

Safety Instructions

iTEMP TMT82

Ex ia [ia Ga] IIC T6 Gb



iTEMP TMT82

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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 TMT82

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-0542X

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.

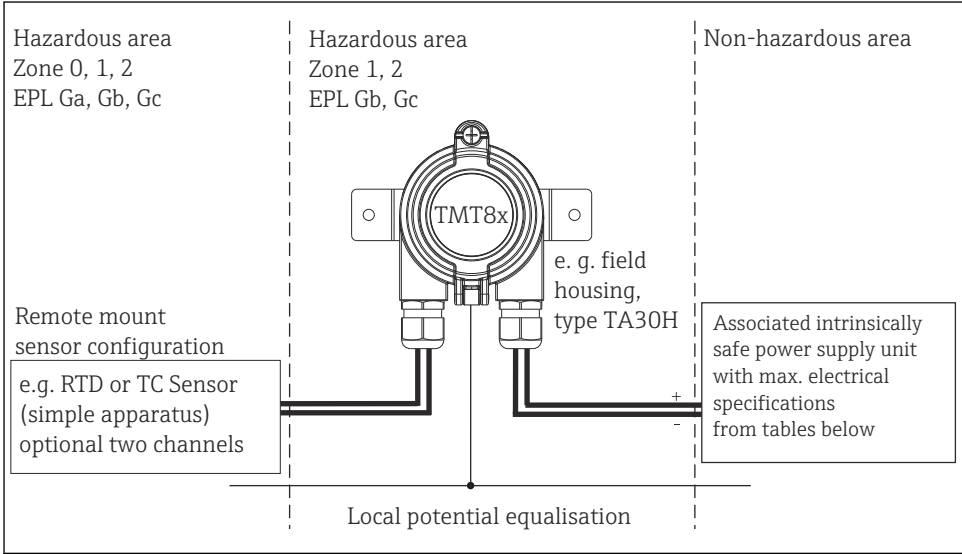
Manufacturer address

Endress+Hauser Wetzer GmbH + Co. KG

Obere Wank 1

87484 Nesselwang, Germany

Safety instructions



A0050182

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).
- The housing of the field transmitter must be connected to the potential matching line.
- The type of protection changes as follows when the device is connected to certified intrinsically safe circuits of Category ib: Ex ib IIC.
When connecting an intrinsically safe ib circuit, do not operate the sensor at Zone 0 (EPL Ga).
- When connecting two independent sensors make sure that the potential equalisation cables are at the same potential.
- The circuits of assembled head transmitter are isolated from its enclosure in conformance with EN/IEC 60079-11 chapter 6.3.13.

Safety instructions: Specific conditions of use

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

Transmitter version with field housing, type TA30H, TA30A, TA30D		Temperature class / code	Ambient temperature range
Ex ia IIC	iTEMP TMT82 without display TID10	T6	–52 to +58 °C
		T5	–52 to +75 °C
		T4	–52 to +85 °C
	iTEMP TMT82 with display TID10	T6	–40 to +55 °C
		T5	–40 to +70 °C
		T4	–40 to +85 °C

Transmitter version with field mount housing (dual compartment)		Temperature class / code	Ambient temperature range
Ex ia IIC	iTEMP TMT82 without display TID10	T6	–40 to +58 °C
		T5	–40 to +75 °C
		T4	–40 to +85 °C
	iTEMP TMT82 with display TID10	T6	–40 to +55 °C
		T5	–40 to +70 °C
		T4	–40 to +85 °C

Electrical
connection data

Type	Electrical data	
iTEMP TMT82 HART®-protocol	Supply voltage (terminal + and -)	$U_i \leq 30\text{ V}_{DC}$ $I_i \leq 130\text{ mA}$ $P_i \leq 800\text{ mW}$ $C_i = \text{negligibly small}$ $L_i = \text{negligibly small}$
	Sensor circuit (terminal 3 to 7)	$U_o \leq 7.6\text{ V}_{DC}$ $I_o \leq 13\text{ mA}$ $P_o \leq 24.7\text{ mW}$ $C_i = \text{negligibly small}$ $L_i = \text{negligibly small}$
	Maximum connection values Ex ia IIC Ex ia IIB Ex ia IIA	$L_o = 10\text{ mH}$ $L_o = 50\text{ mH}$ $L_o = 50\text{ mH}$ $C_o = 1\text{ }\mu\text{F}$ $C_o = 4.5\text{ }\mu\text{F}$ $C_o = 6.7\text{ }\mu\text{F}$



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www.addresses.endress.com
