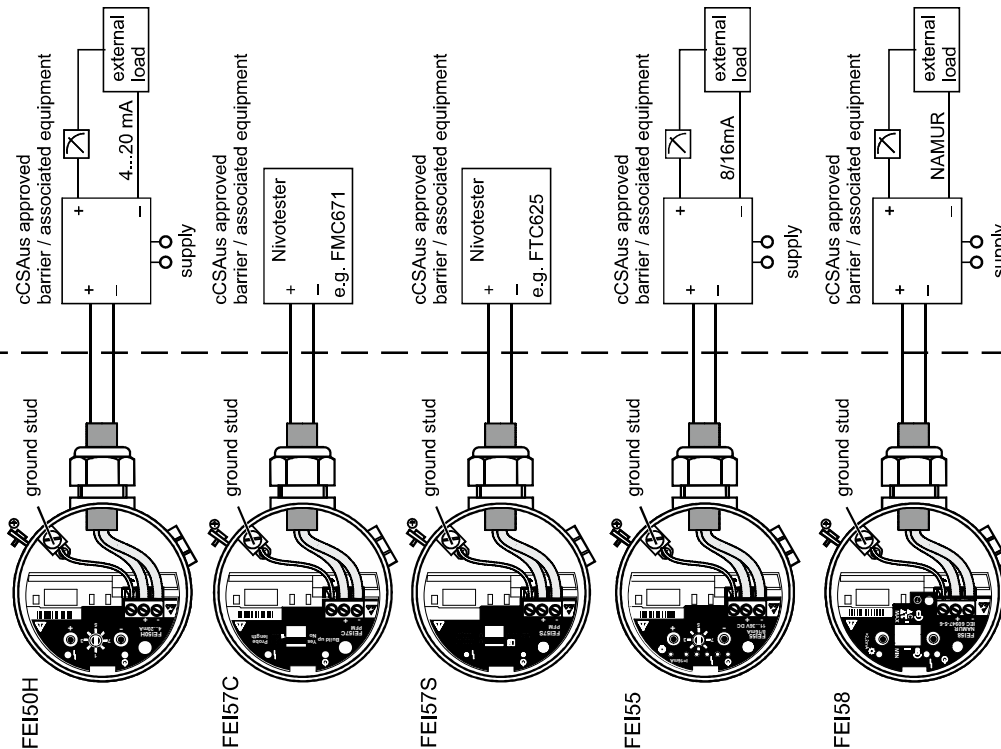


Hazardous classified location

Class I, Div. 1, 2, Groups A, B, C, D
Class I, Zone 0,
Class II, Div. 1, 2, Groups E, F, G
Class III



Temperature code	Permissible ambient temperature Electronic compartment
T6	-50 °C...+60 °C
T5, T4, T3	-50 °C...+70 °C

Non hazardous location

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

Hazardous Location Installations

- Control room equipment may not use or generate over 250 Vrms.
- Install per Canadian Electrical Code resp. National Electrical Code NFPA 70 (NEC).
- For entity installations: Use CSA certified 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:

FEI50H insert:
Entity Parameters:
 $V_{max} \leq 30$ V
 $I_{max} \leq 120$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI57C insert:
Entity Parameters:
 $V_{max} \leq 19,2$ V
 $I_{max} \leq 108$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI55 insert:
Entity Parameters:
 $V_{max} \leq 36$ V
 $I_{max} \leq 100$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI57S insert:
Entity Parameters:
 $V_{max} \leq 16,1$ V
 $I_{max} \leq 100$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI58 insert:
Entity Parameters:
 $V_{max} \leq 18$ VDC
 $I_{max} \leq 52$ mA
 $P_i \leq 170$ mW
 $C_i \approx 0$
 $L_i \approx 0$

For T- code see table.

- WARNINGS: Substitution of components may impair intrinsic safety. AVERTISSEMENTS : 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 barriers must be CSA approved.
- Use supply wires suitable for 5 °C above surrounding ambient.
- Single Seal Device acc. ISA 12.27.01; Gas tight conduit seal not required.

Nonincendive Class I, Div. 2, Group A, B, C, D
Class II, Div. 1, Group E, F, G; Class III

Hazardous Location Installations

- Installation per Canadian Electrical Code resp. National Electrical Code NFPA 70 (NEC). Intrinsic safety barrier not required.
- Nonincendive field wiring installation. The Nonincendive Field Wiring Circuit Concept allows interconnection of nonincendive field wiring apparatus with associated apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when: $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$ transmitter parameters are as follows:

FEI50H insert:
Entity Parameters:
 $V_{max} \leq 36$ V
 $I_{max} \leq 120$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI57C insert:
Entity Parameters:
 $V_{max} \leq 19,2$ V
 $I_{max} \leq 108$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI55 insert:
Entity Parameters:
 $V_{max} \leq 36$ V
 $I_{max} \leq 100$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI57S insert:
Entity Parameters:
 $V_{max} \leq 16,1$ V
 $I_{max} \leq 100$ mA
 $P_i \leq 1$ W
 $C_i \leq 2,4$ nF
 $L_i \approx 0$

FEI58 insert:
Entity Parameters:
 $V_{max} \leq 18$ VDC
 $I_{max} \leq 52$ mA
 $P_i \leq 170$ mW
 $C_i \approx 0$
 $L_i \approx 0$

- For these current and voltage controlled circuits the parameters I_{sc} and V_{oc} is not required and need not to be aligned with parameters I_{sc} and V_{oc} of the associated nonincendive field wiring or associated apparatus.
- WARNINGS: Explosion hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous. AVERTISSEMENTS : Risque d'explosion - Ne pas déconnecter l'équipement tant que l'alimentation électrique n'a pas été coupée ou tant que la zone n'est pas connue comme étant non dangereuse.
- WARNINGS: Substitution of components may impair suitability for Class I, Div. 2, Zone 2. AVERTISSEMENTS : La substitution de composants peut compromettre l'aptitude à la Classe I, Div. 2, Zone 2.

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CCS/CD2019
CSA/E 29.07.21



CSA Control Drawing
960007471-E

Liquicap M FMI51, FMI52, FTI51, FTI52
(IS, NI)
ENTITY INSTALLATION

Endress+Hauser People for Process Automation