



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 23-MAR-2021. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Cable, Power, Control and Instrumentation
Model Name(s): Type TC, TC-ER, Exane-ZH TC-ER, Vitalink TC-ER

Presented to:

RSCC WIRE & CABLE LLC (ROCKSBESTOS - SURPRENANT CABLE CORP)
20 BRADLEY PARK ROAD
CT 06026
United States

Intended Service:

General purpose electrical power distribution, control and signal cable intended for offshore drilling units, fixed and floating platforms and onboard vessels.

Description:

Models: Type TC, Type TC-ER, Exane-ZH Type TC-ER, and Vitalink Type TC-ER. Multi-conductor electrical cable 18 AWG to 2000 kcmil, Silicone or XLPE insulation, Type XHHW, XHHW-2, RHH, RHW-2 or RFHH-3 LSZH or PVC jackets. Single & Mult-pairs with individual and/ or overall shield consisting of aluminum/ polyester tape & drain wire or tinned copper braid shields.

Tier:

3

Ratings:

Voltage: 600 or 2000V; Maximum Conductor Temperature: 90°C; Insulation: Silicone, XLPE, Ceramifiable Silicone Rubber or Low Smoke Zero Halogen XLPE.

Service Restrictions:

1) Unit Certification is required for the cables used for propulsion systems. All propulsion cables, other than internal wiring in control gears and switchboards, are to be subjected to dielectric and insulation tests in the presence of the Surveyor (See 4-8-5/5.17.11 (e) of Steel Vessels Rules.) 2) For uses other than propulsion Unit Certification is not required for this product. 3) Ampacity to be in accordance with IEEE Std 45 for 90 °C rated cable.

Comments:

Duplicate PDA resides with Radiant RSCC Speciality Cable, Medak India.

Notes / Documentation:

Product Data Sheets Rev. 8 dated 19 Jan. 2007 and Rev. 6 dated 16 Jan. 2008; UL Certificate No. 20070305 File E60263 dated 13 April 2007; UL File E31697

Project 06E06811 dated 28 Dec. 2006; UL File E83358.

Term of Validity:

This Product Design Assessment (PDA) Certificate 16-HS1487804-PDA, dated 24/Mar/2016 remains valid until 23/Mar/2021 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.

ABS Rules:

The Rules for Conditions of Classification, Part 1 2016 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2016 Steel Vessel Rules 4-8-3/9, 2016 Offshore Support Vessels 4-8-3/9 2016 Steel Vessels Under 90 Meters (295 Feet) in Length 4-6-4/13 The Rules for Conditions of Classification, 2016- Offshore Units and Structures 1-1-A2, 1-1-A3, which covers the following: 2016 Mobile Offshore Drilling Unit Rules 4-3-4/13; 2016 Facilities on Offshore Installations 3-6/13

National Standards:

IEEE 45:2002, IEEE 1580:2010, IEEE 1202:1991; UL 1277:2010, UL 1309:2011, UL 1685:2015, UL 44:2014, UL 1581:2015, UL 1569:2015 & UL 2225:2013 (Crush and Impact Test Only); API-RP-14F, API-RP-14FZ.

International Standards:

Government Authority:

46 CFR 111.60

EUMED:

Others:

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA	16-HS1487804-PDA	24-MAR-2016	23-MAR-2021



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.