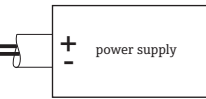
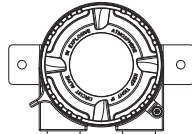


Hazardous (Classified) Location
 Class I / Division 1, 2 / Groups ABCD
 Class I / Zone 1 / IIC T6/T5/T4
 Class II / Division 1, 2 / Groups EFG
 Class III

Nonhazardous Locations

e.g. Remote mount sensor configuration

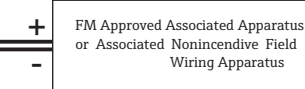
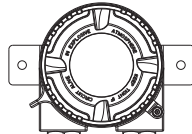
FM explosionproof approved
 temperature sensor assembly



Hazardous (Classified) Location
 Class I / Division 2 / Groups ABCD

Nonhazardous Locations

e.g. RTD or TC Sensor
 (Simple Apparatus)
 integral or remote mounted



Temperature range

without display, TID10

T4	-50°C ... +85°C
T5	-50°C ... +80°C
T6	-50°C ... +70°C

with display, TID10

T4	-40°C ... +85°C
T5	-40°C ... +80°C
T6	-40°C ... +70°C

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

Sensor circuits (Terminals 3...7)

U_o or V_{oc} or $V_t = 7.6 V$ I_o or $I_{sc} = 13 mA$ $P_o = 24.7 mW$

Group A, B resp. IIC	C_o or $C_a = 10.4 \mu F$	L_o or $L_a = 236 mH$
Group C, D resp. IIB	C_o or $C_a = 160 \mu F$	L_o or $L_a = 946 mH$
Group C, D resp. IIA	C_o or $C_a = 1000 \mu F$	L_o or $L_a = 1.893 H$

Installation Notes TMT82

- 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. $V_{max} \leq 35 V DC$.
- 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 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:
 - U_i or $V_{max} \leq 35 V DC$ $C_i = 0$ $L_i = 0$
 - I_i or I_{max} = see following note below
- 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.

Functional ratings

These ratings do not supersede Hazardous Location values
 $U_{nom} \leq 42 DC$ $I_{nom} \leq 4$ to 20 mA



Approved	Pfanzelt	Date (yyyy-mm-dd)	2011-06-08	Drawing No.	34 05 00 113			Dwg.rev.	-	Revision no.	-	Revision date (yyyy-mm-dd)	-	Name	-	Material	71540294 XA02284T/09/EN/01.20	Endress+Hauser
Volume (mm³)	Designed	Pfanzelt	2011-06-06	Unit	ITEMP TMT82			Scale	1:1	Title		CONTROL DRAWING FM		Series				
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No.	-			Format	A4	XP, NI, DIP		Objekt version	Sheet	1 of 1		Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany			