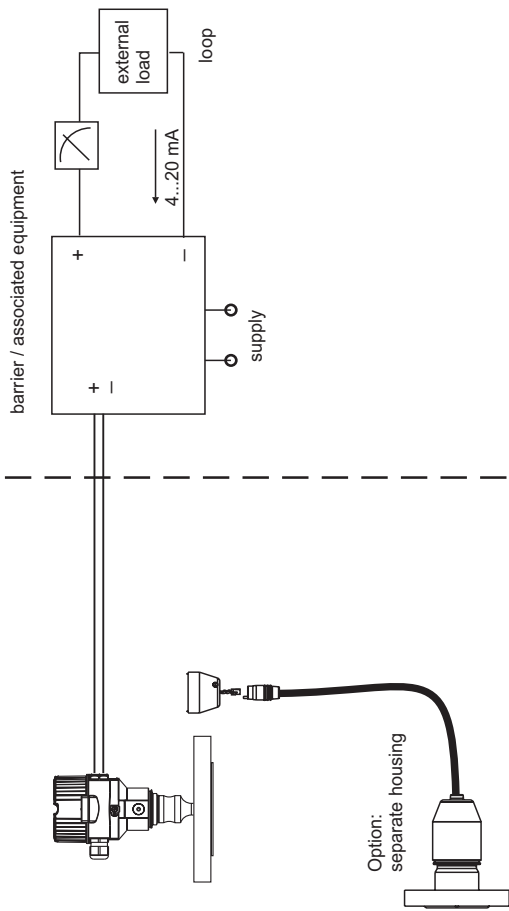


Hazardous location

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



Entity parameter:

$U_i / V_{max} = 30 \text{ VDC}$
 $I_i / I_{max} = 300 \text{ mA}$
 $P_i / P_{max} = 1 \text{ W}$
 $C_i \leq 10 \text{ nF}$
 $L_i = 0$

Non hazardous location

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

Hazardous Locations Installations

Division 1 installation:

- Control room equipment may not use or generate over 250 V.
- Install per 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:
 $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i$ + Coable, $L_a \geq L_i$ + Lcable.
 Transmitter entity parameters are as follows: $U_i / V_{max} = 30 \text{ VDC}$
 $I_i / I_{max} = 300 \text{ mA}$
 $P_i / P_{max} = 1 \text{ W}$
 $C_i \leq 10 \text{ nF}$
 $L_i = 0$
 For T-code see table

4. For system installation:

Use: CSA certified safety barriers as follows:

- $28 \text{ V} / 300 \Omega + \text{ground or}$
- $28 \text{ V} / 300 \Omega + 28 \text{ V} / \text{diode or}$
- $28 \text{ V} / 300 \Omega + 10 \text{ V} / 50 \Omega$

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

Avertissement : La substitution de composants peut compromettre la sécurité intrinsèque.

6. 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.

7. 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.

8. Service connection:

For service purposes the Endress+Hauser Commubox FXA191 or FXA195 may be connected to the display connection of the electronic insert. Follow the safety advice of the Commubox.

Suitable for Class I, Div. 2, Groups A, B, C, D, Class II, Div. 1, Groups E, F, G, Class III (only for NPT conduit entries)

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
 max. ambient temperature: 70°C
- 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 Class I, Div. 2.
 Avertissement : La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Class I, Div. 2.

Table: Permissible ambient temperature and temperature code:

Temperature code	Permissible ambient temperature electronics compartment
T6	-40...40°C
T4	-40...70°C

option for Ta min: -50°C

	Enclosure type			
	without separate housing	F15	F31	F15 F31
Cerabar M	X	X	X	X
PMC51	X	X	X	X
PMP51, PMP55	X	X	X	X

ZD238P-A/00/EN/01.10
 CCS/PM6.0
 CSA/A 29.07.09



71109147

CSA Control Drawing 960009066 A

Cerabar M
 PMC51, PMP51, PMP55
 4...20 mA HART (IS)

Endress+Hauser

People for Process Automation