des fils d'alimentation qui conviennent à une température de 5 °C au-dessus de la température ambiante.

9. Remark: Versions with optional terminal block with integrated overvoltage protection have an isolation voltage greater than 420 VDC between terminal connections and potentially grounded metal parts.

Suitable for Cl. I, Div. 2, Groups A, B, C, D, Cl. II, Div. 1, Groups E, F, G, Cl. III

Hazardous Location Installation (not for separated housing)

- Install per Canadian Electrical Code or National Electrical Code (ANSI/NFPA70) and ISA RP 12.06.01.

Intrinsic safety barrier not required
max. supply voltage 45 VDC.

- Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.
Avertissement : Risque d'explosion - avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux.

Warning: Open circuit before removing cover.

Avertissement : Ouvrir le circuit avant d'enlever le couvercle.

Warning: Substitution of Components may impair suitability for Cl. I, Div. 2.

Avertissement : La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Cl. I, Div. 2.

Table: Permissible ambient temperature and temperature code:

Temperature code	Permissible ambient temperature electronic compartment
T6	-40...40 °C
T4	-40...70 °C
	option for Ta min: -50 °C

Deltabar S PMD70, FMD76	Single Seal Device acc. ISA 12.27.01; Gas tight conduit seal not required.
Deltabar S FMD77, FMD78, PMD75	This device does not rely on a single seal to allow passage of process fluids into the electrical or conduit system. Hence, Sec. 18, clause 18-092.... of the CEC does not apply and a secondary seal is not required in the conduit.

ZD142P-E/00/en/01.09
CS/FM6.0
CSA/E 30.04.08



71078160

CSA Control Drawing
960006697 E

Deltabar S
FMD76, FMD77, FMD78, PMD70, PMD75
4...20 mA HART

Endress+Hauser



People for Process Automation