

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

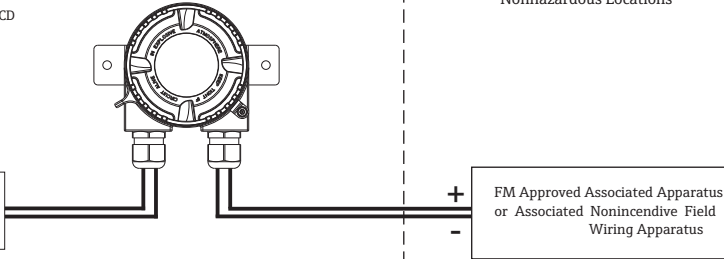
e.g. Remote mount sensor configuration



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	-40°C ... +85°C
T5	-40°C ... +80°C
T6	-40°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)

Uo or Voc or Vt = 7.2 V	Io or Isc = 25.9 mA	Po = 46.7 mW
Group A, B resp. IIC	Co or Ca = 13.5 µF	Lo or La = 59 mH
Group C, D resp. IIB	Co or Ca = 240 µF	Lo or La = 238 mH
Group C, D resp. IIA	Co or Ca = 1000 µF	Lo or La = 477 mH

Installation Notes TMT84, TMT85

- 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

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

NONINCENDIVE

Class I / Div. 2 / Groups ABCD AEx nA II

- 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

$$Voc \leq Vmax, Ca \geq Ci + Ccable, La \geq Li + Lcable.$$

Transmitter Nonincendive Field Wiring parameters are as follows: Ui or Vmax ≤ 35 V DC Ci ≤ 5 nF Li ≤ 10 µF

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.

- Warning: Explosion Hazard- Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous
- The transmitter is suitable to be installed according the FNICO concept.

NOTE

When the product is installed as a FNICO installation use drawing 34 02 00 111.



Approved	Pfanzelt	Date (yyyy-mm-dd)	2011-06-08	Drawing No.	34 02 00 113			Dwg.rev.	-	Revision no.	-	Revision date (yyyy-mm-dd)	-	Name	-	Material	71540295 XA02281T/09/EN/01.20	Endress+Hauser
Volume (mm³)	Designed	Date (yyyy-mm-dd)	2011-06-06	Unit	iTEMP TMT84, TMT85			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		