



71073954

CSA Control Drawing 960523-2080 D

Prosonic M
 FMU40, FMU41, FMU42, FMU44
 IS-HART

Endress+Hauser
 People for Process Automation



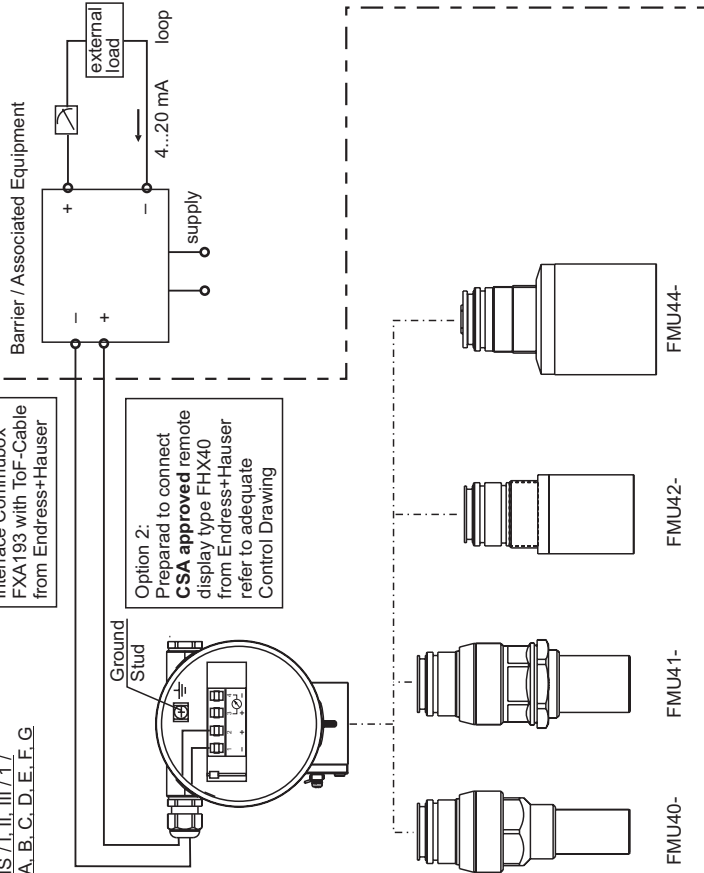
HAZARDOUS LOCATION

Class I, Div. 1, Groups A, B, C, D
 Class I, Zone 0, Ex ia IIC T6
 Class II, Div. 1, Groups E, F, G
 Class III

"F"-Type-Housing:
 IS / I, II, III / 1 /
 A, B, C, D, E, F, G

Option 1:
 Interconnection with
CSA approved Service
 Interface Commubox
 FXA193 with ToF-Cable
 from Endress+Hauser

Option 2:
 Prepared to connect
CSA approved remote
 display type FHX40
 from Endress+Hauser
 refer to adequate
 Control Drawing



NON HAZARDOUS LOCATION

Notes:

Intrinsically safe installation

Intrinsically Safe (Ex ia), Class I, Div. 1, Groups A, B, C, D or Ex ia IIC
Hazardous Location Installation

- Control room equipment may not use or generate over 250 V_{RMS}.
- The installation must be in accordance with the Canadian Electrical Code (CEC).
- Warning: Substitution of components may impair intrinsic safety.
- Avertissement: La substitution de composants peut compromettre la sécurité intrinsèque.
- Ex ia / IS is defined as intrinsically safe / sécurité intrinsèque.
- For entry installation use CSA certified safety barrier or other associated equipment that satisfy the following conditions:

U_i / V_{max} [V]	I_i / I_{max} [mA]	P_i / P_{max} [W]	C_i [nF]	L_i [µH]
30	300	1.0	≤ 13	negligible

with $U_0 / V_{OC} \leq U_i / V_{max}$, $I_0 / I_{SC} \leq I_i / I_{max}$, $C_0 / C_g \geq C_i + C_{cable}$, $L_0 / L_g \geq L_i + L_{cable}$

- For system installations 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

- Caution: Use only supply wires suitable for 5 K above surrounding temperature.

Utiliser des fils de l'alimentation qui conviennent à une température de 5 K au-dessus de la température ambiante.

- Install barrier / associated apparatus in accordance with manufacturer's instructions.
- This version of Prosonic M may be provided with a connection to an external display unit already installed or via a set up kit. This connection is for the use of the CSA certified display unit FHX40 only. Refer to safety instructions of the external display unit FHX40.
- In case of FMU44 avoid electrostatic charge at the sensor
 (e.g. do not rub with dry cloth; do not install within the filling curtain).

Class I, Div. 2, Groups A, B, C, D or Ex nC, IIC and DIP for Class II and III,
Div. 1, Groups E, F, G Hazardous Location Installation

- Depending on Location install per Canadian Electrical Code (CEC) using wiring methods described in Rule 18-156 or Rule 18-202 or Rule 18-302. Intrinsic safety barrier not required.
 Max. supply voltage 30 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: Explosion Hazard - Substitution of components may impair suitability for Class I, Div. 2.

Avertissement : Risque d'explosion - La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Div. 2.

For Class II and III, Div. 1

Warning: Keep cover tight unless power has been switched off or the area is known to be non-hazardous.

Area of application

The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.

Permissible ambient temperature:

Electronics: intrinsically safe, "F"-type enclosure: -40...+80 °C (-40...+176 °F)

Sensors: (FMU40, FMU41, FMU42, FMU44): -40...+80 °C (-40...+176 °F)

Permissible process / ambient temperature and temperature code:

Temperature code of FMU40/41/42/44	Permissible medium temperature (flange)	Permissible medium temperature of electronics compartment as a function of medium temperature (sensor)
T6	+60 °C	+60 °C
T5	+80 °C	+80 °C
T4	+80 °C	+80 °C