

### Nonhazardous Locations



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

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

- Install per National Electrical Code (NFPA 70)
- Seal all conduits within 18 inches.
- All conduits must be assembled with a minimum of five full threads engagement.
- Temperature sensor assembly must be FM approved for appropriate area classification.
- Class II use a dust tight seal
- Keep tight when circuits alive
- $U \leq 35 \text{ V DC}$

**NONINCENDIVE**

NI Class I / Div. 2 / Groups ABCD

- Depending on location install per National Electrical Code (NEC) using wiring methods described in article 500 through article 510. Intrinsic safety barrier not required.  $V_{max} \leq 35$  V DC.

- **Warning:** Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.

- 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 Apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations.

Nonincendive Field Wiring parameters are as follows:

Active Configuration Connection requirements:

(+ and -) terminals

The RIA14 with respect to the supply device:  
 $V_{max} \text{ of RIA} \geq V_{oc} \text{ of the Associated Nonincendive Field Wiring Apparatus}$

$I_{\max}$  of RIA  $\geq I_{sc}$  Not relevant

Pi of RIA  $\geq$  Po of the Associated Nonincendive Field Wiring Apparatus

$$C_i \text{ of RIA} + C_{\text{cable}} \leq C_a \text{ of the Associated Nonincendive Field Wiring Apparatus}$$
$$\text{Li of RIA} + \text{Lcable} \leq \text{La of the Associated Nonincendive Field}$$

Wiring Apparatus Passive Configuration Connection requirements:

(+, 1, and -) terminals Associated Nonincendive Field Wiring Apparatus with respect to the Both Nonincendive Field Wiring Apparatus

$V_{oc} \leq V_{max}$  of RIA and  $V_{max}$  of Nonincendive Field Wiring Apparatus

$I_{sc} \leq I_{max}$  Not relevant

Po ≤ Pi max of RIA and Pi of Nonincendive Field Wiring Apparatus

$$Ca \geq Ci \text{ of RIA} + Ci \text{ of Nonincendive Field Wiring Apparatus} + C_{\text{cable}}$$
$$La \geq Li \text{ of RIA} + Li \text{ of Nonincendive Field Wiring Apparatus} + L_{\text{cable}}$$

For these current controlled circuits, the parameter Imax is not required and need not to be aligned with parameter Isc and It of the Associated Nonincendive Field Wiring Apparatus or Associated Apparatus.

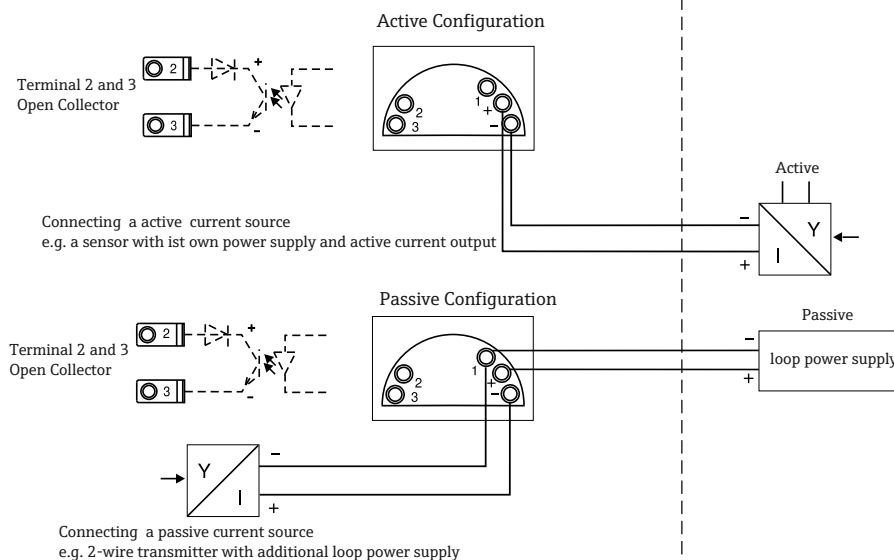
### Functional ratings

These ratings do not supersede Hazardous Location values

Unom  $\leq 35$  DC      Inom  $\leq 4$  to 20 mA


### Temperature range

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



## NONINCENDIVE, FIELD WIRING PARAMETERS

Signal Input	Vmax	Imax	Pi	Ci	Li
Terminals	(V)	(mA)	(W)	(μF)	(mH)
Active (+ and -)	35	200	1.75	0	0
Passive (+, 1, and -)	35	200	1.75	0	0
Open Collector					
2 and 3	35	100	0.875	0	0

	Approved Pfanzelt	Date (yyyy-mm-dd) 2008-12-08	Drawing No. 12 07 00 113	Dwg.rev. A	Revision no. W14304	Revision date (yyyy-mm-dd) 2014-03-04	Name MP	Material 71540225 XA02352R/09/EN/01.20	Endress+Hauser 
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2008-12-04	Unit RIA14	Scale 1:1	Title CONTROL DRAWING FM XP/NI/DIP			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	