

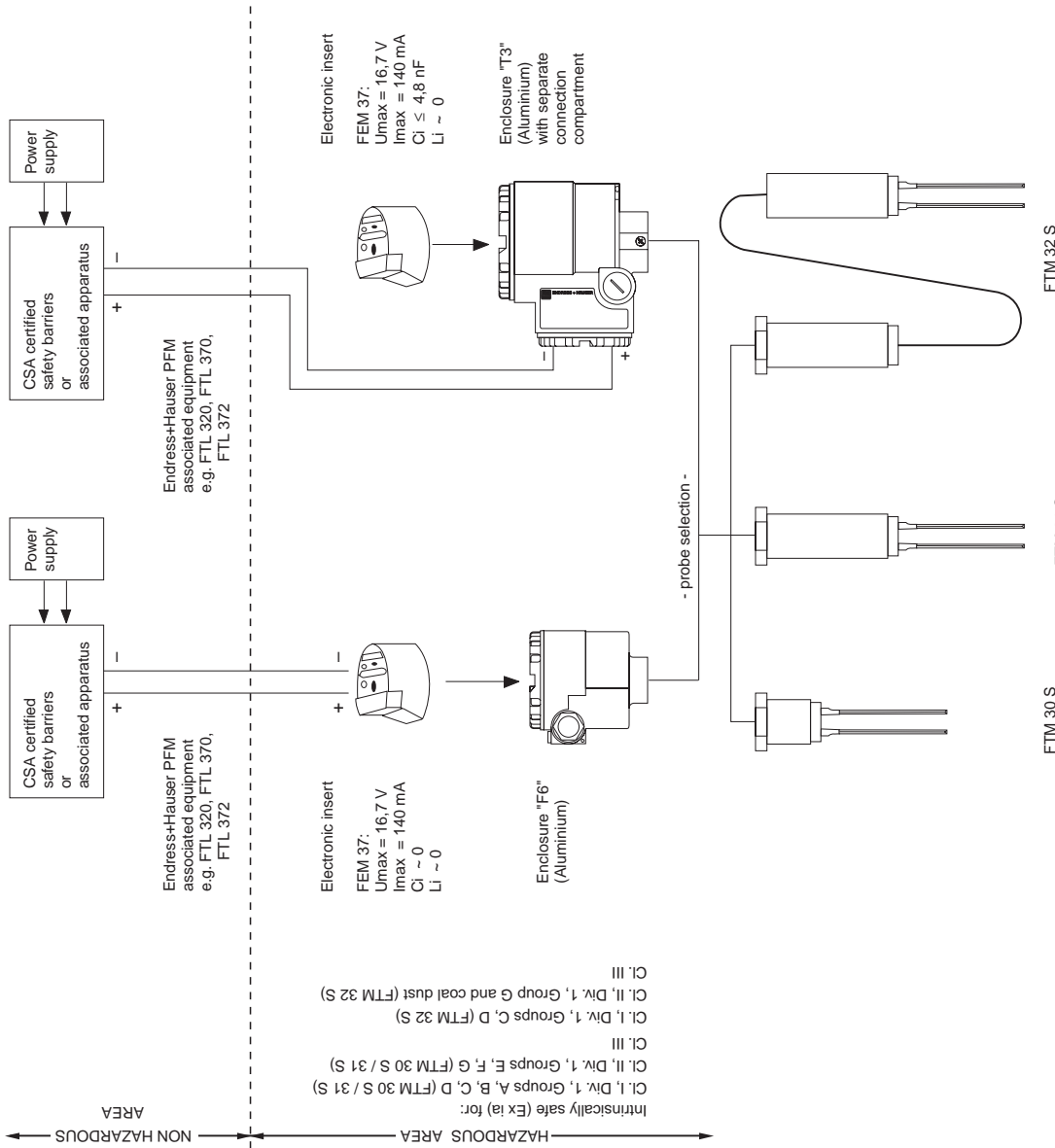
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CSA / A 11.06.02



Control drawing 960362-1066 A

Soliphant
FTM 30 S, 31 S, 32 S
(F6/T3)

Endress + Hauser



The relation between maximum process temperature and temperature class is shown in the following table:

Type	Temperature class	process temperature		ambient temperature of the electronic insert
		min.	max.	
FTM 30 S / 31 S / 32 S	T6	-40°C	85°C	-20°C ... 70°C
FTM 30 S / 31 S	T5	-40°C	100°C	-20°C ... 70°C
FTM 30 S / 31 S	T4	-40°C	135°C	-20°C ... 70°C
FTM 30 S / 31 S	T3	-40°C	150°C	-20°C ... 70°C

Agency controlled drawing.
No changes without prior
Agency approval.

Intrinsically safe (Ex ia),
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.
- For entry installations: Use CSA certified intrinsic safety barrier or other associated equipment that satisfy the following conditions:
 $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$
Entry parameters are as follows: $U_i / V_{max} = 16.7$ V DC
 $I_i / I_{max} = 140$ mA
 $L_i = 0$
 $C_i = 0$ (enclosure F6)
 $C_i \leq 4.8$ nF (enclosure T3)

4. 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 .

- Warning: Substitution of components may impair intrinsic safety.
Avertissement: La substitution de composants peut compromettre la sécurité intrinsèque.

- 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.

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

8. Note: Type of protection

for FTM 30 S, FTM 31 S:
Intrinsically safe (Ex ia), CL I, Div. 1, Groups A, B, C, D;
CL II, Div. 1, Groups E, F, G, CL III;
Ex ia IIC T6
for FTM 32 S:
Intrinsically safe (Ex ia), CL I, Div. 1, Groups C, D;
CL II, Div. 1, Group G + coal dust, CL III;
Ex ia IIB T6

Suitable for CL I, Div. 2, Groups A, B, C, D

Hazardous Locations Installations

- Install per Canadian Electrical Code using threaded metal conduit.

Intrinsic safety barrier not required
max. supply voltage 12.5 V
for T-code see table

- 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.

3. Note: Type of protection

for FTM 30 S, FTM 31 S:
suitable for CL I, Div. 2, Groups A, B, C, D;
for FTM 32 S:
suitable for CL I, Div. 2, Groups C, D