

Hazardous (Classified) Location  
 Class I / Division 1, 2 / Groups ABCD  
 Class I / Zone 0 / IIC T6/T5/T4  
 Class II / Division 1, 2 / Groups EFG  
 Class III



Nonhazardous Locations

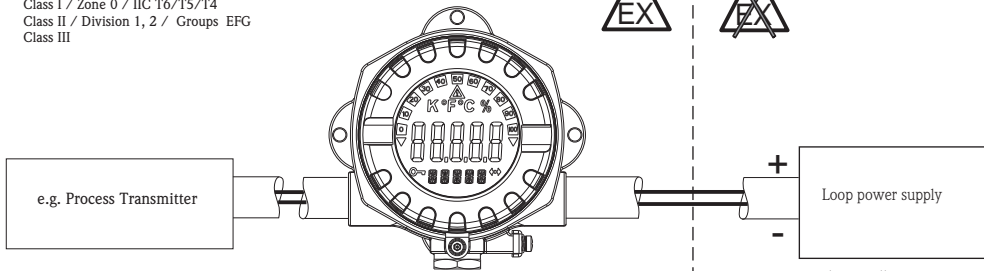
### Installation Notes RIA 141



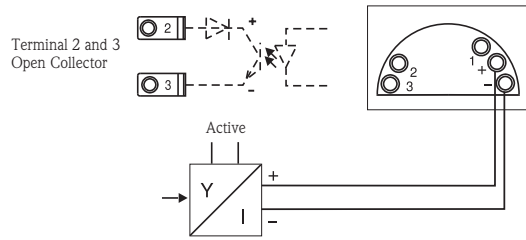
**EXPLOSION PROOF**  
**DUST IGNITION PROOF**

Class I / Div. 1 / Groups ABCD  
 Class II,III / Div. 1 / Groups EFG

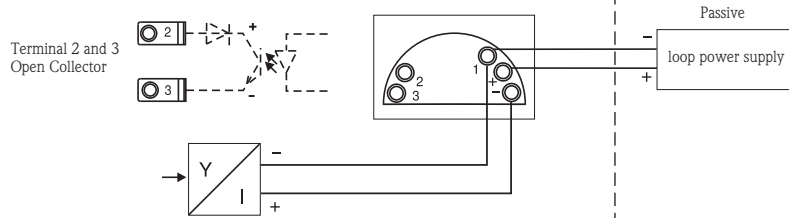
- CSA certified apparatus must be installed in accordance with manufacturer's instructions.
- Installation must be in accordance with Canadian Electrical Code.
- Use supply wires suitable for 5°C above surroundings.
- Conduit seal required at 18".
- All Conduits must be assembled with a minimum of five full threads engagement.
- A dust tight seal must be used for conduit entry when the field display is used in a Class II or Class III location.
- Keep tight when circuits alive.
- 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.
- Supply circuit (Terminals + and 1)
  - $V_{max} \leq 35 \text{ V DC}$
  - $P_{max} = 1.75 \text{ W}$
- Open Collector (Terminals 2 and 3)
  - $V_{max} \leq 35 \text{ V DC}$
  - $P_{max} \leq 875 \text{ mW}$



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

#### Temperature range

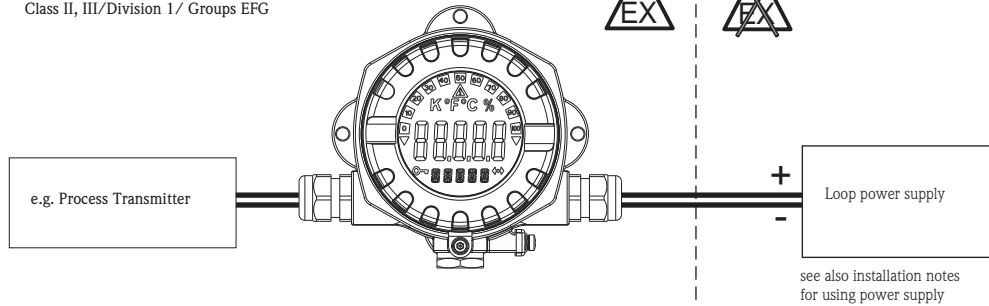
- T4 -40°C ... +80°C
- T5 -40°C ... +70°C
- T6 -40°C ... +55°C

	Approved Pfanzelt	Date (yyyy-mm-dd) 2005-03-23	Drawing No. 02 15 00 114	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material 510 10645 ZD 041R/09/en/05.05	<b>Endress+Hauser</b>
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2005-03-24	Unit RIA 141	Scale 1:1	Title CONTROL DRAWING CSA Explosionproof		Series	Endress + Hauser Wetzler 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			

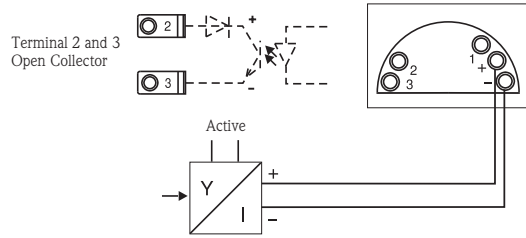
Hazardous (Classified) Location  
 Class 1 / Zone 2 / Ex nA IIC  
 Class II, III/Division 1/ Groups EFG



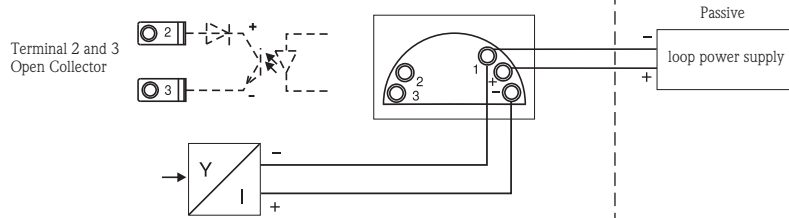
Nonhazardous Locations



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

Temperature range

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

Installation Notes RIA 141



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

NONINCENDIVE

Class I / Zone 2 / Ex nA IIC

- Intrinsic safety barrier not required.
- Supply circuit (Terminals + and 1)  
 Supply voltage  $\leq 35$  V DC      Signal current: 4-20mA
- Open Collector (Terminals 2 and 3)  
 Supply voltage  $\leq 35$  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 1)  
 $V_{max} \leq 35$  V DC       $C_i = 0$ ,  $L_i = 0$   
 $I_{max} =$  see following note below  
 $P_{max} = 1.75$  W
- Open Collector (Terminals 2 and 3)  
 $V_{max} \leq 35$  V DC       $C_i =$  negligible small,  $L_i = 0$   
 $I_{max} \leq$  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.

	Approved Pfanzelt	Date (yyyy-mm-dd) 2005-03-23	Drawing No. 02 15 00 114	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material 510 10645 ZD 041R/09/en/05.05	<b>Endress+Hauser</b>
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2005-03-24	Unit RIA 141	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	Nonincendive			Objekt version Sheet 2 of 2	
								Endress + Hauser Wetzlar GmbH+Co. KG Nesselwang / Germany	