



CERTIFICATE NUMBER
15-LD1396965-PDA

DATE
14 Jul 2015

ABS TECHNICAL OFFICE
London Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

EBO SYSTEMS SAS

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Cable, Trays & Ladders**

Model: **K2, KP, UL series cable trays and cable ladders**

This Product Design Assessment (PDA) Certificate 15-LD1396965-PDA, dated 14/Jul/2015 remains valid until 13/Jul/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Roberto Alvarez

Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5 9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

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Tier: 3 - Type Approved, unit certification not required

Product: Cable, Trays & Ladders

Model: K2, KP, UL series cable trays and cable ladders

Intended Service:

ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules and International standards.

Description:

K2 series - press moulded cable trays; KP series - pultruded cable trays; UL series pultruded cable ladders.

Rating:

K2 series: Height (mm) 50, 80, 110, Perforated & non-perforated, Halogen free . KP series: Height (mm) 40, 50, 80, Perforated & non-perforated, Halogen free. UL series: Height (mm) 53, 80, 100, 150, Halogen free.

Service Restriction:

Unit Certification is not required for this product.

Comments:

The distance between fixing points are to be in accordance with Steel Vessel Rules (2015) 4-8-4/21.9.2, Steel Vessels Under 90 Meters Rules (2015) 4-6-3/5.9.1 (b), Mobile Offshore Drilling Units Rules (2015) 7-1-5/5.9.1 (a), High-Speed Craft Rules (2015) 4-6-3/5.9.1 (b) & Offshore Support Vessel Rules (2015) 4-8-4/21.9.2.

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. 15/34/129B, Test Report Crepim Certificate & Test Report - Oxygen Index & Glow Wire R98M, Revision: -, Pages: 8

Drawing No. 15/36/166A, Test Report Crepim Certificate & Test Report - Oxygen Index & Glow Wire R6204M, Revision: -, Pages: 7

Drawing No. 60037569-537203, Test Report LCIE IEC 61537 - Impact Resistance and Non-Fire Propagation GRP Cable Trays and Ladders, Revision: -, Pages: 8

Drawing No. 93161-585626A, Test Report LCIE IEC 60079-0 - Electrostatic Characterisation of Composite Materials R96, R96M, Revision: -, Pages: 4

Drawing No. 93161-585626B, Test Report LCIE IEC 60079-0 - Electrostatic Characterisation of Composite Materials R6204, R6204M, Revision: -, Pages: 4

Drawing No. 97188-592560, Test Report LCIE IEC 60093 - Surface and volume resistivity on two materials R96/AS, R6204/AS, Revision: -, Pages: 3

Drawing No. CCEI 015/54/349A, Test Report Crepim Certificate & Test Report - Oxygen Index & Glow Wire R96, Revision: -, Pages: 3

Drawing No. CCEI 015/54/349B, Test Report Crepim Certificate & Test Report - Oxygen Index & Glow Wire R6204, Revision: -, Pages: 3

Drawing No. K2-GB, Catalogue - Cable Trays in GRP - K2 Series - pressed, Revision: -, Pages: -

Drawing No. KP-GB, Catalogue - Cable Trays in FRP/GRP - KP Series - pultruded, Revision: -, Pages: -

Drawing No. M02B1989-1, Test Report Serma Technologies - Accelerated Ageing Salt Spray R96, Revision: -, Pages: 4

Drawing No. M02B1989-10, Test Report Serma Technologies - Accelerated Ageing Salt Spray R6204M, Revision: -, Pages: 4

Drawing No. M02B1989-11, Test Report Serma Technologies - Accelerated Ageing UV R6204M, Revision: -, Pages: 4

Drawing No. M02B1989-2, Test Report Serma Technologies - Accelerated Ageing UV R96, Revision: -, Pages: 4

Drawing No. M02B1989-4, Test Report Serma Technologies - Accelerated Ageing Salt Spray R98M, Revision: -, Pages: 4

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Tier: 3 - Type Approved, unit certification not required

Drawing No. M02B1989-5, Test Report Serma Technologies - Accelerated Ageing UV R98M, Revision: -, Pages: 4
Drawing No. M02B1989-7, Test Report Serma Technologies - Accelerated Ageing Salt Spray R6204, Revision: -, Pages: 4
Drawing No. M02B1989-8, Test Report Serma Technologies - Accelerated Ageing UV R6204, Revision: -, Pages: 4
Drawing No. R6204, Smoke-Toxicity and Opacity tests, Revision: -, Pages: 4
Drawing No. R96, Smoke-Toxicity and Opacity tests, Revision: -, Pages: 4
Drawing No. UL-GB, Catalogue - Cable Ladders in FRP/GRP - UL Series - pultruded, Revision: -, Pages: -

Terms of Validity:

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STANDARDS

ABS Rules:

The Rules applicable to this assessment are:

- Steel Vessels (2015) 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-8-4/21.9.4
- Steel Vessels Under 90 Meters (295 Feet) in Length (2015) 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-6-3/5.9.3
- Mobile Offshore Drilling Units (2015) 1-1-4/9.7, 1-1-Appendix 3 & 4, 4-3-3/5.9.3, 7-1-5/5.9.1 (b) & (e)
- Offshore Support Vessels (2015) 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-8-4/21.9.4
- High-Speed Craft (2015) 1-1-4/11.9, 1-1-Appendix 2 & 3, 4-6-3/5.9.3

National:

NA

International:

IEC 60695 Part 2-10 and Part 2-11, IEC 60092-101 (1994), IEC 61537 (2006), IEC 60079-0, IEC 60093.

Government:

NA

EUMED:

NA

OTHERS:

NA