



Confirmation of Product Type Approval

Company Name: YOFC POLIRON INDUSTRIA E COMERCIO DE CABOS ESPECIAIS LTDA

Address: AV. MARIA LEONOR, NO 1222 - PREDIO 1-PARQUE REID SP 09920-080 Brazil

Product: Cable, Power

Model(s): CE NV, CE NV ES, CE IF NV, CE IF NV ES

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	20-2009060-PDA	08-JUL-2020	07-JUL-2025
Manufacturing Assessment (MA)	19-SP3647037	14-MAY-2019	13-MAY-2024
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

Power Cables for Marine and Offshore Installations

Description

Armored or unarmored, flame retardant, halogen free, low smoke, fire resistant (ES) power electric cables.

Ratings

Voltage Class: 0.6/1kV

Conductor: tinned copper class 2 and class 5

Cross Section: 1.5 mm² up to 300 mm² and 16 AWG up to 500 MCM

Cores (quantity): 1 up to 4

Thermal Barrier: Mica tape (only to ES - fire resistant)

Insulation: XLPE, HEPR

Shielding: None or overall

Armouring: bare copper (A and A.1); tinned copper (B and B.1); steel (C); steel tape (D); bare copper tape (E and E.1); tinned copper tape (F and F.1)

Oversheath: SHF1, SHF2, SHF2 (M)

Service Restrictions

1) Unit Certification is not required for this product.

2) Unit Certification is required where the cables are 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 of 2020 Marine Vessel Rules).

3) 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.

Comments

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

- The following markings are to be provided in accordance with IEC 60092-350: Identification of origin (manufacturer's name or trade name); rated voltage (Uo/U) and construction (number of cores and cross sectional area of conductor).

Notes, Drawings and Documentation

Databook - Low Voltage Power Cable

PDA ENERGIA - GAP ANALYSIS

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 07/Jul/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules

2020 Rules for Conditions of Classification, Part 1: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2020 Marine Vessels Rules 4-8-3/9.1, 9.3, 9.4, 9.5, 9.7, 9.9, 9.11, 9.17

2020 Steel Barge Rules 4-1-3/9.1

2020 Rules for Conditions of Classifications - High-Speed Craft: 1-1-4/11.9, 1-1-A2, 1-1-A3, which covers the following:

2020 High-Speed Craft Rules 4-6-4/13.1

2020 Rules for Conditions of Classification - Offshore Units and Structures , Part 1: 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2020 Mobile Offshore Units Rules 4-3-4/7.1

2020 Facilities on Offshore Installations 3-6/13

International Standards

NA

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



A handwritten signature in blue ink, appearing to read "James J. Walsh".

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 26-Jan-2022 11:00

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 is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. 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.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

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.

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.