

# Safety Instructions

## **iTEMP TMT142, TMT162**

HART®, PROFIBUS® PA, FOUNDATION Fieldbus™

Ex nA IIC T4~T6 Gc



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HART®, PROFIBUS® PA, FOUNDATION Fieldbus™

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## About this document



This document has been translated into several languages. Legally determined is solely the English source text.

The document translated into EU languages is available:

- In the download area of the Endress+Hauser website:  
[www.endress.com](http://www.endress.com) -> Downloads -> Manuals and Datasheets ->  
 Type: Ex Safety Instruction (XA) -> Text Search: ...
- In the Device Viewer: [www.endress.com](http://www.endress.com) -> Product tools ->  
 Access device specific information -> Check device features



If not yet available, the document can be ordered.

## Associated documentation

This document is an integral part of the following Operating Instructions:

TMT142 HART®:

- Operating instructions: BA00191R
- Brief operating instructions: KA00222R
- Technical information: TI00107R

TMT162 HART®:

- Operating instructions: BA01801T
- Brief operating instructions: KA00250R
- Technical information: TI00086R, TI01344T

TMT162 PROFIBUS® PA:

- Operating instructions: BA00275R
- Brief operating instructions: KA00276R
- Technical information: TI00086R

TMT162 FOUNDATION Fieldbus™:

- Operating instructions: BA00224R
- Brief operating instructions: KA00189R
- Technical information: TI00086R

## Supplementary documentation

Explosion protection brochure: CP00021Z

The Explosion-protection brochure is available:

- In the download area of the Endress+Hauser website:  
[www.endress.com](http://www.endress.com) -> Downloads -> Brochures and Catalogs ->  
 Text Search: CP00021Z
- On the CD for devices with CD-based documentation

**Manufacturer's  
certificates****NEPSI certificate**

Certificate number: GYJ22.1038X, GYJ22.1041X

Affixing the certificate number certifies conformity with the following standards (depending on the device version)

- GB 3836.1-2010
- GB 3836.8-2014

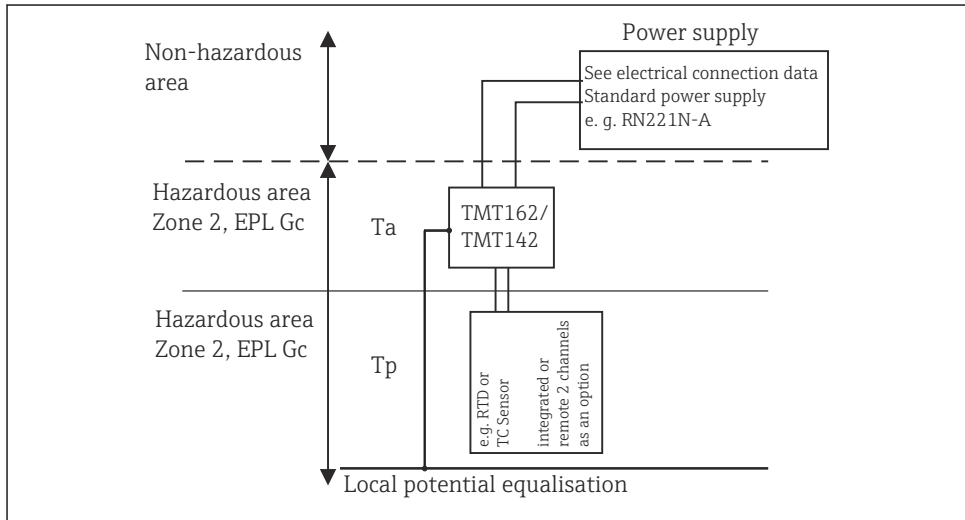


Please refer to NEPSI/CCC certificates for conditions of safe use.

**Manufacturer  
address**

Endress+Hauser Wetzer GmbH + Co. KG  
Obere Wank 1  
87484 Nesselwang, Germany

## Safety instructions:



1 Installation of the transmitter

## Safety instructions: Installation

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations (e.g. EN/IEC 60079-14).
- Seal the cable entries tight with certified cable glands (min. IP6X) IP6X according to EN/IEC 60529.
- For operating the transmitter at an ambient temperature under  $-20^{\circ}\text{C}$ , appropriate cables, cable entries and sealing facilities permitted for this application must be used.
- The housing of the field transmitter must be connected to the potential matching line.
- For ambient temperatures higher than  $+70^{\circ}\text{C}$ , use suitable heat-resisting cables or wires, cable entries and sealing facilities for  $T_a +5\text{ K}$  above surrounding.
- The transmitter must be installed and maintained so, that even in the event of rare incidents, an ignition source due to impact or friction between the enclosure and iron/steel is excluded.
- When using a plug-in connector (e.g. TURCK PA connector), ensure that the requirements for category 3 and the operating temperature are observed.

**⚠ WARNING**

**Explosive atmosphere**

- In an explosive atmosphere, do not open the device when voltage is supplied (ensure that the IP 66/67 housing protection is maintained during operation).

**Temperature tables**

Type	Temperature class	Ambient temperature
TMT142 TMT162	T6	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$
	T5	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$
	T4	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$

**Electrical connection data**

Type	Type of protection	Power supply (terminals + and -)
TMT142 TMT162	Ex nA IIC T4~T6 Gc	$U_b = 11\text{ to }40\text{ V}_{DC}$ Output: 4 to 20 mA (HART® protocol) Current consum. $\leq 23\text{ mA}$
TMT162	Ex nA IIC T4~T6 Gc	$U_b = 9\text{ to }32\text{ V}_{DC}$ Output: FOUNDATION Fieldbus™ PROFIBUS PA® Current consum. $\leq 11\text{ mA}$



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