

CERTIFICATE NUMBER 15-VC1400803-PDA

ABS TECHNICAL OFFICE

DATE 21 Aug 2015

CERTIFICATE OF Services DESIGN ASSESSMENT

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

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: Molded Case Circuit Breaker

Model: Series G (JG Frame) - JGE, J250E, JGS, J250S, JGH, J250H, JGC, J250C, JGU, J250U, JGX, J250X

This Product Design Assessment (PDA) Certificate 15-VC1400803-PDA, dated 21/Aug/2015 remains valid until 20/Aug/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

Tim Kimble 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).

EATON ELECTRICAL GROUP

1000 CHERRINGTON PARKWAY Moon Township PA United States 15108 Telephone: 412-893-3792 Fax: 412-893-5937 Email: louisfgrahor@eaton.com Web: WWW.EATON.COM

Tier: 2 - PDA Issued

Product: Molded Case Circuit Breaker

Model: Series G (JG Frame) - JGE, J250E, JGS, J250S, JGH, J250H, JGC, J250C, JGU, J250U, **JGX, J250X**

Intended Service:

Marine & Offshore Application - Low Voltage Distribution Protection

Description:

Molded Case Circuit Breaker 3 & 4 Pole with Thermal Magnetic and Electonic Trip Units

Rating:

Ampere Ratings: 70 A to 250 A @ 40°C Ambient Voltage: 240, 480 & 600 VAC, 250 VDC Interrupting, Short Time Rating see details as per attached "pdf" Data Sheets.

Service Restriction:

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 ship applications relative to removable mounting see 4-8-3/5.3.3 (c) of the SV Rules.
 (2) Where used in locations with ambient temperatures greater than 40 °C the ratings(both normal and interrupting) are to be recalibrated/derated as appropriate.

(3) For Marine use please note that the rated Ultimate Short-circuit Breaking Capcity (Icu) is to be the same as (and not higher than) the rated Short-circuit Service Breaking Capacity (Isc).

Comments:

Duplicate PDA resides with Cutler Hammer Industrial Ltd - SAN CRISTOBAL, DOMINICAN REPUBLIC.

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

Notes/Drawing/Documentation:

Dwg. 69D2520 Rev. 11, sheet 1 of 1- AB DE ION Circuit Breaker Type JG, Three pole Circuit Breaker Outline. Dwg. 69D2521 Rev. 06, sheet 1 of 1- AB DE ION Circuit Breaker Type JG, Four pole Circuit Breaker Outline. DNV Certificate No. 8051 for Molde Case Circuit Breakers Type J250E, J250H, J250S, dated 01-19-2007. UL File E7819 Report on Molded Case Circuit Breakers, dated May 29, 2001. IEC/IECEE Circuit Breaker Test Report No. NL-12140, dated 2007-04-16 KEMA Certificate No. 2074516.03 for EATON-C-Hammer Circuit Breakers Type J250E, J250H and J250S, dated 18 June 2008. Table 1, JG Frame CB, UL Interrupting Rating. EATON memo to ABS dated 1/19/10 EATON- CUTLER- HAMMER Catalogue PA 0121E/CSS18801.

Terms of Validity:

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Tier: 2 - PDA Issued

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.

STANDARDS

ABS Rules:

Rules for Conditions of Classification, Part 1 2015 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2015 Steel Vessel 4-8-3/5.3.3, 4-8-2/9.3;

ABS Rules for Conditions of Classifications, Part1, 2015 Offshore Unit and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3 which covers the following: 2015 Mobile Offshore Drilling Units 6-1-7/13.1.1

National:

ANSI/UL 489 10th Edition: 2002 ; UL File E7819 (29 & 30 May 2001, 17 August 2004 & 19 January 2007)

International:

IEC 60947-2 Ed. 4.1: 2009, KEMA Certificate 2074516.03 (18 June 08); IEC Certificate NL-12140 dated 16 April 07

Government: NA

EUMED:

NA

OTHERS:

NA



CERTIFICATE NUMBER 15-VC1400803-PDA-DUP DATE 21 Aug 2015

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AMERICAN BUREAU OF SHIPPING

Engineer

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EATON CARRETERA SANCHEZ KM 18.5 PARQUE INDUSTRIAL ITABO, S.A. (PIISA) HAINA, SAN CRISTOBAL Dominican Republic 11116 Telephone: Fax: Email:

Web: www.eaton.com

Tier: 3 - Type Approved, unit certification not required

Product: Molded Case Circuit Breaker

Model: Series G (JG Frame) - JGE, J250E, JGS, J250S, JGH, J250H, JGC, J250C, JGU, J250U, JGX, J250X

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147.7

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OTHERS:

NA