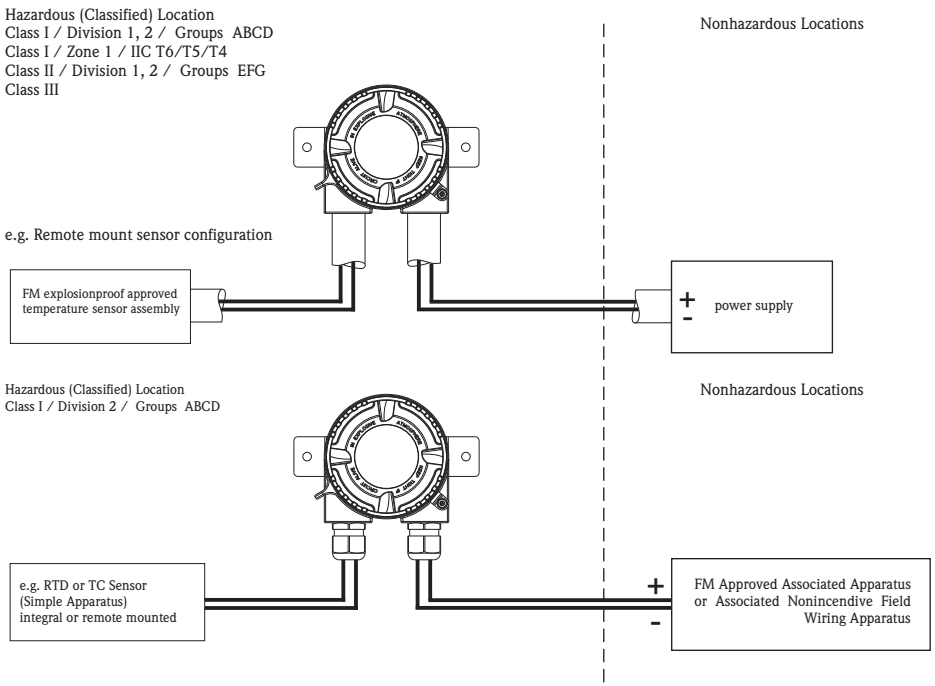

Temperature range

without display, TID10		with display, TID10	
T4	-50°C ... +85°C	T4	-40°C ... +85°C
T5	-50°C ... +80°C	T5	-40°C ... +80°C
T6	-50°C ... +70°C	T6	-40°C ... +70°C

NONINCENDIVE, FIELD WIRING NI Class I / Div. 2 / Groups ABCD

Sensor circuits (Terminals 3…7)

Uo or Voc or Vt = 7.6 V	Io or Isc = 13 mA	Po = 24.7 mW
Group A, B resp. IIC	Co or Ca = 10.4 µF	Lo or La = 236 mH
Group C, D resp. IIB	Co or Ca = 160 µF	Lo or La = 946 mH
Group C, D resp. IIA	Co or Ca = 1000 µF	Lo or La = 1.893 H

Installation Notes TMT82

FM APPROVED

- FM Approved Apparatus must be installed in accordance with manufacturer's instructions.
- Use supply wires suitable for 5°C above surroundings.
- Only simple apparatus should be terminated to the sensor connection.
- Simple apparatus are components as defined by the NEC (1.2 V, 0.1 A, 0.25 mW or 20 µJ).
- Warning: Substitution of components may impair intrinsic safety or suitability for Class I, Division 2.

EXPLOSION PROOF XP Class I / Div. 1 / Groups ABCD
DUST IGNITION PROOF DIP Class II, III / Div. 1 / Groups EFG

- Install per National Electrical Code (NFPA 70)
- For Group A, seal all conduits within 18 inches of enclosure; otherwise, conduit seal not required for compliance with NEC 501.5(A)(1)(1).
- 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

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 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 Voc ≤ Vmax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.
- Transmitter Nonincendive Field Wiring parameters are as follows:
- Ui or Vmax ≤ 35 V DC Ci = 0 Li = 0
  Ii or Imax = see following note below
- 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 ≤ 42 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	2011-06-08	34 05 00 113					71186536	ZD01002T/09/en/01.12
Volume (mm³)	Designed	Date (yyyy-mm-dd)	Unit	Scale	Title			Series	
	Pfanzelt	2011-06-06	iTEMP TMT82	1:1	CONTROL DRAWING FM XP, NI, DIP				
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

Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany