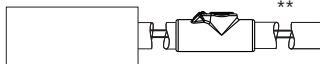


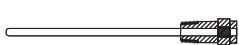
Hazardous (Classified) Location
 Class I / Division 1, 2 / Groups ABCD
 Class II / Division 1 / Groups EFG
 Class III

Remote mount sensor
 sample configuration*:



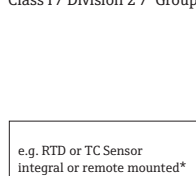
CSA certified temperature sensor assembly

Direct mount sensor
 sample configuration*:



CSA certified temperature sensor assembly

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



Nonhazardous Locations
 CSA certified Associated Apparatus
 or Associated Nonincendive Field
 Wiring Apparatus

* The temperature sensor assembly is shown for illustration purpose only. The remote mount or direct mount sensor, or its assembly with TMT142 is not covered by this certificate.

| Temperature class / Maximum surface: | Temperature range: | Sensor circuits (Terminals 1...4): | | | |
|--------------------------------------|--------------------|------------------------------------|---------------------|-------------------|--|
| T4 / T110°C | -40°C ... +85°C | Uo or Voc or Vt = 4.3 V | Io or Isc = 20.5 mA | Po = 22 mW | |
| T5 / T100°C | -40°C ... +70°C | Group A, B resp. IIC | Co or Ca = 1 µF | Lo or La = 80 mH | |
| T6 / T85°C | -40°C ... +55°C | Group C resp. IIB | Co or Ca = 10 µF | Lo or La = 300 mH | |
| | | Group D resp. IIA | Co or Ca = 10 µF | Lo or La = 600 mH | |

Applicable requirements see CSA certificate **80047477**

Installation Notes TMT142

- CSA approved apparatus must be installed in accordance with manufacturer's instructions.
- Install per Canadian Electrical Code or National Electrical Code (NFPA 70) suitable for Cl. 1 Div. 1, Cl. II Div. 1 wiring methods.
- Temperature Sensor assembly must be CSA approved for appropriate area classification and type of protection.
- Use supply wires suitable for 5°C above surroundings.
- Keep tight when circuits alive / Garder bien fermé tant que les circuits sont sous tension

EXPLOSION PROOF
Class I, Div. 1, Groups ABCD; T6...T4
DUST IGNITION PROOF
Class II, Div. 1, Groups EFG
Class III



- All conduits must be assembled with a minimum of five full threads engagement.
- Seal all conduits within 18 inches of enclosure.
 Un scellement doit être installé à moins de 18" du boîtier.
- In Class II use a dust tight seal.
- Warning: Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.
 Avertissement: Risque d'explosion - Ne pas débrancher tant que le circuit est sous tension, à moins qu'il s'agisse d'un emplacement non dangereux.
- Transmitter's supply ratings at terminals + and - are 11...36 V DC, 23mA

NONINCENDIVE
Class I, Division 2, Groups A, B, C, D; T6...T4 (Non Incendive Field Wiring (NIFW))

- Intrinsic safety barrier is required. $V_{max} \leq 30$ V DC.
- **WARNING; EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT WHILE CIRCUITS ARE LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS.**
- **AVERTISSEMENT: RISQUE EXPLOSIF- NE JAMAIS BRANCHEZ OU DECONNECTEZ QUAND LES CIRCUITS INTERNES SONT SOUS TENSION Á MOINS QUE LA ZONE SOIT PAS Á RISQUES.**
- 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 $V_{oc} = V_{max}$, $C_a = C_i + C_{cable}$, $L_a = L_i + L_{cable}$.
 Transmitter Nonincendive Field Wiring parameters are as follows:
 U_i or $V_{max} = 30$ V DC
 I_i or $I_{max} = 300$ mA

Functional ratings

These ratings do not supersede Hazardous Location values
 $U_{nom} \leq 36$ DC $I_{nom} \leq 4$ to 20 mA

| | | | | | | | | | |
|---|------------------------------------|--|----------------------------|---------------|---|---------------------------------|----------------|---|--|
| | Approved Pfanzelt | Date (yyyy-mm-dd) 2019-10-15 | Drawing No. 10000011429 | Dwg.rev. - | Revision no. - | Revision date (yyyy-mm-dd) - | Name - | Material 71758436 XA02099T/09/EN/02.26-00 | Endress+Hauser |
| Volume (mm³) | Designed Pfanzelt | Date (yyyy-mm-dd) 2019-10-14 | Unit iTEMP TMT142 | Scale 1:1 | Title CONTROL DRAWING CSA XP, DIP | | 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 2 | Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany |

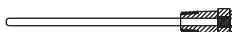
Hazardous (Classified) Location
Class I / Division 2 / Groups ABCD
Class I, Zone 2, IIC

Remote mount sensor
sample configuration*:



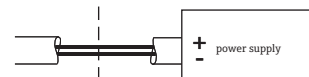
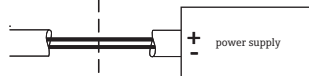
CSA certified temperature sensor assembly

Direct mount sensor
sample configuration*:



CSA certified temperature sensor assembly

Nonhazardous Locations



INCREASED SAFETY

Ex ec IIC T6...T4 Gc

Class I, Zone 2, AEx ec IIC T6...T4 Gc

Class I, Div. 2, Groups ABCD; T6...T4



- Intrinsic safety barrier is not required. $V_{max} \leq 36$ V DC.
- **WARNING: EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT WHILE CIRCUITS ARE LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS.**
- **AVERTISSEMENT: RISQUE EXPLOSIF- NE JAMAIS BRANCHEZ OU DECONNECTEZ QUAND LES CIRCUITS INTERNES SONT SOUS TENSION Á MOINS QUE LA ZONE SOIT PAS Á RISQUES.**

Functional ratings

These ratings do not supersede Hazardous Location values

$U_{nom} \leq 36$ DC $I_{nom} \leq 4$ to 20 mA

CONDITIONS OF ACCEPTABILITY

- For the use as an equipment in type of protection increased safety, and for Zone 2 (EPL Gc), and Class I, Division 2 applications, the field transmitter TMT142 shall not be connected or disconnected unless the area is known to be non-hazardous.
- If the field transmitter TMT142 was used in a Zone 2 (EPL Gc) or Class I, Division 2 application it is not allowed to use it in Zone 1 (EPL Gb), Zone 0 (EPL Ga) or Class I, Division 1 applications in the future.
- Final acceptance of this equipment when installed is subject to the jurisdiction of the local inspection authority.
- The end user shall ensure appropriate earthing of the metallic field housing upon installation. The equipment shall only be powered by limited energy circuits such as Class 2 SELV circuits.

WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD

- Do not rub surfaces with dry cloth.
- The device must be installed so that even in the event of rare incidents, an ignition source is due to impact or friction between the housing and iron/steel is excluded.
- When installing and commissioning the unit make sure that an electrostatic charge of the housing is avoided.

AVERTISSEMENT: RISQUE POTENTIEL DE DÉCHARGES ELECTROSTATIQUES

- Ne pas frotter les surfaces avec un chiffon sec.
- Le transmetteur de température doit être installé de telle sorte que même en cas d'incident rare, toute source d'inflammation due à un choc ou à un frottement entre le boîtier et le fer/l'acier soit exclue
- Lors du montage et de la mise en service de l'appareil, veiller à éviter une charge électrostatique du câble de raccordement.

Temperature range:

T4 -40°C ... +85°C

T5 -40°C ... +70°C

T6 -40°C ... +55°C

* The temperature sensor assembly is shown for illustration purpose only. The remote mount or direct mount sensor, or its assembly with TMT142 is not covered by this certificate.

Applicable requirements see CSA certificate **80047477**

Installation Notes TMT142 (Increased safety/Div. 2 installation with wiring methods)

- CSA approved apparatus must be installed in accordance with manufacturer's instructions.
- Install per Canadian Electrical Code or National Electrical Code (NFPA 70) Wiring methods for Division 2 or Zone 2.
- Temperature Sensor assembly must be CSA certified for appropriate area classification and type of protection.
- Use supply wires suitable for 5°C above surroundings.
- Keep tight when circuits alive.
Garder bien fermé tant que les circuits sont sous tension
- Terminal specification:

| | Torque* | Cable version | Cable cross-section |
|-----------------|-----------|-------------------|--|
| Screw terminals | max. 1 Nm | Solid or flexible | = 2.5 mm ² (12 AWG) plus ferrules |

*Do not overtighten the screw terminals, as this could damage the transmitter.

| | | | | | | | | | | | | | | | | |
|---|------------------------------------|--|------------|-------------|--------------|----------|-----|--------------|---|----------------------------|------------|----------------|--------|---|-------------------------------------|----------------|
| Approved | Pfanzelt | Date (yyyy-mm-dd) | 2019-10-15 | Drawing No. | 10000011429 | Dwg.Rev. | A | Revision no. | - | Revision date (yyyy-mm-dd) | 2025-12-11 | Name | MP | Material | 71758436 XA02099T/09/EN/02.26-00 | Endress+Hauser |
| Volume (mm ³) | Designed | Date (yyyy-mm-dd) | 2019-10-14 | Unit | iTEMP TMT142 | Scale | 1:1 | Title | CONTROL DRAWING CSA Increased Safety | | Series | Objekt version | Sheet | Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany | | |
| Refer to protection notice ISO 16016 | Edge of working parts ISO 13715 | Geometrical tolerancing ISO 2768-mH-E | | Part No. | - | Format | A4 | | | | | | 2 of 2 | | | |