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Safety Instructions
iTEMP TMT142B

HART®

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

Endress+Hauser
People for Process Automation

iTEMP TMT142B

HART®

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About this document

The document number of these Safety Instructions (XA) must match the information on the nameplate.

Associated documentation

All documentation is available on the Internet:
www.endress.com/Deviceviewer
(enter the serial number from the nameplate).
To commission the device, please observe the Operating Instructions pertaining to the device:
www.endress.com/<product code>, e.g. iTEMP TMT142B

Supplementary documentation

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:
www.endress.com/Downloads

Certificates and declarations

Korean certificate

Certificate number:

25-KA4BO-0704X

25-KA4BO-0705X

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

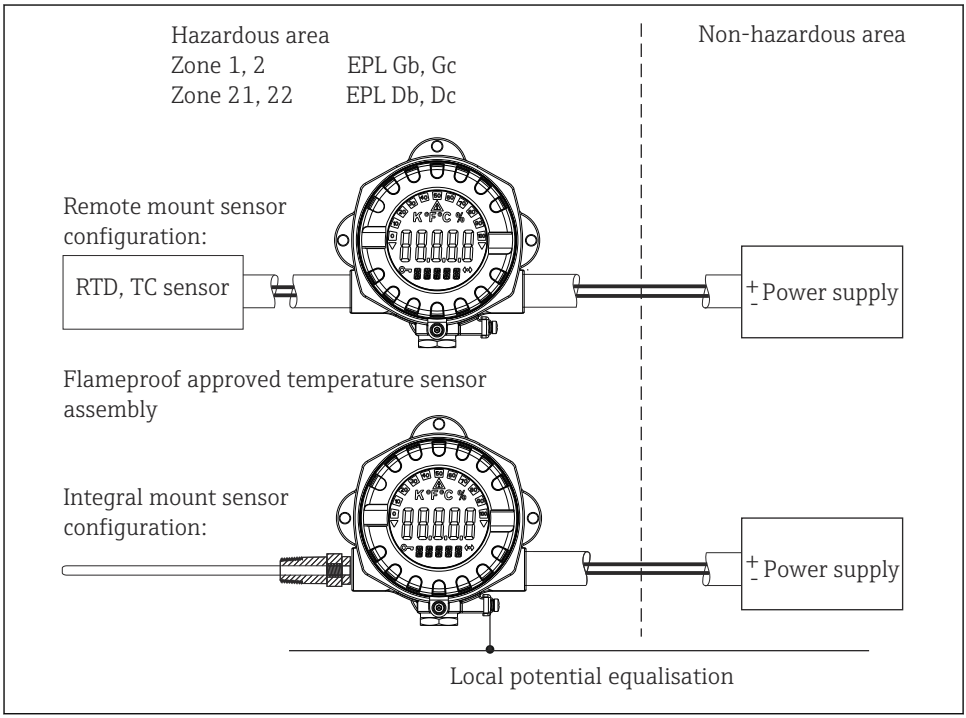
Protect Device Safety Certification Notice No. 2021-22

Please refer to Korean certificates for conditions of safe use.

Manufacturer address

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

Safety instructions



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Safety instructions: Installation of protection flameproof

WARNING

Potentially explosive atmospheres

- ▶ Do not open the electrical connection of the supply circuit when energized if there is a potentially 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. EN/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 EN/IEC60079-14, paragraph 16 of EN/IEC 60079-0, paragraph 13 of EN/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 °C, appropriate cables and cable entries permitted for this application must be used.
- For ambient temperatures higher than +70 °C, use suitable heat-resisting cables or wires, cable entries and sealing facilities for Ta +5 K 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 EN/IEC 60079-1.
- The temperature class specified for the certified temperature sensor shall be taken into account.

Safety instructions: Installation of dust ignition protection

⚠ WARNING

Explosive atmosphere

▶ In an explosive atmosphere, do not open the device when voltage is supplied (ensure that the IP66/67 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. EN/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 °C.
- For ambient temperatures higher than +70 °C, use suitable heat-resisting cables or wires, cable entries and sealing facilities for Ta +5 K above surrounding.
- The remote or integral mounted temperature sensor must comply with the requirements according to EN/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
iTEMP TMT142B	T6	−40 °C ≤ Ta ≤ +55 °C
	T5	−40 °C ≤ Ta ≤ +70 °C
	T4	−40 °C ≤ Ta ≤ +80 °C

Type	Maximum surface temperature	Ambient temperature
iTEMP TMT142B	+110 °C	−40 °C ≤ Ta ≤ +80 °C

Electrical connection data

Type	Electrical data
iTEMP TMT142B	U ≤ 36 V_{DC} P ≤ 3 W

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