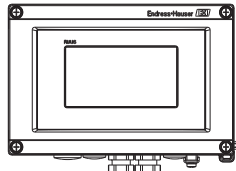


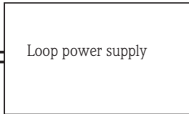
Hazardous (Classified) Location
 Class I / Division 1/ Ex ia IIC
 Class II, III/Division 1/ Groups EFG



Nonhazardous Locations

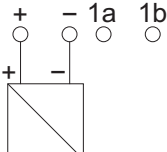
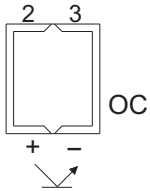


e.g. Process Transmitter or
 RTD or TC Sensor



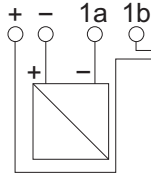
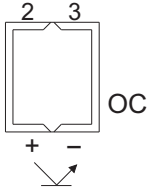
See also installation notes
 for using power supply

Terminal 2 and 3
 Open Collector



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

Terminal 2 and 3
 Open Collector



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 RIA16



- 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, III / Div. 1 / Groups EFG

- 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

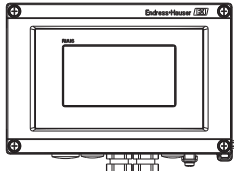
Class I / Div. 1 / Groups ABCD

- Installation should be in accordance with the Canadian Electrical Code (CEC).
- CSA Approved Associated Apparatus must meet the following parameters:
- $U_o \leq U_i$ $I_o \leq I_i$ $P_o \leq P_i$ $C_a \geq C_i + C_{cable}$ $L_a \geq L_i + L_{cable}$
- display entity parameters are as follows:
 Supply circuit (Terminals + and 1b)
 U_i or $V_{max} \leq 30$ V DC $C_i = 15.2$ nF
 I_i or $I_{max} \leq 100$ mA $L_i = 0$
 $P_i \leq 750$ mW
- Open Collector (Terminals 2 and 3)
 U_i or $V_{max} \leq 30$ V DC $C_i = 0$
 I_i or $I_{max} \leq 100$ mA $L_i = 0$
 $P_i \leq 375$ mW
- Warning: Substitution of components may impair intrinsic safety.

	Approved Pfanzelt	Date (yyyy-mm-dd) 2008-12-08	Drawing No. 12 05 00 112	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material 71108339 ZD 077R/09/en/12.09	Endress+Hauser
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2008-12-05	Unit RIA16	Scale 1:1	Title CONTROL DRAWING CSA Intrinsic Safety		Series	Endress + Hauser Wetzlar GmbH+Co. KG Nesselwang / Germany	
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No. -	Format A4	Objekt version	Sheet 1 of 2			

Hazardous (Classified) Location

Class I / Zone 2 / Ex nA IIC

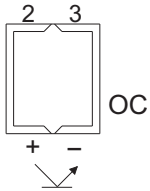


Nonhazardous Locations

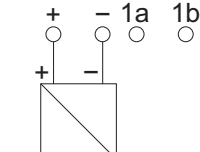


see also installation notes for using power supply

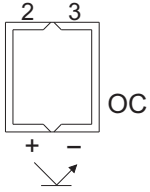
Terminal 2 and 3 Open Collector



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



Terminal 2 and 3 Open Collector



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

Temperature range

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

Installation Notes RIA16



- CSA approved apparatus must be installed in accordance with manufacturer's instructions.
- Installation must be in accordance with Canadian Electrical Code (CEC) Section 18.
- Use supply wires suitable for 5°C above surroundings.
- The device for Class I, Zone 2, Ex nA IIC is suitable for installation in Class I, Division 2, Groups A, B, C, D per CEC Section 18-000 Subrule (5).
- Warning: Substitution of components may impair suitability for Class I, Division 2.
- Warning: Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.

DUST IGNITION PROOF

Class II, III / Div. 1 / Groups EFG

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

NONINCENDIVE

Class I / Zone 2 / Ex nA IIC

- Intrinsic safety barrier not required.
- Supply circuit (Terminals + and 1b)
Supply voltage ≤ 35 V DC Signal current: 4-20mA
- Open Collector (Terminals 2 and 3)
Supply voltage ≤ 35 V DC, max. 100mA

NONINCENDIVE, FIELD WIRING

Class I / Zone 2 / Ex nA IIC

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 $V_{oc} \leq V_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$.
Transmitter Nonincendive Field Wiring parameters are as follows:

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

- Open Collector (Terminals 2 and 3)
 $V_{max} \leq 35 \text{ V DC}$ $C_i = \text{negligible small}$, $L_i = 0$
 $I_{max} \leq \text{see following note below}$
 $P_{max} \leq 875 \text{ mW}$

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.

	Approved Pfanzelt	Date (yyyy-mm-dd) 2008-12-08	Drawing No. 12 05 00 112	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material 71108339 ZD 077R/09/en/12.09	Endress+Hauser
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2008-12-05	Unit RIA16	Scale 1:1	Title CONTROL DRAWING CSA Nonincendive			Series	
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No. -	Format A4	Objekt version	Sheet 2 of 2	Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany		