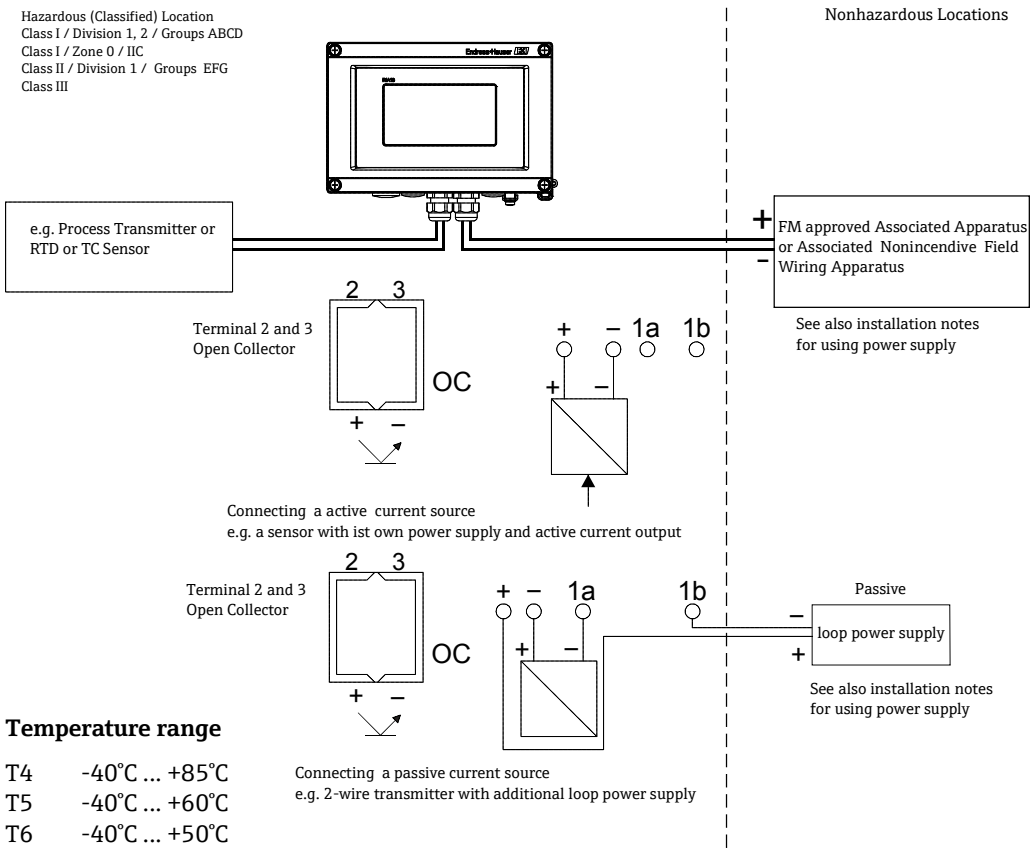

Temperature range

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

INTRINSICALLY SAFE IS Class I / Div. 1 / Groups ABCD
NONINCENDIVE, FIELD WIRING NI Class I / Div. 2 / Groups ABCD

Signal Input	Vmax	Imax	Pi	Ci	Li
Terminals	(V)	(mA)	(W)	(nF)	(mH)
Active (+ and -)	30	100	750	12.5	0
Passive (+, 1b)	30	100	750	12.5	0
Open Collector					
2 and 3	30	100	375	0	0

Installation Notes RIA16

- FM Approved Apparatus must be installed in accordance with manufacturer's instructions.
- Install per National Electrical Code (NFPA 70)
- Use supply wires suitable for 5°C above surroundings.
- Warning: Substitution of components may impair intrinsic safety or suitability for Class I, Division 2.

FM APPROVED

INTRINSICALLY SAFE IS Class I / Div. 1 / Groups ABCD

- Installation should be in accordance with ANSI/ISA RP 12.6.01 "Installation of Intrinsically safe systems for Hazardous (classified) locations" and the National Electrical Code (ANSI/NFPA 70).
- FM Approved Associated Apparatus must meet the following parameters:

  Uo ≤ Ui Io ≤ Ii Po ≤ Pi Ca ≥ Ci + Ccable La ≥ Li + Lcable

  Field display entity parameters are as follows:

  Ui or Vmax ≤ 30 V DC Ci = 0
  Ii or Imax ≤ 100 mA Li = 0
  Pi ≤ 750 mW

DUST IGNITION PROOF DIP Class II, III / Div. 1 / Groups EFG

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

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. Vmax ≤ 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 RIA16 with respect to the supply device:
  Vmax of RIA ≥ Voc of the Associated Nonincendive Field Wiring Apparatus
  Imax of RIA ≥ Isc Not relevant
  Pi of RIA ≥ Po of the Associated Nonincendive Field Wiring Apparatus
  Ci of RIA + Ccable ≤ Ca of the Associated Nonincendive Field Wiring Apparatus
  Li of RIA + Lcable ≤ 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
  Voc ≤ Vmax of RIA and Vmax of Nonincendive Field Wiring Apparatus
  Isc ≤ Imax Not relevant
  Po ≤ Pi max of RIA and Pi of Nonincendive Field Wiring Apparatus
  Ca ≥ Ci of RIA + Ci of Nonincendive Field Wiring Apparatus + Ccable
  La ≥ Li of RIA + Li of Nonincendive Field Wiring Apparatus + Lcable

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 ≤ 35 DC Inom ≤ 4 to 20 mA

	Approved	Date (yyyy-mm-dd)	Drawing No.	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material	
	Pfanzelt	2008-12-08	12 05 00 111	A	W14304	2014-03-04	MP	71252112 ZD00070R/09/EN/13.14	Endress+Hauser
Volume (mm³)	Designed	Date (yyyy-mm-dd)	Unit	Scale	Title				
	Pfanzelt	2008-12-04	RIA16	1:1	CONTROL DRAWING FM IS/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 / Sheet 1 of 1	Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany