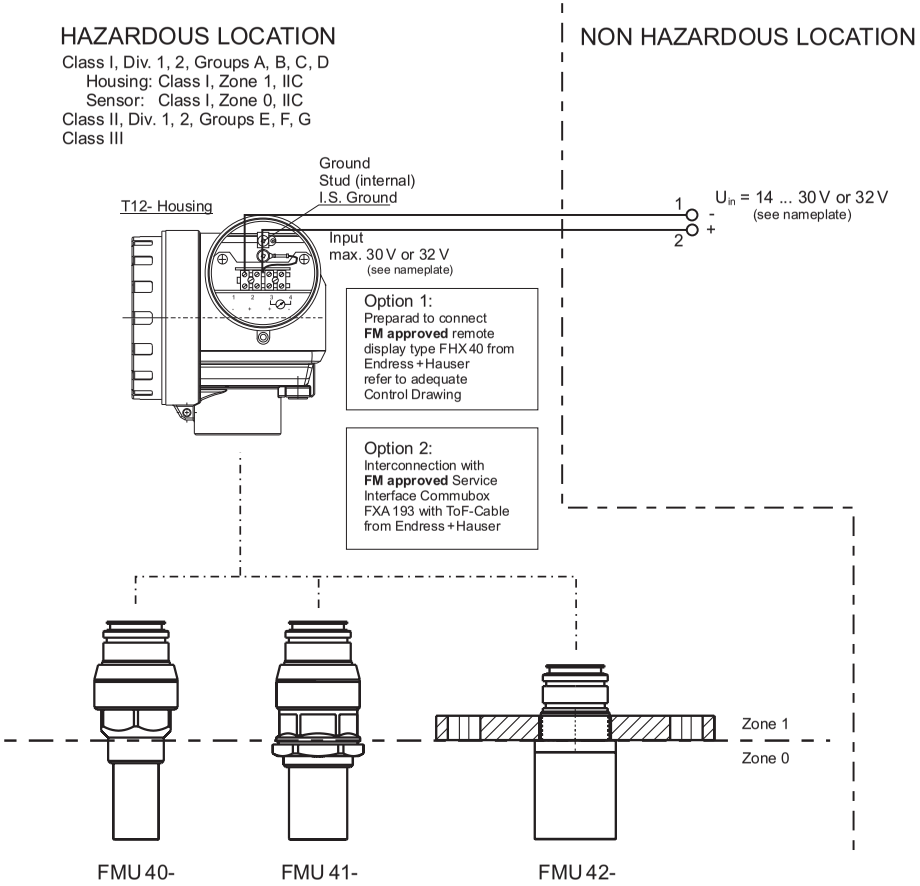

Area of application:
The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.

Permissible ambient temperature:

Electronic: T12 enclosure -40 ... +60 °C resp. -40 ... +140 °F

Type	Type of sensor	Operation temperature [°C resp. °F]
FMU 40-	1½"-sensor	-40 to +80 resp. -40 to +176
FMU 41-	2"-sensor	-40 to +80 resp. -40 to +176
FMU 42-	3"-sensor	-40 to +80 resp. -40 to +176

Notes:

Division 1 installation

Explosion proof , Class I, Div. 1, Group A, B, C, D or Zone 1/0 IIC Hazardous Location Installation

1. Control room equipment may not use or generate over 250 Vrms.
2. Installation should be in accordance with the National Electrical Code NFPA 70 (NEC).
3. Supply wires shall be installed in conduit in accordance with the NEC.
4. Terminal compartment:
   Warning: Keep cover tight when circuit is alive unless the area is known to be non-hazardous.
5. Use supply wires suitable for 5 K above surrounding ambient.
6. For electronics: maximum ambient temperature = 60 °C.
7. Ground stud shall be connected to a grounding electrode by 12 AWG wire or larger insulated conductors.
   Resistance between ground stud and grounding electrode shall be less than 1 Ω.
8. 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 FM approved display unit FHX 40 only.
   Refer to safety instructions of the external display unit FHX 40.

Division 2 and Zone 2 installation

Nonincendive Class I, Div. 2, Group A, B, C, D Hazardous Location Installation

1. Installation shall be in accordance with NEC using threaded conduits or other wiring methods in accordance with Article 500 through Article 510. Intrinsic safety barrier not required. Max. supply voltage 30 V or 32 V (see nameplate). For T-code see table.
2. Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.
   Warning: Explosion hazard - substitution of components may impair suitability for Class I, Div. 2.

Class II, III installation

DIP for Class II and III, Div. 1, Group E, F, G Hazardous Location Installation

1. Installation shall be in accordance with NEC using threaded conduits or other wiring methods in accordance with Article 500 through Article 510.
2. Use a dust tight seal at the conduit entry.

Temperature class with / without Display VU 331	Permissible maximum medium temperature at the sensors	Permissible maximum ambient (T_a) of electronic compartment (enclosure T12)		
		FMU 40	FMU 41	FMU 42
T6	+60 °C	+60 °C	+60 °C	+60 °C
T5	+80 °C	+60 °C	+60 °C	+60 °C
T4	+80 °C	+60 °C	+60 °C	+60 °C

Control drawing
960523-1082 C

Prosonic M FMU40/41/42
T12 / XP

Endress+Hauser
People for Process Automation

ZD098F/00/en/09.04
CCS/FM6.0
FM
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