



CERTIFICATE NUMBER 23-2448734-PDA

EFFECTIVE DATE 19-OCT-2023

EXPIRATION DATE 18-OCT-2028

ABS TECHNICAL OFFICE Yokohama Engineering Services

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

ENDRESS + HAUSER WETZER GMBH + CO. KG

located at

OBERE WANK 1, NESSELWANG, Germany, D-8748

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Temperature Transmitter

Model iTEMP TMT82

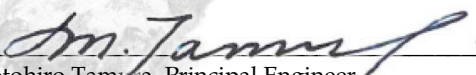
Endorsement: Other

This Product Design Assessment (PDA) Certificate remains valid until 18 October 2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping


Motohiro Tamura, Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement

ENDRESS + HAUSER WETZER GMBH + CO. KG

OBERE WANK 1

NESSELWANG

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Email: info.ehts@endress.com

Web: www.endress.com

Tier: 2 - PDA Issued

Product: Temperature Transmitter

Model: iTEMP TMT82

Endorsements:

Intended Service:

Temperature Transmitter for ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules and International standards.

Description:

Dual-input temperature transmitter with HART® protocol and SIL compliance.

Inputs (2x): resistance thermometers, thermocouples and voltage transmitters.

Output: 2-wire, 4...20mA, HART protocol.

Device type: Terminal head Form B (flat face) as per DIN EN 50446 or DIN rail device.

Rating:

Rated power supply:

11...42 V DC (head transmitter)

12...42 V DC (Din rail device)

IP Rating:

Din rail device: IP20

Head transmitter: depending on field housing

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

1. Each particular application and installation is to be specifically approved in conjunction with the relevant system, locations and environmental conditions. The devices are to be installed such that they may be removed without emptying tanks or without impairing the integrity of pressurized systems.
2. The manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

1. Operating Instructions iTEMP TMT82, BA01028T/09/EN/25.22-00 71584503 dated 4 Apr. 2022,
2. Technical Information iTEMP TMT82, TI01010T/09/EN/25.22-00 71564540 dated 31 Mar. 2022,
3. TEST REPORT No. 22DE-00857C dated 24 Feb. 2023 issued by PAConsult GmbH · Environmental Testing Laboratory,
4. TEST REPORT No. 22DE-00858B dated 1 Dec. 2022 issued by PAConsult GmbH · Environmental Testing Laboratory,
5. Test Report Electro Magnetic Compatibility, Document No. 073375.013.23 V1.0 dated 22 Feb. 2023 issued by MeßTechnikNord GmbH, EMC-Centre,
6. Test Report Electro Magnetic Compatibility, Document No. 073375.017.23 V1.0 dated 21 Mar. 2023 issued by MeßTechnikNord GmbH, EMC-Centre,
7. TMT82_asm_DINrail_2035, Drawing No. 10000004708 dated 4 June 2012,
8. ASM_FIELDHOUS_3036_EN, Drawing No. 10000004493 Rev. C dated 28 Feb. 2011,
9. ASM_FIELDHOUS_3036_XP, Drawing No. 10000004492 dated 25 Jul. 2022,
10. Certificate of Compliance, Certificate No. 1893497 dated 8 Feb. 2023 issued by CSA GROUP,
11. CERTIFICATE EU-Type Examination, Certificate Number: DEKRA 11ATEX0265, Issue Number: 5 dated 17 Oct. 2022 issued by DEKRA Certification B.V.,
12. EU - Type Examination Certificate, EU - Type Examination Certificate Number: EPS 17 ATEX 1 074 X Revision 2 dated 11 Sep. 2020 issued by BUREAU VERITAS,
13. EU-TYPE EXAMINATION CERTIFICATE, EU - Type Examination Certificate Number: PTB 08 ATEX 2007

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Tier: 2 - PDA Issued

issue: 2 dated 4 Aug. 2021 issued by Physikalisch-Technische Bundesanstalt,
14.IECEx Certificate of Conformity, Certificate No. IECEx EPS 17.0039X Issue No.: 1 dated 14 June 2018 issued by BUREAU VERITAS,
15.IECEx Certificate of Conformity, Certificate No. IECEx DEK 11.0096 Issue No.: 4 dated 17 October 2022 issued by DEKRA Certification B.V.,
16.IECEx Certificate of Conformity, Certificate No. IECEx PTB 11.0003 Issue No.: 1 dated 28 Mar. 2013 issued by Physikalisch-Technische Bundesanstalt

Terms of Validity:

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STANDARDS

ABS Rules:

2023 Marine Vessels Rules 1-1-4/7.7; 1-1-A3 & A4, 4-6-2/9.11.1, 4-6-2/9.11.3, 4-8-3/1.7, 4-8-3/13.1, 4-8-3/13.3, 4-9-9/7, 4-9-9/13, 4-9-9/15.7 Table1

2023 Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2 and A3, 4-3-3/9.1.1, 4-3-3/9.1.2, 6-1-6/5.7, 6-1-6/Table 1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

IACS UR E10 (Rev.8 Corr. 1 Jan 2022)