

Safety Instructions

TA30A, TA30D, TA30H

Ex db IIC Gb
Ex tb IIIC Db
Ex ia IIIC Da



TA30A, TA30D, TA30H

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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>, e.g. TA30A

Supplementary documentation

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:

www.endress.com/Downloads

Certificates and declarations**NEPSI certificate**

Certificate number: GYB26.1701U

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

- GB/T 3836.1-2021
- GB/T 3836.2-2021
- GB/T 3836.4-2021
- GB/T 3836.31-2021



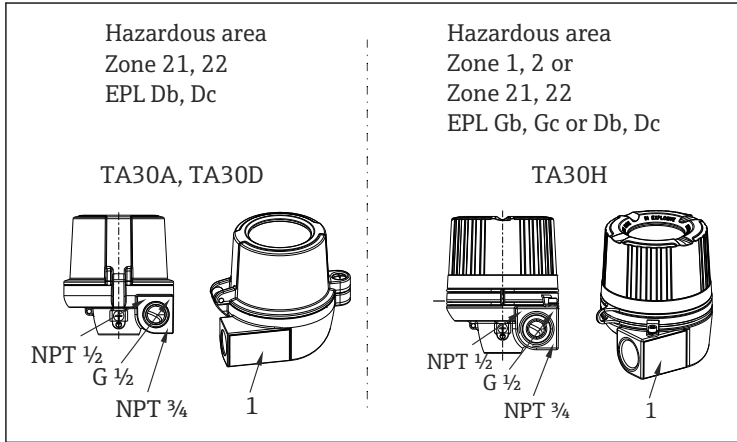
Please refer to NEPSI/CCC certificates for conditions of safe use.

Manufacturer address

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

Endress+Hauser Wetzer (Suzhou) Co. Ltd.
No.31 JiangTianLilu
Suzhou Industrial Park (SIP) Suzhou 215126, China

Safety instructions:



A0048955

- Identification markings for the cable gland thread type. No marking = M20x1.5
- 1 Place for nameplate

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 connection head 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 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 connection head at an ambient temperature under -20°C , appropriate cables and cable entries permitted for this application must be used.
- During operation, the cover must be screwed all the way in and the cover's safety catch must be fastened.
- Close unused entry glands with sealing plugs.
- 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 resp. Zone 1.
- Surface treatment of the cylindrical joint and threaded joint is not permitted.

Schedule of Limitations:

- The suffix "U" in the Ex-certification number indicates that this certificate has restricted conditions, which are:
- The product is an Ex-component and shall not be used independently in explosive atmospheres. Additional consideration is required when it is incorporated into Ex equipment or systems.
- Service temperature range:
 - -50 to +100 °C for the glass window cover
 - -50 to +135 °C for the enclosure and o-rings
- For any Connection Head the service temperature of the applied parts shall not be exceeded.
- For Connection Head Type TA30H, the maximum ambient temperature shall not exceed 130 °C when provided with a blind cover and 90 °C when provided with a window cover.
- For Connection Heads with a transmitter of max 2.2 W or with terminals
 - the maximum ambient temperature +10 K shall not exceed the maximum service temperature of the applied parts.
 - the maximum surface temperature does not exceed the maximum ambient temperature +10 K.
- For Connection Heads with a transmitter of max 800 mW or with terminals for Ex ia IIC Da
 - the maximum ambient temperature +12 K shall not exceed the maximum service temperature of the applied parts (electronics and non-metallic parts).
 - the maximum surface temperature (under 200 mm of dust) does not exceed the maximum ambient temperature +14 K.
- Repair of flameproof joints shall only be carried out in consultation with the manufacturer
- The product may present a potential electrostatic charging hazard – see instructions for users.
- Oil-filled circuit-breakers and contactors shall not be used.
- The connection heads are tested with dummy contents that represent typical round transmitters and terminal blocks with a main diameter of max. 45 mm. The use of enclosed apparatus of another shape and a larger main diameter is not covered by this certificate

**Safety instructions:
Specific conditions of use**

- The degree of protection:IP66/IP68 (1.83 m/24 h) .:
- Cable entries must be fitted with cable entry devices or stopping plugs that are approved by the nationally designated explosion-proof inspection body, with an explosion protection level of Ex db IIC Gb and thread specifications M20×1.5, 1/2-14NPT, 3/4-14NPT, or with an explosion protection level of Ex tb IIIC Db and thread specifications M20×1.5, 1/2-14NPT, 3/4-14NPT, G1/2.
Meanwhile, the use of cable entry devices or stopping plugs must comply with the requirements of their instruction manuals. After installation of the cable entry devices or stopping plugs, it must be ensured that the overall enclosure protection level of the equipment is not less than IP66/IP68 (1.83 m/24 h).
- Only isolated barriers may be selected for the associated apparatus.
- The user shall not replace any components of the product by themselves. Any faults occurring during operation shall be resolved together with the product manufacturer to prevent damage.
- The installation, use and maintenance of the product shall simultaneously comply with the relevant provisions of the product instruction manual:
GB/T 3836.13-2021 “Explosive atmospheres- Part 13: Equipment repair, overhaul, reclamation and modification”.
GB 3836.15-2024 “Explosive atmospheres- Part 15: Electrical installations design, selection and erection”.
GB 3836.16-2024 “Explosive atmospheres- Part 16: Electrical installations inspection and maintenance”.
GB 3836.18-2024 “Explosive atmospheres- Part 18: Intrinsically safe electrical systems”.
GB50257-2014 “Code for construction and acceptance of electric equipment on fire and device for explosion hazard electrical installation engineering”.

Manufacturer’s Responsibility

- Conditions for safe use and special conditions for safe use, as specified above, should be included in the documentation the user is provided with.
- Manufacturing should be done according to the documentation approved by NEPSI.

Temperature tables

Type	Type of protection		Temperature range
TA30H	Ex db IIC Gb Ex tb IIIC Db Ex ia IIIC Da	Without display	$-50\text{ °C} \leq T_a \leq +130\text{ °C}$
		With display	$-50\text{ °C} \leq T_a \leq +90\text{ °C}$
		With transmitter	$-50\text{ °C} \leq T_a \leq +90\text{ °C}$

Type	Type of protection		Temperature range
TA30A, TA30D	Ex tb IIIC Db Ex ia IIIC Db	Without display	$-50\text{ °C} \leq T_a \leq +130\text{ °C}$
		With display	$-50\text{ °C} \leq T_a \leq +90\text{ °C}$
		With transmitter	$-50\text{ °C} \leq T_a \leq +90\text{ °C}$



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