Certificate no.:
TAE00004U6

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Termination and Joint for Cable

with type designation(s)
JL07 / JL09 / JL17

issued to
Jiangsu Jianlong Electrical Co., Ltd.
Yixing, **China**

is found to comply with
DNV 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.

Issued at **Hamburg** on **2025-02-25**
This Certificate is valid until **2030-02-24**.
DNV local unit: **Jiangyin NB & CMC**

for **DNV**

Approval Engineer: **Harald Amberger**

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.

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.

Product description

High-/ Low voltage shore connection plug and socket.

Types:

JLAP17: Plug with Male-Pin JLBP17: Socket with Male-Pin
JLAS17: Socket with Female-Pin JLBS17: Plug with Female-Pin

Ratings:	JLAP17	JLAS17	JLBP17	JLBS17
Operating voltage U_e	690V			
Operating current I_n (45°C)	350A			
Short-time withstand current I_{cw}	16kA, 1s			
Peak withstand current I_p	40kA			
Number of poles	3 poles with ground			
Control contacts	4 pilot contacts			
Degree of protection	IP66			

JLAP07: Plug with Male-Pin JLBP07: Socket with Male-Pin
JLAS07: Socket with Female-Pin JLBS07: Plug with Female-Pin

Ratings:	JLAP07	JLAS07	JLBP07	JLBS07
Operating voltage U_e	7.2kV			
Operating current I_n (45°C) Conductors cross section 185mm²	350A			
Short-time withstand current I_{cw}	25kA, 1s			
Peak withstand current I_p	40kA			
Number of poles	3 poles with ground			
Control contacts	3 pilot contacts			
Degree of protection	IP66			

JLAP09: Plug with Male-Pin
JLAS09: Socket with Female-Pin

Ratings:	JLAP09	JLAS09
Operating voltage U_e	12kV	
Operating current I_n (45°C) Conductors cross section 240mm²	500A	
Short-time withstand current I_{cw}	25kA, 1s	
Peak withstand current I_p	63kA	
Number of poles	3 poles with ground	
Control contacts	7 pilot contacts	
Degree of protection	IP66	

Application/Limitation

Location Classes:
Temperature: D, Humidity: A, Vibration: A

According IEC/IEEE 80005-1:2019+AMD1:2022, Compatibility assessment before shore connection must be performed.

Operating instruction of the manufacturer to be observed.

Type Approval documentation

Tests carried out

IEC 60309-1:2021, IEC 60309-5:2017, IEC 62613-1:2019, IEC 62613-2:2016
Vibration test, Dry heat test, Damp heat test, Cold test

Marking of product

Acc. IEC 62613-1 subclause 7, IEC 60309-1 subclause 7

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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