

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 I / Division 2 / Groups ABCD

Nonhazardous Locations

Installation Notes RIA16

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



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)

$$U_i \text{ or } V_{max} \leq 30 \text{ V DC} \quad C_i = 15.2 \text{ nF} \quad U_i \text{ or } V_{max} \leq 30 \text{ V DC} \quad C_i = 0$$

$$I_i \text{ or } I_{max} \leq 100 \text{ mA} \quad L_i = 0 \quad I_i \text{ or } I_{max} \leq 100 \text{ mA} \quad L_i = 0$$

$$P_i \leq 750 \text{ mW} \quad P_i \leq 375 \text{ mW}$$

- **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. $V_{max} \leq 35 \text{ V DC}$.

- **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)

$$V_{max} \leq 35 \text{ V DC} \quad C_i = 15.2 \text{ nF}, L_i = 0$$

I_{max} see following note below

$$P_{max} = 1.75 \text{ W}$$

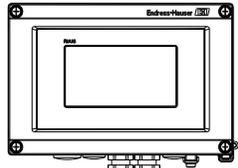
Open Collector (Terminals 2 and 3)

$$V_{max} \leq 35 \text{ V DC} \quad C_i = 0, L_i = 0$$

I_{max} see following note below

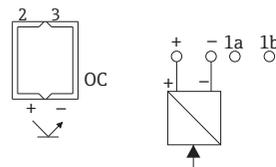
$$P_{max} \leq 875 \text{ mW}$$

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.



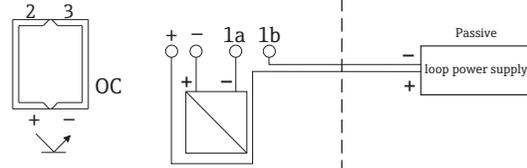
See also installation notes for using power supply

Terminal 2 and 3
Open Collector



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

Terminal 2 and 3
Open Collector



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

Temperature range

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

Approved	Pfanzelt	Date (yyyy-mm-dd)	2008-12-08	Drawing No.	12 05 00 112	Dwg.rev.	A	Revision no.	-	Revision date (yyyy-mm-dd)	2024-11-18	Name	MP	Material	71757126 XA02308R/09/EN/02.26-00	Endress+Hauser
Volume (mm³)	Designed	Pfanzelt	2008-12-05	Unit	RIA16	Scale	1:1	Title		CONTROL DRAWING CSA		Series				
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No.	-	Format	A4	Intrinsic Safety		Objekt version	Sheet	1 of 1	Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany				