

# Safety Instructions

## **iTEMP TMT82,**

## **iTEMP TMT12x**

HART®

1 Ex ib [ia Ga] IIC T6...T4 Gb X



# **iTEMP TMT82, iTEMP TMT12x**

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**

To commission the device, please observe the Operating Instructions pertaining to the device:

[www.endress.com/<product code>](http://www.endress.com/<product code>), e.g. TMT82

**Supplementary documentation**

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:

[www.endress.com/Downloads](http://www.endress.com/Downloads)

**Certificates and declarations****EAC certificate**

The device meet the fundamental health and safety requirements for the design and construction of devices and protective systems intended for use in potentially explosive atmospheres.

- Certification body: ТОО/Ж ШС "Т-Стандарт"
- Certificate number: EAЭC KZ 7500525.01.01.01840

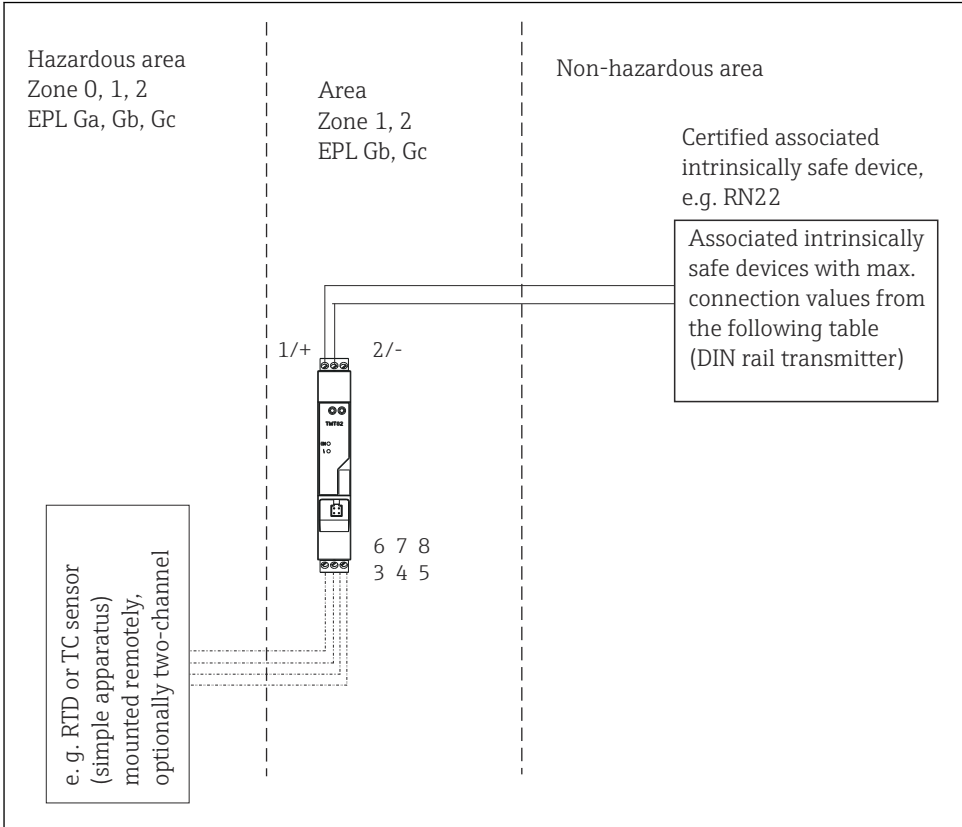
Affixing the certificate number certifies conformity with the following standards:

- GOST 31610.0-2019 (IEC 60079-0:2017)
- GOST 31610.11-2014 (IEC 60079-11:2011)

**Manufacturer address**

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

## Safety instructions for TMT82



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### 1 Installation of the DIN rail 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 regulations (e.g. EN/IEC 60079-14).
- When installing the unit note that the housing ingress protection classification IP20 according to EN/IEC 60529 is upheld.
- In hazardous areas it is not permitted to use the CDI interface for configuration.
- On installation please make sure that the spacing between the intrinsically safe and non intrinsically safe circuits is at least 50 mm.

### Safety instructions: Zone 1 and Zone 2

- According to the specifications of the manufacturer, this apparatus can be operated in zone 1 (category 2)/EPL Gb or zone 2 (category 3) /EPL Gc.
- The sensor current circuit may be introduced into zone 0 (category 1)/EPL Ga.

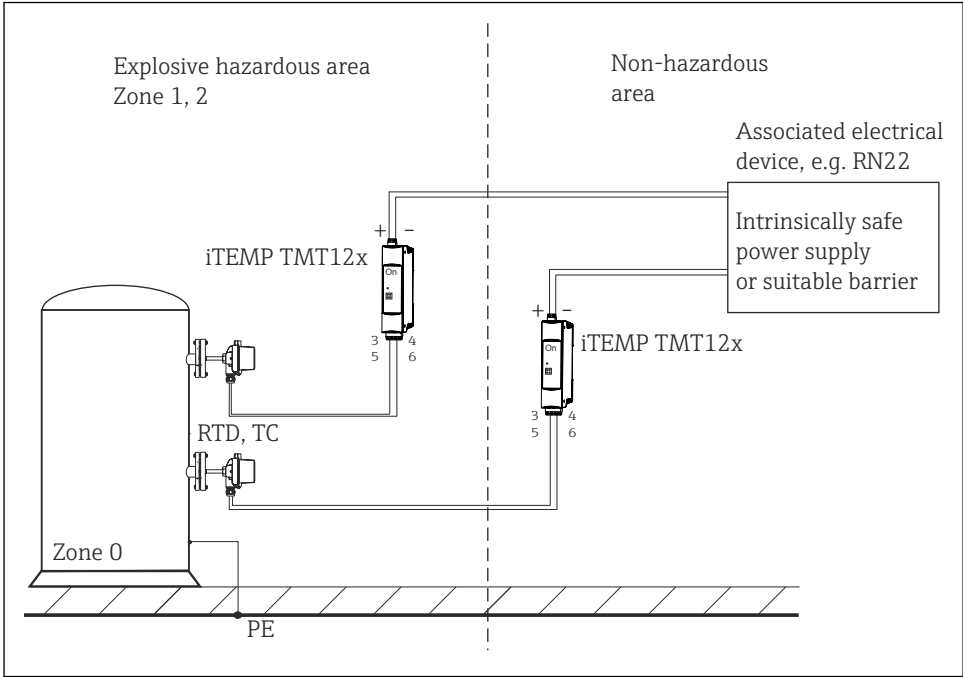
### Temperature tables

Type (order option)	Temperature class	Ambient temperature zone 1	Ambient temperature zone 0
iTEMP TMT82- xxA3xxxxxxxxx (DIN rail transmitter)	T6	-40 °C = Ta = +46 °C	
	T5	-40 °C = Ta = +61 °C	
	T4	-40 °C = Ta = +85 °C	

### Electrical connection data

Type	Electrical data		
iTEMP TMT82 Order option: iTEMP TMT82- xxA3xxxxxxxxx (DIN rail transmitter)	Power supply (terminals + and -)	$U_i = 30 V_{DC}$ $I_i = 130 mA$ $P_i = 770 mW$ $C_i = \text{negligibly small}$ $L_i = \text{negligibly small}$	
	Sensor circuit (terminals 3 to 8)	$U_o = 9 V_{DC}$ $I_o = 13 mA$ $P_o = 29,3 mW$	
	Max. connection values		
Ex ia IIC	$L_o = 5 mH$	$C_o = 0.93 \mu F$	
Ex ia IIB	$L_o = 20 mH$	$C_o = 3.8 \mu F$	
Ex ia IIA	$L_o = 50 mH$	$C_o = 4.8 \mu F$	

## Safety instructions for TMT12x



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2 Installation of the transmitter

### Safety instructions: Installation

- Comply with the installation and safety instructions in the Operating Instructions.
- Setting up the transmitter is only allowed to be done in a non-hazardous area.
- Instrumentation used for setting up must not exceed a voltage of  $U_i = 30\text{ V}$ , this can, for example, be achieved by using battery powered lap tops. Setting up with a mains powered PC  $U_m = 250\text{ V}$  can only be done when using an approved adapter with barrier, e.g. TXU10-AA.
- When installing the unit note that the housing ingress protection classification IP20 according to EN/IEC 60529 is upheld.
- On installation please make sure that the spacing between the intrinsically safe and non intrinsically safe circuits is at least 50 mm.

### Safety instructions: Zone 0

According to the manufacturers specifications this apparatus may be installed in Zones 1, 2 and the sensor circuit can be fed into Zone 0.

### Temperature tables

Type	Temperature class	Ambient temperature
iTEMP TMT127, iTEMP TMT128	T6	$-40\text{ °C} \leq T_a \leq +50\text{ °C}$
	T5	$-40\text{ °C} \leq T_a \leq +65\text{ °C}$
	T4	$-40\text{ °C} \leq T_a \leq +85\text{ °C}$

### Electrical connection data

Type iTEMP TMT127, iTEMP TMT128	Electrical data		
Power supply (terminals 1 and 2)	$U_i \leq 30\text{ V}_{DC}$ $I_i \leq 100\text{ mA}$ $P_i \leq 750\text{ mW}$ $C_i = \text{negligibly small}$ $L_i = \text{negligibly small}$		
Sensor circuit (terminals 3 to 6)	$U_0 \leq 4.4\text{ V}_{DC}$ $I_0 \leq 9.6\text{ mA}$ $P_0 \leq 10.6\text{ mW}$		
Maximum connection values	Ex ia IIC Ex ia IIB Ex ia IIA	$L_0 = 100\text{ mH}$ $L_0 = 100\text{ mH}$ $L_0 = 100\text{ mH}$	$C_0 = 2.4\text{ }\mu\text{F}$ $C_0 = 12\text{ }\mu\text{F}$ $C_0 = 18\text{ }\mu\text{F}$



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[www.addresses.endress.com](http://www.addresses.endress.com)

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