



CERTIFICATE NUMBER
15-VC1400801-PDA

DATE
21 Aug 2015

ABS TECHNICAL OFFICE
TIV-MEX-Veracruz Engineering
Services

CERTIFICATE OF 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 C (L Frame) - LD, CLD, LDB, HLD, CHLD, HLDB, LDC, CLDC, LDCB, HLD-DC, LW, HLW, LW--K, Molded Case Switch (Fused), LD--K, HLD--K, LDB--K, HLDB--K, & Motor Circuit Protector: ...**

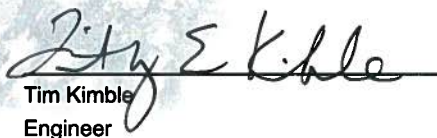
This Product Design Assessment (PDA) Certificate 15-VC1400801-PDA, dated 21/Aug/2015 remains valid until 20/Aug/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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-A3/9.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

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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 C (L Frame) - LD, CLD, LDB, HLD, CHLD, HLDB, LDC, CLDC, LDCB, HLD-DC, LW, HLW, LW-K, Molded Case Switch (Fused), LD-K, HLD-K, LDB-K, HLDB-K, & Motor Circuit Protector: HMCP600L6W, HMCP600X6W & HMCP600Y5W

Intended Service:

Marine & Offshore Application - Low Voltage Distribution Protection.

Description:

2, 3 & 4 Pole Molded Case Circuit Breaker with Thermal Magnetic and Electronic Trip Units., Motor Circuit Protectors and Molded case Switches (Fused).

Rating:

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 Capacity (Icu) is to be the same as (and not higher than) the rated Short-Circuit Service Breaking Capacity (Isc).

Comments:

Duplicate PDA resides with Eaton Corporation - BEAVER.

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

Notes/Drawing/Documentation:

Dwg. 1493D63 Rev.4 Sheet 1 of 3- " AB DE ION Circuit Breaker Type LD/HD/LDC-600 Amp. 2, 3 Poles Outiline & Drilling Plans"

Dwg. 1493D63 Rev.4 Sheet 2 of 3- " AB DE ION Circuit Breaker Type LD/HD/LDC-600 Amp. 2, 3 Poles Outiline & Drilling Plans"

Dwg. 1493D63 Rev.4 Sheet 3 of 3- " AB DE ION Circuit Breaker Type LD/HD/LDC-600 Amp. 2, 3 Poles Outiline & Drilling Plans"

Dwg. 1493D64 Rev. 2 Sheet 1 of 2- "AB DE ION Circuit Breaker Type LD/HLD/LDC-600 Amp. 4 Poles Outiline & Drilling Plans"

Dwg. 1493D64 Rev. 2 Sheet 1 of 2- "AB DE ION Circuit Breaker Type LD/HLD/LDC-600 Amp. 4 Poles Outiline & Drilling Plans"

File E7819 Vol. LD, issued: 1994-08-17, Revised: 2008-08-19

File E7819 Vol. LD, Section 1 and Report issued: 10-02-89, Revised: 5-5-98

File E7819 Vol. LD, Section 5 and Report issued: 10-05-89, Revised: 4-1-01

File E7819 Vol. LD, Section 8 and Report issued: 1994-08-17, Revised: 2009-04-17

File E7819 Vol. MCP, issued: 1994-08-17, Revised: 2008-08-19

File E7819 Vol. MCP, Section 7 and Report issued: 1991-06-24, Revised: 2009-04-17

File E59918 Vol. 1, issued: 1994-08-17, Revised: 2018-09-05.

File E59918 Vol. 1, issued: 1994-08-17, Revised: 2008-09-05

File E59918 Vol. 1, Section 12, issued: 8-2-90, Revised: 1-25-02

KEMA Certificate: 2095729.02- Circuit Breakers Type-Models LW 800 Amp. Issued 17 January 2008

KEMA Certificate: 2095729.01- Circuit Breakers Type-Models LW-HLW 800 Amp. Issued 17 January 2008

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Email: louisfgrahor@eaton.com
Web: WWW.EATON.COM

Tier: 2 - PDA Issued

KEMA Certificate: 2095729.06- Circuit Breakers Type-Models LWK. Issued April 9 2003.
Table 1 LD Frame Circuit Breakers Rating Tables
EATON memo to ABS dated 7-6-10
Catalogue CA081010001E- Series C, Molded Case Circuit Breakers. 125-600 Amp.

Terms of Validity:

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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 Vol: LD (Issued 17 August 1994, Revised 19 August 2008), Vol: MCP (Issued 24 June 1992, Revised 17 April 2009), UL File 59918 (Issued 17 August 1994, Revised 5 September 2008)

International:

IEC 60947-2, Ed. 4.1: 2009, KEMA Certificate Nos: 2095729.02, 2095729.01 (Issued 17 January 2008) & 2025423.06 (Issued 9 April 2003);

Government:

NA

EUMED:

NA

OTHERS:

NA



CERTIFICATE NUMBER
15-VC1400801-PDA-DUP

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Tier: 3 - Type Approved, unit certification not required

Product: Molded Case Circuit Breaker

Model: Series C (L Frame) - LD, CLD, LDB, HLD, CHLD, HLDB, LDC, CLDC, LDCB, HLD-DC, LW, HLW, LW-K, Molded Case Switch (Fused), LD-K, HLD-K, LDB-K, HLDB-K, & Motor Circuit Protector: HMCP600L6W, HMCP600X6W & HMCP600Y5W

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Dwg. 1493D64 Rev. 2 Sheet 1 of 2- "AB DE ION Circuit Breaker Type LD/HLD/LDC-600 Amp. 4 Poles Outline & Drilling Plans"

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Tier: 3 - Type Approved, unit certification not required

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OTHERS:

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