

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

Remote mount sensor configuration



FM explosionproof approved temperature sensor assembly

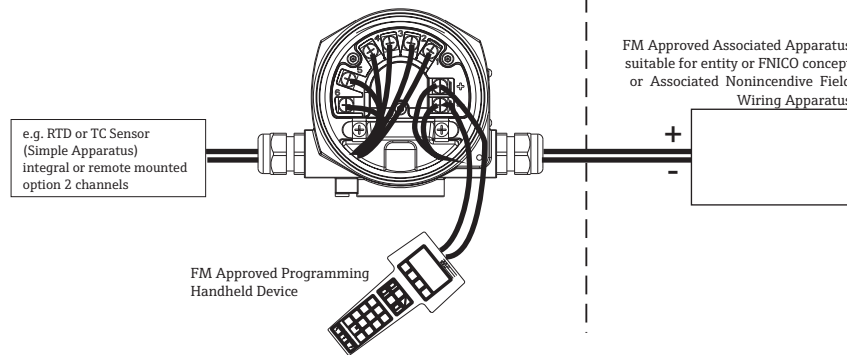
Direct mount sensor configuration:



FM explosionproof approved temperature sensor assembly

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

Nonhazardous Locations



FM Approved Associated Apparatus suitable for entity or FNICO concept or Associated Nonincendive Field Wiring Apparatus

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

Sensor circuits (Terminals 1...6)

Uo or Voc or Vt = 8.6 V    Io or Isc = 26.9 mA    Po = 57.6 mW  
 Group A, B resp. IIC    Co or Ca = 6.2 µF    Lo or La = 48 mH  
 Group C, D resp. IIB, IIA    Co or Ca = 55 µF    Lo or La = 180 mH

**Installation Notes TMT162**

- 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 (1.5 V, 0.1 A, 25 mW).
- Warning: Substitution of components may impair intrinsic safety or suitability for Class I, Division 2.

**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)
- 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
- U ≤ 35 V DC    P ≤ 3 W

**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 ≤ 5 nF    Li ≤ 10 µH
- 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.
- The transmitter is suitable to be installed according the FNICO concept.

**NOTE**

When the product is installed as a FNICO installation use drawing 14 12 00 211.

**Temperature range**

T4 -40°C ... +85°C    T5 -40°C ... +70°C    T6 -40°C ... +55°C



	Approved Pfanzelt	Date (yyyy-mm-dd) 2005-07-14	Drawing No. 14 12 00 213	Dwg.rev. -	Revision no. -	Revision date (yyyy-mm-dd) -	Name -	Material 71540251 XA02327T/09/EN/01.20	<b>Endress+Hauser</b>
Volume (mm³)	Designed Meroth	Date (yyyy-mm-dd) 2005-07-14	Unit iTEMP TMT162 FF/PA	Scale 1:1	Title CONTROL DRAWING FM XP, NI		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		