

Safety Instructions

iTEMP TMT142 HART

ATEX: II2G Ex db IIC T6...T4 Gb, II2D Ex tb IIIC
T110°C Db

IECEX: Ex db IIC T6...T4 Gb, Ex tb IIIC T110°C Db



Document: XA01959T

Safety instructions for electrical apparatus for explosion-hazardous areas according to Directive 2014/34/EU (ATEX)

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iTEMP TMT142 HART

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About this document



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

Associated documentation

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

- Operating Instructions: BA00191R
Brief operating instructions: KA00222R
- Technical Information: TI00107R

All documentation is available in:

- *W@M Device Viewer*: Enter the serial number from the nameplate in the (www.endress.com/deviceviewer): all data relating to the device and an overview of the Technical Documentation supplied with the device are displayed.
- *Endress+Hauser Operations App*: Enter the serial number on the nameplate or scan the 2-D matrix code (QR code) on the nameplate with the *Endress+Hauser Operations App*: all the information about the device and the technical documentation pertaining to the device is displayed.
- In the Download Area of the Endress+Hauser web site: www.endress.com → Download.

Supplementary documentation

Explosion-protection brochure: CP00021Z/11

The Explosion-protection brochure is available: In the download area of the Endress+Hauser website: www.endress.com → Download → Advanced → Documentation code: CP00021Z

Certificates

Declaration of Conformity

Declaration number: EC_00164

IECEx Certificate

Certificate number: KEM 06.0020X

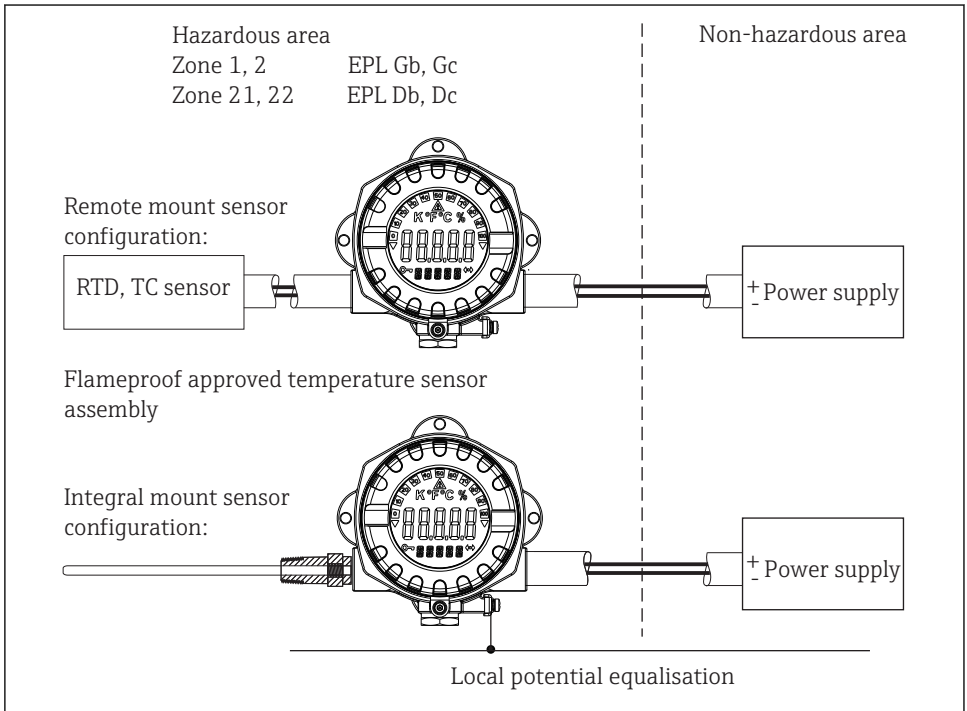
Affixing the certificate number certifies conformity with the following standards (depending on the device version).

- IEC 60079-0: 2017
- IEC 60079-1: 2014
- IEC 60079-31: 2014

Manufacturer address

Endress+Hauser Wetzler GmbH + Co. KG
Obere Wank 1,
D-87484 Nesselwang or www.endress.com

Safety instructions



A0020358-EN

Safety instructions: Installation of protection flameproof

⚠ WARNING

Explosive atmosphere

- ▶ Do not open the electrical connection of the power supply circuit in an explosive atmosphere.
- 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. IEC 60079-14).
- The housing of field transmitter must be connected to the potential matching line.
- Only the approved wire entries as specified in paragraph 10.3 of IEC60079-14, paragraph 16 of IEC 60079-0, paragraph 13 of IEC 60079-1 must be used.
- For connection through a conduit entry approved for this purpose the associated sealing facility shall be mounted directly to the housing.
- Seal the cable entries with certified cable glands and or blanking elements which have at least type of protection Ex db.

- For operating the transmitter housing at an ambient temperature under $-20\text{ }^{\circ}\text{C}$, appropriate cables and cable entries permitted for this application must be used.
- For ambient temperatures higher than $+70\text{ }^{\circ}\text{C}$, use suitable heat-resisting cables or wires, cable entries and sealing facilities for Ta +5K above surrounding.
- During operation, the cover must be screwed all the way in and the cover's safety catch must be fastened.
- The remote or integral mounted temperature sensor must comply with the requirements according to IEC 60079-1.
- The temperature class specified for the certified temperature sensor shall be taken into account.

**Safety instructions:
Installation of
dust ignition
protection**



Explosive atmosphere

- ▶ In an explosive atmosphere, do not open the device (ensure that the IP 66/67 housing protection is maintained during operation).
 - 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. IEC 60079-14).
 - Seal the cable entries tight with certified cable glands which have at least type of protection Ex tb suitable for Group IIIC (degree of protection IP6X).
 - The housing of the field transmitter must be connected to the potential matching line.
 - The provided cable entries to option code glands are suitable ATEX/IECEx certified cable glands with a temperature range of -20 to $+95\text{ }^{\circ}\text{C}$.
 - For ambient temperatures higher than $+70\text{ }^{\circ}\text{C}$, use suitable heat-resisting cables or wires, cable entries and sealing facilities for application temperature +5 K above surrounding.
 - The remote or integral mounted temperature sensor must comply with the requirements according to IEC 60079-31.
 - The maximum surface temperature specified for the certified temperature sensor shall be taken into account.

**Safety instructions:
Specific
conditions of use**

- The flameproof joints are not intended to be repaired.
- The temperature transmitter must be installed 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.

Temperature tables

Type	Temperature class	Ambient temperature
TMT142	T6	$-40\text{ °C} \leq T_a \leq +55\text{ °C}$
	T5	$-40\text{ °C} \leq T_a \leq +70\text{ °C}$
	T4	$-40\text{ °C} \leq T_a \leq +80\text{ °C}$

Type	Maximum surface temperature	Ambient temperature
TMT142	+110 °C	$-40\text{ °C} \leq T_a \leq +80\text{ °C}$

Electrical connection data

Type	Electrical data
TMT142	$U \leq 36\text{ V}_{DC}$ $P \leq 3\text{ W}$

Category	Type of protection (ATEX/IECEX)	Type
II 2G	Ex db IIC T6...T4 Gb	TMT142
II 2D	Ex tb IIIC T110°C Db	



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