

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Temperature Transmitter**

with type designation(s)

iTEMP PCP TMT121, iTEMP RTD TMT127, iTEMP TC TMT128, iTEMP HART TMT122

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	B
Humidity	B
Vibration	A
EMC	A
Enclosure	Required protection according to DNV GL Rules shall be provided upon installation onboard.

Issued at **Hamburg** on **2018-07-17**for **DNV GL**This Certificate is valid until **2023-07-16**.DNV GL local station: **Augsburg**Approval Engineer: **Dariusz Lesniewski**

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

...TMT121: DIN rail temperature transmitter programmable via a PC (PCP)
...TMT122: DIN rail temperature transmitter programmable via HART-Protocol
...TMT127/128: DIN rail temperature transmitter with fixed measuring range

Power supply: 12 ... 35VDC, (12 ... 30VDC Ex-version)
(to be powered by type approved power supply unit)
Input (TMT121/122): RTD, TC, resistance transmitter (Ohm), voltage transmitter
Input (TMT127): RTD (Pt100)
Input (TMT128): TC
Output: 4 ... 20mA analogue, 2-wire
Ex-proof-protection (Ex-version): according to EC-Type Examination Certificates
no. PTB 01 ATEX 2157 and no. PTB 02 ATEX 2017
Software version: R1.xx.xx (TMT121/TMT122)

Approval conditions

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.

Application/Limitation

Type approved power supply unit required.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to DNV GL Rules and Ex-Certification / Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Type Approval documentation

Test reports no.: paconsult 28/02-C, E+H 03-9-601-50, W08742 TMT121+122,
TMT121/12.11.01/401+14.03.02, TMT122/22.02.02, FES_E_09_010_GL,
ZAMM 471+472-1008, E+H QUD_Change W12119_EN_V0100 (08.08.12);
TI 00087R/09/en, TI 090R/09/en, TI 095R/09/en, TI 096R/24/ae;
Revision record QUD_W13701_GL_Renewal_V0100 (13.09.13);
Revision record QUD_W15715_GL_Renewal_V0100 (06.12.2017)
Test report: E+H W15715 follow-up EMC-measurement (2015-07-30)
Test report: E+H W16643 follow up measurement (2016-09-02)
Software documentation MP007 (18.12.02), Software Info (29.08.02)
Type approval assessment report issued at Augsburg on 2018-06-08

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

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:

Job Id: **262.1-027762-1**
Certificate No: **TAA00001TD**

- 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