# Safety Instructions **TA30A, TA30D, TA30H**

ATEX: II 2G Ex db IIC Gb, II 2D Ex tb IIIC Db IECEx: Ex db IIC Gb, Ex tb IIIC Db

Safety instructions for electrical apparatus in explosion-hazardous areas







## TA30A, TA30D, TA30H

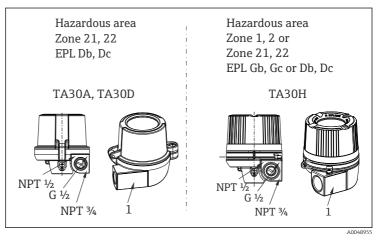
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About this document	This document has been translated into several languages. Legally determined is solely the English source text.		
	<ul> <li>The document translated into EU languages is available:</li> <li>In the download area of the Endress+Hauser website: www.endress.com -&gt; Downloads -&gt; Manuals and Datasheets -&gt; Type: Ex Safety Instruction (XA) -&gt; Text Search:</li> <li>In the Device Viewer: www.endress.com -&gt; Product tools -&gt; Access device specific information -&gt; Check device features</li> </ul>		
	If not yet available, the document can be ordered.		
Associated documentation	This document is an integral part of the following Operating Instructions:		
	Operating instructions: EA01116T		
Supplementary documentation	<ul> <li>Explosion-protection brochure: CP00021Z/11</li> <li>The Explosion-protection brochure is available:</li> <li>In the download area of the Endress+Hauser website: www.endress.com -&gt; Downloads -&gt; Brochures and Catalogs -&gt; Text Search: CP00021Z</li> <li>On the CD for devices with CD-based documentation</li> </ul>		

Manufacturer´s certificates	IECEx certificate
	Certificate number: IECEx KEM 08.0042 U
	Affixing the certificate number certifies conformity with the following standards (depending on the device version)
	<ul> <li>IEC 60079-0: 2017</li> <li>IEC 60079-1: 2014</li> <li>IEC 60079-31: 2013</li> </ul>
	ATEX certificate
	Certificate number: KEMA 08ATEX0145 U
	EU Declaration of Conformity
	Declaration number: EC_00179
Manufacturer address	Endress+Hauser Wetzer GmbH + Co. KG Obere Wank 1 87484 Nesselwang, Germany

#### Safety instructions:



- → 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.

	<ul> <li>The cover has at least 9 engaged threads. The cylindrical process connection joint has a minimal length of 13.9 mm in which the maximum gap of 0.10 mm must be kept.</li> <li>The flameproof joints are not intended to be repaired.</li> <li>Built-in electronics shouldn't exceed measurements of 24.1 mm x 44 mm or 44 mm x 44 mm.</li> <li>The housing has been tested with 5 thread pitches in the cover.</li> <li>The temperature limit of the display glass is +100 °C, for the 0 rings +135 °C.</li> </ul>
Safety notes: Dust ignition protection	<ul> <li>Comply with the installation and safety instructions in the Operating Instructions.</li> <li>Install the device according to themanufacturer's instructions and any other valid standards and regulations (e.g. EN/IEC 60079-14).</li> <li>Seal the cable entries tight with certified cable glands (min. IP6X) IP6X according to EN/IEC 60529.</li> <li>The connection head must be connected to the potential matching line.</li> <li>For ambient temperatures higher than +70 °C, use suitable heat-resisting cables or wires.</li> <li>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 Da/Db or II2D Ex tb IIIC Db for use in Zone 20 or Zone 21.</li> <li>The temperature limit of the display glass is +100 °C, for the O rings +135 °C.</li> <li>Temperature range transmitter Ta = -50 to +130 °C.</li> </ul>
Schedule of Limitations: Types TA30A, TA30D and TA30H	<ul> <li>The ambient temperature range shall be selected as shown in certificate or table in manual.</li> <li>Connection Heads provided with a non-conductive varnish shall be marked and provided with instructions to minimize the risk from electrostatic discharge.</li> <li>The IP grade at the opening for the sensor in the base of the connection head or in the adapter shall be ensured by suitable means.</li> </ul>
Schedule of Limitations: Type TA30H only	<ul> <li>The flameproof joints are not intended to be repaired.</li> <li>The cover has 9 engaged threads but has been tested with 5 threads.</li> <li>Oil-filled circuit-breakers and contactors shall not be used.</li> <li>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.</li> </ul>

#### Temperature tables

Туре	Type of protection		Temperature range
Ex d II2D	Ex db IIC Gb II2D Ex tb IIIC Db Ex tb IIIC Db	Without display	-50 °C ≤ Ta ≤ +130 °C
		With display	-50 °C ≤ Ta ≤ +90 °C
		With transmitter	-50 °C ≤ Ta ≤ +90 °C

Туре	Type of protection		Temperature range
	Ex tb IIIC Db	Without display	-50 °C ≤ Ta ≤ +130 °C
		With display	-50 °C ≤ Ta ≤ +90 °C
		With transmitter	-50 °C ≤ Ta ≤ +90 °C



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