



## *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 16-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  
**Model Name(s):** CWCMC HL Type SA

**Presented to:**

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

**Intended Service:**

Marine & Offshore Applications - For General purpose and Hazardous (classified) Locations. Electrical Control, Signal and Instrumentation or Thermocouple Extension Cable intended for Offshore Drilling Units, Fixed & Floating Production Platforms and Onboard Marine Vessels. Not intended for use as propulsion cable.

**Description:**

Gardex Marine Shipboard Cable Type CWCMC; Multi-Conductor Electrical cable, 14 AWG to 1000 MCM, Silicone Insulation Type SA in Continuous Welded Corrugated Metal Sheath, PVC Jacket, 600V.

**Tier:**

3

**Ratings:**

Voltage: 600 Volts; Maximum Cond. Temperature: 90°C; Insulation: Silicone; Hazardous (classified) locations: Class I and II, Division 1, Zone 1 and 2 & Class III, Division 1 and 2, Zone 1 and 2; Please refer to the attached pdf for details.

**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. The cable is not permitted in areas or applications exposed to high vibration, festooning, repeated flexing, excessive movement, or twisting such as in Engine Rooms, on Elevators, or in the area of Drill Floors, Draw Works, Shaker areas and Mud Pits. On an Offshore Floating, Drilling and Production Facility, the cable may be used as interconnect cable between Production Modules and between fixed Distribution Panels within the Modules, except that interconnection

between Production and temporary Drilling Packages is prohibited. The cable may be used within Columns, providing that the Columns are not subject to conditions stated above. When the cable is used within a Hazardous (classified) location, listed terminations or fittings, appropriate for use with CWCMC Type MC cable and approved for that location, are required. The cable is to be installed in accordance with Article 334 of the NEC. The ampacity values are to be determined as per Article 334 of the NEC

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. 1) Rockbestos Surprenant Cable Co. may use Metric Conductor sizes from 0.5 mm<sup>2</sup> to 600 mm<sup>2</sup> in their Power, Control & Instrumentation Cable constructions. 2) Ampacity to be in accordance with IEEE Std 45 for 90 °C rated cable.

**Notes / Documentation:**

Drawing No.: CWCMC HL Type ITC & PLTC Gardex ITC & PLTC-Type  
 CWCMC-Catalog Pages Drawing No.: CWCMC HL Type MV 15KV Shld Gardex  
 CC 15KV Shld-Type CWCMC-MV-Catalog Pages Drawing No.: CWCMC HL Type  
 MV 5KV & 8KV Shld Gardex CC 5KV & 8KV Shld-Type CWCMC-MV-Catalog  
 Pages Drawing No.: CWCMC HL Type RHH-RHW Control Power Vitalink MC-NCC  
 Control Power-Type CWCMC-MC-HL-Catalog Pages Drawing No.: CWCMC HL  
 Type RHH-RHW Instr-Type Vitalink MC-NCC Instr-Type CWCMC-MC-HL-Catalog  
 Pages Drawing No.: CWCMC HL Type SA - Instr-Type Gardex CRC Instr-Type  
 CWCMC-MC-Catalog Pages Drawing No.: CWCMC HL Type SA - Power & Control  
 Gardex CRC Power & Control-Type CWCMC-MC-Catalog Pages Drawing No.:  
 CWCMC HL Type THCPL EXT Gardex CC Armored Instr-Type  
 CWCMC-MC-HL-Catalog Pages Drawing No.: CWCMC HL Type XHHW-2 -  
 Armored Control Gardex CC Armored Control-Type CWCMC-MC-HL-Catalog  
 Pages Drawing No.: CWCMC HL Type XHHW-2 - Armored Power Gardex CC  
 Armored Power-Type CWCMC-MC-HL-Catalog Pages Drawing No.: Gardex 25KV  
 & 35KV Shld-Type CWCMC-MV-Catalog Pages Gardex 25KV & 35KV Shld-Type  
 CWCMC-MV-Catalog Pages Drawing No.: Gardex Arctic Instr-Type  
 CWCMC-ITC-HL & MC-HL-Catalog Pages Gardex Arctic Instr-Type  
 CWCMC-ITC-HL & MC-HL-Catalog Pages Drawing No.: Intertek ETL SEMKO  
 Report No. 3077754-001 ITS-IEEE 1202-4 PR 24AWG-Cat 5-Type BS Drawing  
 No.: Intertek ETL SEMKO Report No. 3079415-001 4 PR 24 AWG CAT 5-Type  
 BS-Impact Test Drawing No.: Intertek ETL SEMKO Report No. 3079415-002 4 PR  
 24 AWG Cat 5-Type BS-Crush Test Drawing No.: TD-005123 Electrical Test  
 Report- 4PR 24 AWG CAT 5 TYPE BS Drawing No.: Type P-300V CSPE Jkt  
 Catalog-Exane 125-Type P-CSPE Jkt-Dimensions & Part Numbers-300V Cables  
 Drawing No.: Type P-300V Neop Jkt Catalog-Exane 125-Type P-Neop  
 Jkt-Dimensions & Part Numbers-300V Cables Drawing No.: UL File E3358 Gardex  
 Type CWCMC Test Records Drawing No.: UL File E83358-Vol 2-Sec 2 MV Cables  
 Marine Drawing No.: UL File E38918

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 16-HS1477473-PDA, dated 17/Mar/2016 remains valid until 16/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 STD 2002, UL 1309:2014, UL 1569:2014

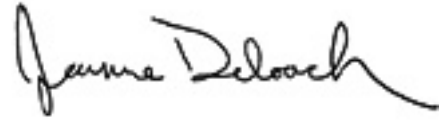
**International Standards:  
Government Authority:**

USCG 46 CFR 111.60-1 & -23

**EUMED:**

**Others:**

<b>Model Certificate</b>	<b>Model Certificate No</b>	<b>Issue Date</b>	<b>Expiry Date</b>
PDA	16-HS1477473-PDA	18-MAR-2016	16-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.