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Safety Instructions
iTEMP TMT31

ATEX: Ex ec IIC Gc

Endress+Hauser
People for Process Automation

iTEMP TMT31

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Associated documentation

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

Associated documentation for TMT31
- Operating Instructions: BA02157T
- Technical Information: TI01613T

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

ATEX certificate

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

- EN IEC 60079-0 : 2018
- EN 60079-7 : 2015

EU Declaration of Conformity

Declaration number: EC_00187 U

Manufacturer address

Endress+Hauser Wetzer GmbH + Co KG

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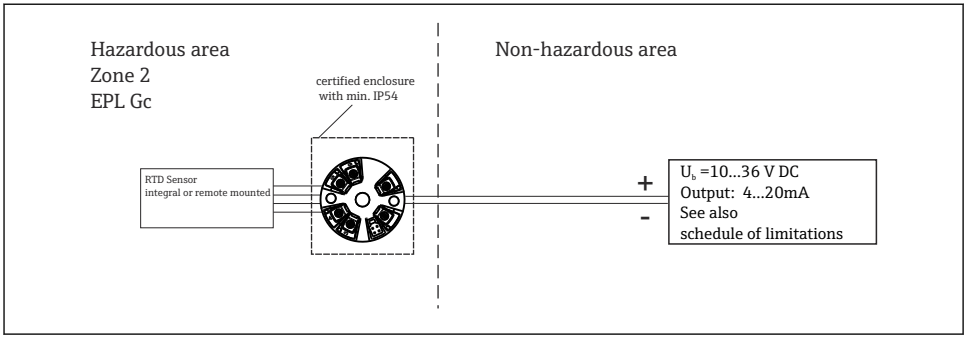
Safety instructions



1 Installation of the head 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 guidelines (e.g. EN/IEC 60079-14).
- For operating the head transmitter 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 +5K above surrounding.
- Terminal specification:

	Torque	Cable version	Cable cross-section
Screw terminals cable version, stripping length = min. 7 mm (0.28 in)	0.4 Nm	Solid or flexible	0.2 to 1.5 mm² (24 to 16 AWG)
Push-in terminals cable version, stripping length = min. 10 mm (0.39 in)	-	Solid or flexible	0.2 to 1.5 mm² (24 to 16 AWG)
	-	Flexible with wire end ferrules with/ without plastic ferrule	0.25 to 1.5 mm² (24 to 16 AWG)

Safety instructions: Schedule of limitations

- The device must be powered only by a power unit that operates using a limited-energy circuit in accordance with IEC/EN 61010-1, Section 9.4 and the requirements in Table 18.
- For use in the type of protection increased safety Ex ec, and for Zone 2 (EPL Gc) application, the transmitter TMT31/F2058HRTD shall be installed completely inside an additional enclosure, providing a degree of protection of not less than IP54 according to IEC/EN 60079-0 and IEC/EN 60079-7. The ambient temperature within the end use enclosure shall not exceed the limits of the permissible ambient temperature range. Clearances, creepage distances, and separations as defined in IEC/EN 60079-7 must be considered for the installation.
- The end user shall ensure appropriate earthing of the metallic field housing (optional) and all metallic accessories if used (wall or pipe mounting accessories for the field housing and the DIN rail clip for the head transmitter) upon installation.
- These components does not have any surface that achieves a temperature greater than 105 °C/100 °C/85 °C with a 5K safety factor when operated under full load conditions at an ambient of range of 85 °C/65 °C/50 °C respectively.
- For full certification as an electrical equipment for use in EPL Gc or Dc the tests according to IEC/EN 60079-0 section 5.2 and 5.3 have to be carried out. Based on the test results a temperature class shall be assigned.

Temperature tables

Type	Type of protection	Ambient Temperature
TMT31, F2058HRTD	Ex ec IIC Gc	-40 °C ≤ Ta ≤ +85 °C

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