



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 17/MAR/2016. 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 30/APR/2018 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
Model Name(s): Type P, Type T/N

Presented to:

CONDUCTORES MONTERREY, S.A. DE C.V.
AVE. CONDUCTORES 505 OTE.
COL. CONSTITUYENTES DE QUERETARO
SAN NICOLAS DE LOS GARZA
Mexico

Intended Service:

Marine & Offshore Applications - Cables for Power Distribution & Control Systems.

Description:

Type P: Single and Multi-Conductor Power (Distribution) Cables, Multi-Conductor Control Cables and Multi-Conductor Signal Cables, Pairs & Triads, Unshielded or individual Shielded and with or without an overall Shielding. Crosslinked Polyolefin Insulation and Thermosetting Chlorinated Polyethylene Jacket. Optional: Aluminum or Bronze Armor with or without overall Sheath, or with Tin Coated Copper Armor with overall Sheath; Type T/N: Single and Multi-Conductor Power (Distribution) Cables, Multi-Conductor Control Cables and Multi-conductor Signal Cables, Pairs & Triads, Unshielded or individual Shielded and with or without an overall Shielding. Polyvinyl Chloride (PVC) and Polyamide Nylon Insulation, and Polyvinyl Chloride (PVC) Jacket. Optional: Aluminum or Bronze Armor with or without overall Sheath, or with Tin Coated Copper Armor with overall Sheath;

Tier:

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Ratings:

Type P: 300-600V/600 -1000V/2000V (IEEE/UL/CSA); 100 °C Ampacity; Flame Retardant to IEEE 1202 & IEC 332 A (IEEE-1580 & 45; UL 1309/CSA C22.2 No. 245); Type T/N: 300/600-1000V (IEEE/UL/CSA); 90 °C Ampacity; Flame Retardant to IEEE 1202 (IEEE-1580 & 45; UL 1309/CSA C22.2 No. 245);

Service Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the

specification or standard, including inspection standards and tolerances, must be clearly defined. 1) For electric cables in hazardous areas, the electric cable construction and the cable glands are to achieve the appropriate seal, such that gas cannot migrate through the cable. 2) This Cable is not intended to be used as Propulsion Cable. 3) Electrical Cables for High-Voltage are to be tested after installation in accordance to Rules for Building and Classing Steel Vessels 4-8-5/3.13.3.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. See attached Task 171737 dated 23 June 2006 Cable Ampacity Rating at 90 °C Clarification.

Notes / Documentation:

Supporting Data: Dwg.No. Type P-Single, 600V/1000V-2000V Marine Shipboard Single Power Cable, dated 20/08/2014; Dwg.No. Type P 2,3,4 or 5 Conductors, 600V/1000V Marine Shipboard Power Cable, dated 20/08/2014; Dwg.No. Type P 2 to 91 Conductors, 600V/1000V Marine Shipboard Control Cable, dated 20/08/2014; Dwg.No. Type P Multiple Pairs or Triads, 300V-600V/1000V Marine Shipboard Signal Cable, dated 20/08/2014; 101667890SAT-001A_REV1 Test Report Fire Conditions VE82 7/P 18AWG XLPO 2220/CPE7159 dated 12 Jun 2014; 101667890SAT-001B Test Report Fire Conditions ZT45 3/C 6AWG XLPO 2220/CPE7159 dated 11 Jun 2014; 101667890SAT-001C Test Report Fire Conditions ZT25 7/C 14AWG XLPO 2220/CPE7159 dated 11 Jun 2014; UL File E217848, Project No 4786418951, Per Standard No. UL 1685FT4/IEEE1202 (Flame Only), Laboratory Data Package, dated 12 Jun 2014; UL File E217848, Project No 4786418951, Per Standard No. UL1309 IEEE1580-2010 UL 1581, Laboratory Data Package, dated 11 Aug 2014; UL File E217848 Page T3-1/2 & 2/2 Test Record No 3 Summary dated 16 Aug 2014; Dwg. No. Type T/N - 2, 3, 4 or 5 Conductors, 600V/1000V Marine Shipboard Power Cable, dated 04/03/2013; Dwg. No. Type T/N 2 - 91 Conductors, 600V/1000V Marine Shipboard Control Cable, dated 04/03/2013; Dwg. No. Type T/N Multiple Pairs or Triads, 300 - 600V/1000V Marine Shipboard Control Cable, dated 04/03/2013; Dwg. No. Type T/N Single, 600V/1000V Marine Shipboard Single Power Cable, dated 04/03/2013; FVEP 07 005, Rev.4, Test Report on Moisture, Dielectric Test, 14/7, 600/1000V Type C14PCP-7, 100°C, Type P Cable, dated 2- 16 April 12; FRVEP 01 007, Rev.2, Test Report on Dielectric Tests, 14/7, 600/1000V Type C14PCP-7, 100°C, Type P Cable, dated 26 March & 10 April 2012; FVEP 07 005, Rev.4, Test Report on Moisture, Dielectric Test, 3C, 6 AWG, 600/1000V Type TPCP-26, 100°C, Type P Cable, dated 2- 16 April 12; FRVEP 01 007, Rev.2, Test Report on Dielectric Tests, 3C, 6 AWG, 600/1000V Type TPCP-26, 100°C, Type P Cable, dated 26 March & 10 April 2012; FVEP 02 006, Rev.2, Test Report Insulation & Jacket, Item IT04, IT68, VB97, UT68, MZ31 & UW98 Marine Cables, dated 26 March 2012;

Term of Validity:

This Product Design Assessment (PDA) Certificate 01-HS195937-6-PDA, dated 25/Sep/2014 remains valid until 30/Apr/2018 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:

Rules for Conditions of Classification, Part 1 - 2014 Steel Vessel Rules: 1-1-4/7.7, 1-1-A3, 1-1-A4 which covers the following: Steel Vessels: 4-1-1/Table 3, 4-8-3/9.1, 4-8-3/9.3, 4-8-3/9.5, 4-8-3/9.7, 4-8-3/9.9, 4-8-3/9.17; Rules for Conditions of Classification, Part 1 - 2014 Offshore Units and Structures: 1-1-4/9.7, 1-1-A2, 1-1-A3 which covers the following: Mobile Offshore Drilling Units: 4-3-4/7.1.1, 4-3-4/7.1.2, 4-3-4/7.1.3, 4-3-4/7.1.4;

National Standards:

IEEE 45 (2002), UL1309 (2011), IEEE-1580-2010

International Standards:

CSA C22.2 No. 245


Government Authority:**EUMED:****Others:****Model Certificate****Model Certificate No****Issue Date****Expiry Date**

PDA

01-HS195937-6-PDA

25/SEP/2014

30/APR/2018



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.