

CERTIFICATE

(1) EU-Type Examination

(2) **Component intended for use on/in equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 08ATEX0145 U** Issue Number: **5**

(4) Product: **Connection Head, Types TA30A, TA30D and TA30H**

(5) Manufacturer: **Endress+Hauser Wetzer GmbH+Co. KG**

(6) Address: **Obere Wank 1, 87484 Nesselwang, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/KEM/ExTR08.0041/04.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018
EN 60079-31 : 2014

EN 60079-1 : 2014

EN 60079-11 : 2012

except in respect of those requirements listed at item 18 of the Schedule.

(10) The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 G Ex db IIC Gb
II 2 D Ex tb IIIC Db
II 1 D Ex ia IIIC Da

only Type TA30H
Types TA30A, TA30D and TA30H
Types TA30A, TA30D and TA30H

Date of certification: 27 July 2022

DEKRA Certification B.V.

R. Schuller
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 08ATEX0145 U**

Issue No. 5

(15) **Description**

Connection Heads, Types TA30A, TA30D and TA30H, are empty enclosures intended for mounting of transmitters or terminals to be connected with a temperature sensor.

A Connection Head consist of a base and a cover, optionally coated with a non-conductive varnish.

Types TA30A and TA30D are made of aluminium and provided with a hinged cover.

Type TA30H is made of aluminium or stainless steel and provided with a threaded cover, blind or windowed.

The Connection Heads are provided with one or two cable entry openings.

The Connection heads can be provided with or without an entry opening for a (temperature) sensor, indicated as "Connection Protection Tube assembly" in the type designation.

This entry opening is optionally provided with an adapter. The cylindrical joint of a temperature sensor with the Connection Head with integral flame path or with the adapter is treated as part of the flameproof enclosure of Connection Head Type TA30H.

The Connection Heads provide a degree of protection of at least IP66/IP68 (1.83 m / 24 h) per EN IEC 60079-0 and EN 60529.

For details about thermal data and the type designation see Annex 1 to Report No. NL/KEM/ExTR08.0041/04.

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/KEM/ExTR08.0041/04.

(17) **Schedule of Limitations**

Types TA30A, TA30D and TA30H:

- The ambient temperature range shall be selected as shown in Annex 1.
- Connection Heads provided with a non-conductive varnish shall be marked and provided with instructions to minimize the risk from electrostatic discharge.
- 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.

Type TA30H only:

- The flameproof joints are not intended to be repaired.
- The cover has 9 engaged threads but has been tested with 5 threads.
- The thread type and size of cable entry openings shall be identified by marking or by the installation instructions with a reference to the instructions on the marking.
- 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.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 08ATEX0145 U**

Issue No. 5

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/KEM/ExTR08.0041/04.

(20) **Certificate history**

Issue 1 - project no. 211363800	Initial certificate
Issue 2 - project no. 213990100	Thickness of o-ring changed/ two cable/conduit entry openings applied/ latest standard applied/ minor changes, not affecting the type of protection
Issue 3 - project no. 219250100	Optional material (Stainless steel) for enclosure TA30H Update of IP rating Update to the latest standards Unification of O-ring for cover
Issue 4 - project no. 225648700	Minor constructional change Update to the latest standard
Issue 5 - project no. 226512100	Minor constructional change Introduction of new type of protection Ex ia IIIC Da

Description

Connection Heads, Types TA30A, TA30D and TA30H, are empty enclosures intended for mounting of transmitters or terminals to be connected with a temperature sensor.

Thermal data

Service temperature range: -50 °C to +100 °C for the glass window cover
-50 °C 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 IIIC 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.

Type designation

Series No Suffix Code
TA30A- abcdefg

Designation	Explanation	Value	Explanation
a	Connection Protection Tube Assembly	1	Thread M24 x 1.5
		7	without thread, preparation for mounting bracket
b	Electrical Connection	A	1x thread M20x1.5
		B	1x thread NPT1/2
		C	1x thread G1/2
		D	2x thread M20x1.5
		E	2x thread NPT1/2
c	Display window	1	Blind cover
		2	Glass window cover
d	Cable Gland; Temp.range; Protect. Type	n.s. *	Not in the scope
e	Plug; Temp. Range; Protect. Type	n.s. *	Not in the scope
f	Accessory Enclosed	n.s. *	Not relevant for Explosion Safety
g	Marking	n.s. *	Not relevant for Explosion Safety

* n.s. mean value is neither related to Explosion Safety nor in the scope.

Series No Suffix Code
TA30D- abcdef

Designation	Explanation	Value	Explanation
a	Connection Protection Tube Assembly	1	Thread M24 x 1.5
		7	without thread, preparation for mounting bracket
b	Electrical Connection	A	1x thread M20x1.5
		B	1x thread NPT1/2
		C	1x thread G1/2
		D	2x thread M20x1.5
		E	2x thread NPT1/2
c	Cable Gland; Temp.range; Protect. Type	n.s. *	Not in the scope
d	Plug; Temp. Range; Protect. Type	n.s. *	Not in the scope
e	Accessory Enclosed	n.s. *	Not relevant for Explosion Safety
f	Marking	n.s. *	Not relevant for Explosion Safety

* n.s. mean value is neither related to Explosion Safety nor in the scope.

Series No Suffix Code
TA30H- abcdefghi

Designation	Explanation	Value	Explanation
a	Approval type	B1	ATEX II2G Ex d IIC, II2D Ex tb IIIC
		I1	IECEX Ex db IIC Gb, Ex tb IIIC Db
		8F	ATEX IECEX II2D Ex tb IIIC Db
		85	ATEX IECEX II1D Ex ia IIIC Da
b	Connection Protection Tube Assembly	1	Thread 1/2NPT, big taphole
		2	Thread 1/2NPT, integral flame path
		3	M20 x 1.5, female thread, big taphole
		4	M20 x 1.5, female thread, integral flame path
		7	without thread, preparation for mounting bracket
c	Electrical Connection	A	Thread M20 x 1.5
		B	Thread 1/2 NPT
		C	Thread G1/2 (only for Ex tb or Ex ia)
		D	Thread 3/4 NPT
		E	Thread 2 x M20 x1.5
		F	Thread 2 x 1/2 NPT
		G	Thread 2 x 3/4 NPT
d	Display window; Lead Sealing; material	A	316L; w/o; w/o
		B	316L; glass; w/o
		C	316L; w/o; lead sealable
		D	316L; glass; lead sealable
		1	Alu; w/o; w/o
		2	Alu; glass; w/o
		3	Alu; w/o; lead sealable
		Y	Special varnishing (Non-conductive) in combination with digit A to 3
e	Cable Gland; Temp.range; Protect. Type	n.s. *	Not in the scope
f	Plug; Temp. Range; Protect. Type	n.s. *	Not in the scope
g	Accessory Mounted:	NA	Attachment hinge, Stainless steel (304)
h	Accessory Enclosed	n.s. *	Not relevant for Explosion Safety
i	Marking	n.s. *	Not relevant for Explosion Safety

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