

TYPE APPROVAL CERTIFICATE**This is to certify:****That the Temperature Transmitter**with type designation(s)
iTEMP TMT71, iTEMP TMT72

Issued to

Endress+Hauser Wetzer GmbH & Co. KG
Nesselwang, Germany

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:****Temperature D****Humidity B****Vibration A/B*****EMC B****Enclosure Required protection according to the Rules shall be provided upon installation on board.***** see Application/Limitation**Issued at **Hamburg** on **2019-09-23**for **DNV GL**This Certificate is valid until **2024-09-22**.DNV GL local station: **Augsburg**Approval Engineer: **Heinz Scheffler****Joannis Papanuskas**
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

Temperature transmitter

iTEMP TMT71:

- Input: Universal input for resistance thermometers (RTD), thermocouples (TC), resistance transmitters (Ω), voltage transmitters (mV) acc. Operating Instructions BA01927T/09/EN/03.19
- Output: Analog output 4 to 20 mA, 20 to 4 mA (can be inverted)
- Auxiliary power supply: 10...36V DC (Head), 11...36V DC (DIN rail)
- Communication: PC-programmable transmitter
- Installation in terminal head form B (flat face) or in field housing or as DIN rail Transmitter

iTEMP TMT72:

- Input: Universal input for resistance thermometers (RTD), thermocouples (TC), resistance transmitters (Ω), voltage transmitters (mV) acc. Operating Instructions BA01854T/09/EN/03.19
- Output: Analog output 4 to 20 mA, 20 to 4 mA (can be inverted)
- Auxiliary power supply: 10...36V DC (Head), 11...36V DC (DIN rail)
- Communication: HART-protocol, PC-programmable
- Installation in terminal head form B (flat face) or in field housing or as DIN rail Transmitter

Application/Limitation

Location classes Vibration B: Only head transmitter

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Documents: Operating Instructions BA01927T/09/EN/03.19; BA01854T/09/EN/03.19; Technical Information TI01393T/09/EN/03.19; TI01392T/09/EN/03.19

Test Report: QUD_F2022_TMT7X_DinRail_high voltage_DNV_GL_EN_V0200;
QUD_F2022_TMT7X_Head_climate_DNV_GL_EN_V0200;
QUD_F2022_TMT7X_DinRail_vibration_DNV_GL_EN_V0200; QUD_F2022_TMT7X_Head_high voltage_DNV_GL_EN_V0200; QUD_F2022_TMT7X_DinRail_climate_DNV_GL_EN_V0200;
QUD_F2022_TMT7X_Head_vibration_DNV_GL_EN_V0200; QUD_F1018_EMC test report_ETSI301 489-1_V0200; QUD_F1018_EMC test report_CE_EN_V0200; 19TUR0004_EN301489-1-17_0;
19TUR0030_EN61326-1_DNVGL_0

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- Manufacturer name
- Model name
- Serial number
- Power supply ratings

Job Id: **262.1-031309-1**
Certificate No: **TAA00002GK**

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE