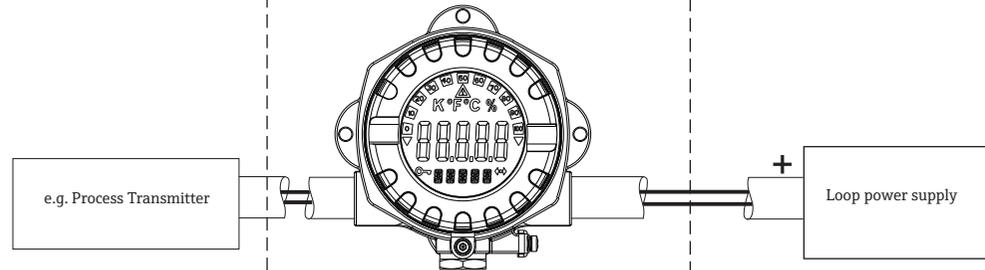




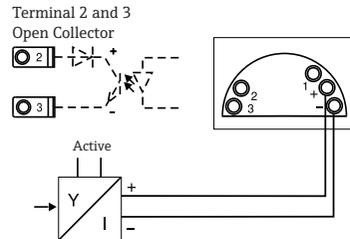
Hazardous (Classified) Location
 Class I, Zone 0, IIC
 Class II, III, Zone 20, IIIC
 Class I / Division 1, 2 / Groups ABCD
 Class II / Division 1 / Groups EFG
 Class III / Division 1

Hazardous (Classified) Location
 Class I, Zone 1, IIC
 Class II, III, Zone 21, IIIC
 Class I / Division 2 / Groups ABCD
 Class II / Division 1 / Groups EFG
 Class III / Division 1

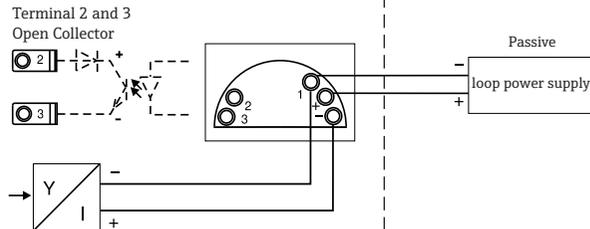
Nonhazardous Locations



see also installation notes for using power supply



Connecting an active current source
 e.g. a sensor with its own power supply and active current output



Connecting a passive current source
 e.g. 2-wire transmitter with additional loop power supply

Temperature range

T4 -40°C ... +85°C
 T5 -40°C ... +60°C
 T6 -40°C ... +50°C

Installation Notes RIA14

- CSA approved apparatus must be installed in accordance with manufacturer's instructions.
- Use supply wires suitable for 5°C above surroundings.

DUST IGNITION PROOF

Class II, Div. 1, Groups E, F & G, Class III, Div. 1

- A dust tight seal must be used for conduit entry when the field display is used in a Class II or Class III location.

INTRINSICALLY SAFE

Ex ib [ia Ga] IIC T6...T4 Gb

Class I, Division 2, Groups A, B, C, D; T6...T4 (Non Incendive Field Wiring (NIFW))

Class I, Division 2, Groups A, B, C, D; T6...T4 - NIFW and Associated Apparatus for Class I,

Division 1, Groups A, B, C, D; Class II, Groups E, F, G; Class III

- Installation should be in accordance with the Canadian Electrical Code (CEC).

- CSA Approved Associated Apparatus must meet the following parameters:

$$U_o \leq U_i \quad I_o \leq I_i \quad P_o \leq P_i \quad C_a \geq C_i + C_{cable} \quad L_a \geq L_i + L_{cable}$$

- Display entity parameters are as follows:

Supply circuit (Terminals + and 1b)	Open Collector (Terminals 2 and 3)
U_i or $V_{max} \leq 30$ V DC	U_i or $V_{max} \leq 30$ V DC
I_i or $I_{max} \leq 100$ mA	I_i or $I_{max} \leq 100$ mA
$P_i \leq 750$ mW	$P_i \leq 375$ mW
$C_i = 15.2$ nF	$C_i = 0$
$L_i = 0$	$L_i = 0$

- **WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.**

AVERTISSEMENT: LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE

NONINCENDIVE

Ex ic IIC Gc T6...T4 Gc

Class I, Division 2, Groups A, B, C, D; T6...T4 (Non Incendive Field Wiring (NIFW))

- Intrinsic safety barrier is required. $V_{max} \leq 35$ V DC.

- **WARNING: EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT WHILE CIRCUITS ARE LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS.**

AVERTISSEMENT: RISQUE EXPLOSIF - NE JAMAIS BRANCHEZ OU DECONNECTEZ QUAND LES CIRCUITS INTERNES SONT SOUS TENSION À MOINS QUE LA ZONE SOIT PAS À RISQUES.

- Nonincendive field wiring installation

The Nonincendive Field Wiring Circuit Concept allows interconnection of Nonincendive Field Wiring Apparatus with Associated Nonincendive Field Wiring Apparatus or Associated Intrinsically Safe Apparatus or Associated Apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when $V_{oc} \leq V_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$.

Field display Nonincendive Field Wiring parameters are as follows:

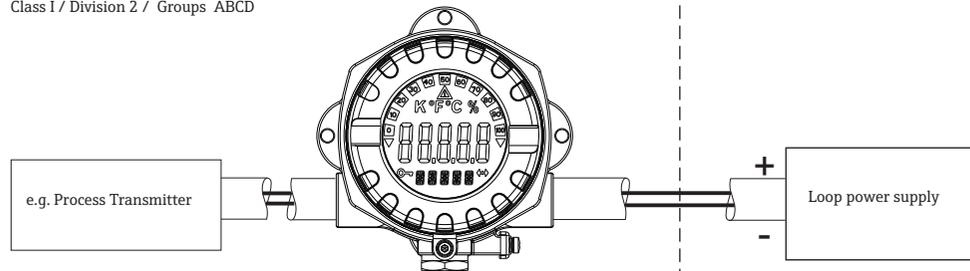
Supply circuit (Terminals + and 1b)	
$V_{max} \leq 35$ V DC	$C_i = 15.2$ nF, $L_i = 0$
I_{max} see following note below	
$P_{max} = 1.75$ W	
Open Collector (Terminals 2 and 3)	
$V_{max} \leq 35$ V DC	$C_i = 0$, $L_i = 0$
I_{max} see following note below	
$P_{max} \leq 875$ mW	

For these current controlled circuits, the parameter I_{max} is not required and need not to be aligned with parameter I_{sc} and I_t of the Associated Nonincendive Field Wiring Apparatus or Associated Apparatus.

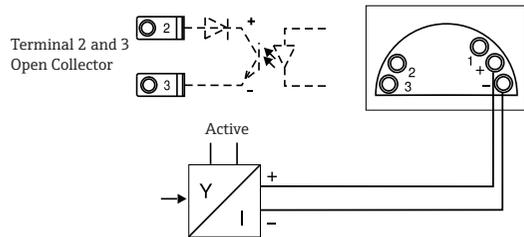
Author: Pfanzelt	Revision: A	Drawing No.: 12 07 00 112	Material: 71757042	Page 1 of 2
Date: 2008-12-08	Date: 2024-11-18	Title: Control drawing CSA Intrinsical safety	XA03644R/09/EN/02.26-00	

Hazardous (Classified) Location
Class I, Zone 2, IIC
Class I / Division 2 / Groups ABCD

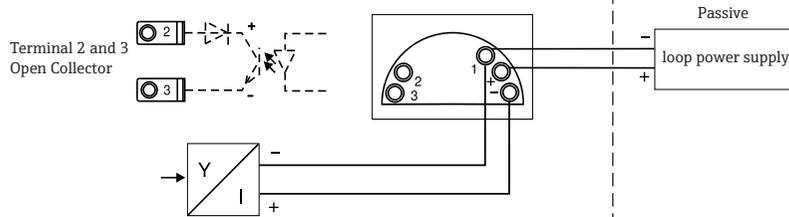
Nonhazardous Locations



see also installation notes for using power supply



Connecting a active current source
e.g. a sensor with ist own power supply and active current output



Connecting a passive current source
e.g. 2-wire transmitter with additional loop power supply

INCREASED SAFETY

Ex ec IIC T6...T4 Gc
Class I, Div. 2, Groups ABCD; T6...T4



- Intrinsic safety barrier is not required. $V_{max} \leq 35$ V DC.
- **WARNING: EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT WHILE CIRCUITS ARE LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS.**
- **AVERTISSEMENT: RISQUE EXPLOSIF- NE JAMAIS BRANCHEZ OU DECONNECTEZ QUAND LES CIRCUITS INTERNES SONT SOUS TENSION Á MOINS QUE LA ZONE SOIT PAS Á RISQUES.**

Terminal specification:

	Torque*	Cable version	Cable cross-section
Screw terminals	max. 1 Nm	Solid or flexible	= 2.5 mm ² (12 AWG) plus ferrules

*Do not overtighten the screw terminals, as this could damage the field display.

Functional ratings

These ratings do not supersede Hazardous Location values
 $U_{nom} \leq 35$ DC $I_{nom} \leq 4$ to 20 mA

CONDITIONS OF ACCEPTABILITY

- For the use as an equipment in type of protection increased safety, and for Zone 2 (EPL Gc), and Class I, Division 2 applications, the field display RIA14 shall not be connected or disconnected unless the area is known to be non-hazardous.
- If the field display RIA14 was used in a Zone 2 (EPL Gc) or Class I, Division 2 application it is not allowed to use it in Zone 1 (EPL Gb), Zone 0 (EPL Ga) or Class I, Division 1 applications in the future.
- Final acceptance of this equipment when installed is subject to the jurisdiction of the local inspection authority.
- The end user shall ensure appropriate earthing of the metallic field housing upon installation.
- The equipment shall only be powered by limited energy circuits such as Class 2 SELV circuits.

Temperature range

- T4 -40°C ... +80°C
- T5 -40°C ... +70°C
- T6 -40°C ... +55°C

Author: Pfanzelt	Revision: A	Drawing No.: 12 07 00 112	Material: 71757042	Page 2 of 2
Date: 2008-12-08	Date: 2024-11-18	Title: Control drawing CSA Increased safety	XA03644R/09/EN/02.26-00	