

Temperature range

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

INTRINSICALLY SAFE NONINCENDIVE, FIELD WIRING

IS Class I / Div. 1 / Groups ABCD
NI Class I / Div. 2 / Groups ABCD

Sensor circuits (Terminals 3...6)

Uo or Voc or Vt = 5.0 V Io or Isc = 3.6 mA

Po = 4.3 mW

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Group A, B resp. IIC

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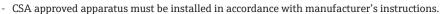
Co or Ca = $40 \mu F$

Lo or La = 100 mH

Group C, D resp. IIB, IIA Co or Ca = $1000 \mu F$

Lo or La = 100 mH

Installation Notes TMT 182



- Use supply wires suitable for 5°C above surroundings.
- Stating that only simple apparatus should be terminated to the sensor connection. Simple apparatus is defined as a device that will neither generate nor store more than 1.2V, 0.1A, 0.25mW or $20\mu J$. Examples are Thermocouples or RTDs.

INTRINSICALLY SAFE

Class I / Div. 1 / Groups ABCD

- Installation should be in accordance with the Canadian Electrical Code (CEC).
- CSA Approved Associated Apparatus must meet the following parameters:

Po ≤ Pi

Ci = 0

Li = 0

 $Uo \le Ui$ $Io \le Ii$

 $Ca \ge Ci + Ccable$ $La \ge Li + Lcable$

Transmitter entity parameters are as follows:

Ui or Vmax ≤ 30 V DC Ii or Imax ≤ 100 mA

Pi < 750 mW

- Voc + Voc of Handheld device < Vmax, Isc + Isc of Handheld device < Imax,

Po + Po of Handheld device < Pi, Ca > Ci + Ccable + Ci of Handheld device,

La > Li + Lcable + Li of Handheld device, when Programming Handheld device is used.

- Warning: Substitution of components may impair intrinsic safety.

NONINCENDIVE

Class I / Div. 2 / Groups ABCD

- Intrinsic safety barrier is 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 $Voc \le Vmax$, $Ca \ge Ci + Ccable$, $La \ge Li + Lcable$.

Transmitter Nonincendive Field Wiring parameters are as follows:

Ui or Vmax ≤ 30 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 \leq 35 DC Inom \leq 4 to 20 mA

,		Approved	Date (yyyy-mm-dd)	Drawing No.	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material	71540259		
		Pfanzelt	2006-09-13	14 06 00 132	Α	W07247	2007-02-26	MP			Endress+Hau	ser 로니
	Volume (mm³)	Designed	Date (yyyy-mm-dd)	Unit	Scale	Title						
		Meroth	2006-09-06	iTEMP TMT182	1:1	CONTROL	DRAWING (CSA	Seri	es		
	Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No.	Format A4	TMT182-D/Ixx Advanced Diagno			Objekt version	Sheet 1 of 1	Endress + Hause GmbH+Co.KG Nesse	r Wetzer wang/Germany

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