

TYPE APPROVAL CERTIFICATE

Certificate No: TAA000017J Revision No:

This is to cer	tify:	
That the Periphe	eral Equipment	
with type designated JUMO safetyM \$		
Issued to JUMO Gm Fulda, Hesse	bH & Co. KG n, Germany	
is found to comp DNV rules for o		fshore units, and high speed and light craft
Application :		
Product(s) appr	oved by this certificate is	s/are accepted for installation on all vessels classed by DNV.
Location class:		
Temperature Humidity Vibration EMC Enclosure	В В А В А	
Issued at Hamb u	ırg on 2023-07-14	ć - - - - - - - - - -
This Certificate is valid until 2027-05-26 . DNV local station: Augsburg		for DNV
Approval Engineer: Holger Jansen		Joannis Papanuskas Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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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.



Job Id: **262.1-025657-3** Certificate No: **TAA000017J**

Revision No: 2

Product description

STB: Safety Temperature Limiter STW: Safety Temperature Monitor

31 W. Salety Temperature	
Type	701150: JUMO safetyM STB/STW
	701155: JUMO safetyM STB/STW Ex
Power supply	110 240 V AC
	20 30 V AC/DC
Inputs	2x analogue (Pt100 / Pt1000 2- or 3-wire, thermocouple, 0/420mA)
	1x digital
Outputs	2x c/o contacts (Pre-alarm / Alarm)
Mounting	Rail
HMI	Display: monochrome with back-light (96x64 Dots)
	SMD-LED's: 1x green, 2yellow, 2x red
	Operation: 4-time operator keys: Pgm (P), Down, Up, R (Reset)
Electrical connection	On the front via screw terminals up to 2.5 mm ²
Housing	Polycarbonate
-	Flammability class: UL94 V0

Place of manufacture

JUMO GmbH & Co. KG Moritz-Juchheim-Strase 1 36039 Fulda, Germany

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 RU SHIP Pt.4 Ch.9 Sec. 1.

Ex-certification is not covered by this certificate. Applications in hazardous areas are to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-Certificates issued by a notified/recognized Certification Body – see:

IECEx TUN 15.0036X, Issue 0, 2021-11-29

EC-Type Examination Certificate TÜV 11 ATEX 556139 X, Issue 00, 2021-10-12

Eurofins Type Examination Certificate SEV 17 ATEX 0161 X, Issue 000, 2018-05-31.

Product certificate

If specified in the Rules, 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. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

GL-Baumusterprüfung Prüfplan-Umweltprüfungen, Referenzliste (13.05.2012)

GL-Baumusterprüfplan STB Typenreihe 701150/701155 (29.01.2012)

JUMO Test Protocol K/E70.2785 (05.05.2017)

Data sheet 701150, 70115000T10Z004K000 (V2.00/EN/00540116)

Operating Manual 701150, 70115000T90Z004K000 (V4.00/EN/00564764)

Data sheet 701155, 70115500T10Z001K000 (V3.00/EN/00542385)

Operating Manual 701555, 70115500T10Z001K000 (V3.00/EN/00542382)

Document Change Overview STB/STW 701150/701155 (DNVGL-TAA000017J), vers.04, dated 2023-03-21.

Additional EMC Test Report, JUMO testlab EW-4169.61000-4-3.STB/STW.1.0, dated 2021-09-21.

IECEx TUN 15.0036X, Issue 0, 2021-11-29; EC-Type Examination Certificate TÜV 11 ATEX 556139 X, Issue 00, 2021-

10-12; Eurofins Type Examination Certificate SEV 17 ATEX 0161 X, Issue 000, 2018-05-31.

Type Approval Assessment Report issued 2022-03-30.

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Revision No: 2

Tests carried out

Applicable tests according to Class Guideline DNV-CG-0339, Edition August 2021.

Marking of product

The products to be marked with:

- manufacturer name
- serial number
- type 701150 or 701155

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

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