XA01007T/09/EN/07.23-00
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2023-02-20

Safety Instructions
iTEMP TMT71, TMT72, TMT82, TMT84, TMT85, TMT86

ATEX, IECEx: Ex db IIC T6 Gb
Ex tb IIIC Txxx °C Db

Endress+Hauser
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iTEMP TMT71, TMT72, TMT82, TMT84, TMT85, TMT86

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Associated documentation

All documentation is available on the Internet:
www.endress.com/Deviceviewer
(enter the serial number from the nameplate).

If not yet available, a translation into EU languages can be ordered.

To commission the device, please observe the Operating Instructions pertaining to the device:
www.endress.com/<product code>, e.g. TMT86

Supplementary documentation

Explosion protection brochure: CP00021Z

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

Certificates and declarations

IECEx certificate

Certificate number: IECEx DEK 11.0096

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: 2013

ATEX certificate

Certificate number: DEKRA 11ATEX0265

EU Declaration of Conformity

Declaration number: EC_00095

The EU Declaration of Conformity is available on the Internet:
www.endress.com/Downloads

UKCA certificate

Certificate number: CML 21UKEX11008

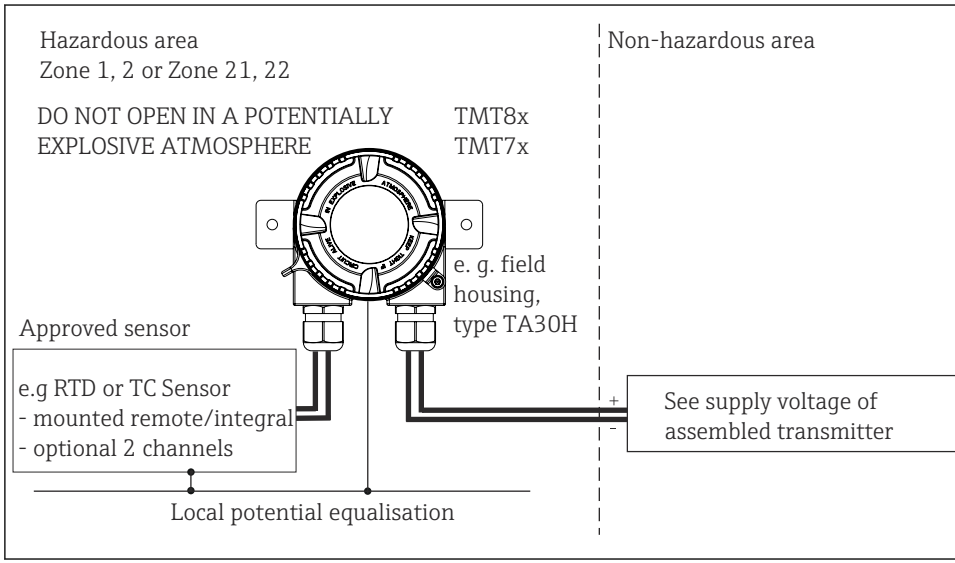
UKCA Declaration of Conformity

Declaration number: UK_00424

Manufacturer address

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

Safety instructions



Safety instructions: Installation

Type of protection flameproof

- 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 the field transmitter must be connected to the potential matching line.
- Only the approved wire entries as specified in paragraph 10.3 of EN/IEC 60079-14, 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 unused entry glands with approved sealing plugs that correspond to the type of protection.
- For operating the field transmitter housing at an ambient temperature under −20 °C, appropriate cables, cable entries and sealing facilities 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.
- Use for remote temperature sensors only approved sensors certified for category 2G marked not less than II2G Ex d IIC T6...T4 Gb for use in Zone 1 (EPL Gb).
- Use for integral temperature sensors only approved sensors certified for category 1G or 2G marked not less than II1/2G Ex d IIC T6...T4 Ga/Gb or II2G Ex d IIC T6...T4 Gb for use in Zone 0 (EPL Ga) resp. Zone 1 (EPL Gb).
- The temperature class specified for the certified temperature sensor shall be taken into account.
- The 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.
- The flameproof joints are not intended to be repaired.

⚠ WARNING

Explosive atmosphere

► Do not open the electrical connection of the power supply circuit under voltage in an explosive atmosphere.

Dust ignition protection

- 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.
- The provided cable glands according to option code are suitable ATEX/IECEx Ex-certified cable glands with a temperature range of -20 °C...+95 °C.
- For operating the transmitter housing at an ambient temperature under -20 °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 °C, use suitable heat-resisting cables or wires, cable entries and sealing facilities for Ta +5 K above surrounding.

- Use for integral temperature sensors only approved sensors certified for category 1D or 2D marked not less than II1/2D Ex ta/Ex tb IIIC T135 °C Da/Db or II2D Ex tb IIIC T135 °C Db for use in Zone 20 (EPL Da) or Zone 21(EPL Db).
- Use for remote temperature sensors only approved sensors certified for category 2D marked not less than II2D Ex tb IIIC T135 °C Db for use in Zone 21 (EPL Db).
- The maximum surface temperature specified for the certified temperature sensor shall be taken into account.

⚠ WARNING

Explosive atmosphere

- ▶ In an explosive atmosphere, do not open the device when voltage is supplied (ensure that the IP6x housing protection is maintained during operation).

Temperature tables

Transmitter version with field housing, type TA30H, TA30A, TA30D		Temperature class / code	Ambient temperature range
Ex db IIC / Ex tb IIIC	TMT71, TMT72, TMT82, TMT84 and TMT85 and TMT86, with or without display TID10	T6 / T85 °C	–50 to +65 °C
		T5 / T100 °C	–50 to +80 °C
		T4 / T105 °C	–50 to +85 °C
Ex tb IIIC		T105 °C	–50 to +85 °C

Transmitter version with field mount housing (dual compartment)		Temperature class / code	Ambient temperature range
Ex db IIC / Ex tb IIIC	TMT82 with or without display TID10	T6 / T85 °C	–40 to +55 °C
		T5 / T100 °C	–40 to +70 °C
		T4 / T110 °C	–40 to +80 °C
Ex tb IIIC		T110 °C	–40 to +80 °C

Electrical connection data

Type	Supply voltage U_b
iTEMP TMT84, TMT85	9 to 32 V_{DC}
iTEMP TMT86	9 to 30 V_{DC}
iTEMP TMT82	11 to 42 V_{DC}
iTEMP TMT71, TMT72	10 to 36 V_{DC}

Category	Type of protection (ATEX, IECEx)	Type
II 2G	Ex db IIC T6…T4 Gb	iTEMP TMT82, TMT84,TMT85, TMT86, TMT71, TMT72
II 2D	Ex tb IIIC T85…T105°C Db	

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