

TYPE APPROVAL CERTIFICATE

Certificate No: **TAE00002FU** Revision No: **2**

This is to certify:

That the Cable Ladders

with type designation(s) Topaz (Z) / Sapphire (P) / Emerald (E)

Issued to

Legrand Electric Limited Birmingham, United Kingdom

is found to comply with

DNV rules for classification - Ships, offshore units, and high speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV Material Metallic Suitable for open deck Yes

Issued at **Høvik** on **2023-10-10** This Certificate is valid until **2027-12-20**. DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: Georgy Abramenko

for **DNV**

Oddvar Deinboll 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.



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

Cable ladders types Topaz (Z), Sapphire (P), Emerald (E)

Widths [mm] : 100 – 1200 in 50mm increments Standard length [m]: 3, 6

Classification according to IEC 61537:

6.1 Material:	Metallic
6.2 Flame propagation:	Non-flame propagating system
6.3 Electrical continuity:	With electrical continuity characteristics
6.4 Electrical conductivity	Electrically conductive
6.5 Resistance against corrosion:	Class 3
	Class 5
	Class 6
	Class 8
	Class 9B and 9D
6.6 Temperature:	Min temperature: -20°C
	Maximum temperature: 90°C
6.7 Perforation in the base area:	N/A
6.8 Free base area:	Classification Y
6.9 Impact resistance	Up to 50J

Application/Limitation

To be installed in accordance with the manufacturer's instructions and DNV rules. Suitable for open deck.

Type Approval documentation

Tests carried out

Tested according to IEC 61537 (2006-10-11)

Marking of product

Manufacturer - Type designation

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