DNV·GL

Certificate No:
TAA00002C4

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Measurement Transmitter

with type designation(s)
JUMO dTRANS T06 (Type 707071)

Issued to
JUMO GmbH & Co. KG
Fulda, Hessen, 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.

Temperature	**B**
Humidity	**B**
Vibration	**A**
EMC	**A/B* (see page 2)**
Enclosure	**A**

Issued at **Hamburg** on **2019-05-22**
This Certificate is valid until **2024-05-21**.
DNV GL local station: **Essen**

Approval Engineer: **Jens Dietrich**

for **DNV GL**

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.

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Product description

Multifunctional Four-Wire Transmitter for DIN-rail mounting with galvanic isolation and configurable linearization.

Analog input
- RTD temperature probe in 2-, 3- or 4-wire connection
- Thermocouple, double thermocouple
- Resistance transmitter
- Resistance/potentiometer in 2-, 3- or 4-wire connection
- Voltage 0 to 1 V, 0 to 10 V
- Current 0(4) to 20 mA

USB-Interface
- USB (Device) for Setup

Analog output
-(0)4 to 20 mA, 0(2) to 10 V

Dot-matrix-LCD-Display
-64 × 96 Pixels with backgroud lighting

Membrane keyboard
-4 keys for operation

Relay output limit value
-Changeover contact

RS485-Interface
-Modbus slave

Order Code 707071-a-bb-ccc
Version:
a = 8: Standard version with default settings
a = 9: Customer specific configuration
Power supply:
bb = 23: AC 110 to 240 V, +10/-15 %, 48 to 63 Hz (*EMC location class A)
bb = 29: DC 24 V, +10/-15 % (*EMC location class B)
Extra codes:
ccc = 000: None
ccc = 018: RS485 interface Modbus RTU and limit value relay output
ccc = 058: SIL and PL approval (yellow front foil)
ccc = 062: DNV·GL approval

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.

Product certificate
If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program.

Tests carried out

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

Marking of product

Maker, type designation, serial number.

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