

# Confirmation of Product Type Approval

Company Name: EATON ELECTRICAL GROUP

Address: 1000 CHERRINGTON PARKWAY PA 15108 United States

**Product: Molded Case Circuit Breaker** 

Model(s): PDG1, PDG2, PDG3, PDG4, PDG5

**Endorsements:** 

Certificate Type	<b>Certificate Number</b>	Issue Date	<b>Expiry Date</b>
Product Design Assessment (PDA)	21-2155768-PDA	30-SEP-2021	29-SEP-2026
Manufacturing Assessment (MA)	22-5172392	04-MAR-2022	03-MAR-2027
Product Quality Assurance (PQA)	NA	NA	NA

#### Tier

3 - Type Approved, unit certification not required

### **Intended Service**

Marine & Offshore Application - Low Voltage For use in Electrical Distribution Systems

Description

Power Defense Molded Case Circuit Breakers 1, 2, 3, and 4 Poles with Thermal Magnetic and Electronic Trip Units

**Ratings** 

Rated voltage: 240 VAC - 690 VAC

Rated current: 15 - 1200 A

Rated frequency: 50/60 Hz

Rated breaking capacity: 5 - 200 kA

Ambient Operating Temperature: up to 50 °C

Interruption Rating Designator: C / F / G / K / M / N / P

For detailed characteristics see attached manufacturer Technical Data.

## **Service Restrictions**

1) 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.

Certificate Number: 21-2155768-PDA

- 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**

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

**Notes, Drawings and Documentation** 

Drawing No. PD1 1P, PD1 1P OUTLINE DRAWING

Drawing No. PD1 2P, PD1 2P OUTLINE DRAWING

Drawing No. PD1 3P, PD1 3P OUTLINE DRAWING

Drawing No. PD1 4P, PD1 4P OUTLINE DRAWING

Drawing No. PD2 1P, PD2 1P OUTLINE DRAWING

Drawing No. PD2 2P, PD2 2P OUTLINE DRAWING

Drawing No. PD2 3P, PD2 3P OUTLINE DRAWING

Drawing No. PD2 4P, PD2 4P OUTLINE DRAWING

Drawing No. PD3 2 3P 400A, PD3 2-3P 400A OUTLINE DRAWING

Drawing No. PD3 2 3P 600A, PD3 2-3P 600A OUTLINE DRAWING

Drawing No. PD3 4P 400A, PD3 4P 400A OUTLINE DRAWING

Drawing No. PD3 4P 600A, PD3 4P 600A OUTLINE DRAWING

Drawing No. PD4 2 3P 800A, PD4 2-3P OUTLINE DRAWING

Drawing No. PD4 4P 800A, PD4 4P 800A OUTLINE DRAWING

Drawing No. PD5 2 3P 1200A, PD5 OUTLINE DRAWING

Drawing No. PD5 4P 1200A, PD5 4P OUTLINE DRAWING

Drawing No. PD RATINGS, PD Marine - Interrupting Ratings

Drawing No. IL012152EN H01, PD1 INSTRUCTION LEAFLET

Drawing No. IL012106EN H04, PD2 INSTRUCTION LEAFLET

Drawing No. IL012107EN H04, PD3 INSTRUCTION LEAFLET

Drawing No. IL012108EN H04, PD4 INSTRUCTION LEAFLET

Drawing No. IL012201EN H01, PD5 INSTRUCTION LEAFLET

Certificate of Compliance No. 20180712-E7819, PDG1 TM, UL LLC, 2018

Certificate of Compliance No. 20190215-E7819, PDG2 TM, PDG2 ETU, UL LLC, 2019

Certificate of Compliance No. 20180912-E7819, PDG3a, UL LLC, 2018

Certificate of Compliance No. 20181115-E7819, PDG3b Sec 9, UL LLC, 2018

Certificate Number: 21-2155768-PDA

Certificate of Compliance No. E7819, PDG3b Sec 8, UL LLC, 2018

Certificate of Compliance No. 220180906-E7819, PDG4 TM, UL LLC, 2018

Certificate of Compliance No. 20181018-E7819, PDG4 ETU, UL LLC, 2018

Certificate of Compliance No. E7819, PDG4 Frame, UL LLC, 2020

Certificate of Compliance No. 20181119-E7819, PDG5 ETU, UL LLC, 2018

Certificate of Compliance No. 20181119-E7819, PDG5 ETU, PDG5 Frame, UL LLC, 2018

Test Report No. E7819 Vol EF PDG1 UL Test Report, UL LLC, 2018

Test Report No. E7819 Vol FD PDG2 UL Test Report, UL LLC, 2019

Test Report No. E7819 Vol KL PDG3A UL Test Report, UL LLC, 2019

Test Report No. E7819 Vol LG PDG3 UL Test Report, UL LLC, 2018

Test Report No. E7819 Vol LG PDG3B UL Test Report, UL LLC, 2018

Test Report No. E7819 Vol MDL PDG4 UL Test Report, UL LLC, 2018

Test Report No. E7819 Vol ND PDG5 UL Test Report, UL LLC, 2018

Test Report Certificate No. CN46467, PD1 CB 0051764 Test Certificate, CQC, China, 2019

Test Report Certificate No. CN45887-M1, PD2 CB 0050928 Test Certificate, CQC, China, 2019

Test Report Certificate No. CN46386, PD3A CB 0051748 Test Certificate, CQC, China, 2019

Test Report Certificate No. CN46327, PD3B CB 0050566 Test Certificate, CQC, China, 2019

Test Report Certificate No. CN47011, PD4 CB 0052402 Test Certificate, CQC, China, 2019

Test Report Certificate No. CN45771, PD5 CB 0049482 Test Certificate, CQC, China, 2019

#### **Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 29/Sep/2026 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**

The Rules for Conditions of Classification, 2021 Marine Vessel Rules 1-1-4/7.7, 1-1-A3,1-1-A4, which covers the following:

2021 Rules for Building and Classing Marine Vessels Rules: 4-1-1/Table 3, 4-8-3/1.7, 4-8-3/5.3.3

The Rules for Conditions of Classification, Offshore Units and Structures, 2021 Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2021 Rules for Building and Classing Mobile Offshore Units: 6-1-7/13.1

# International Standards

Certificate Number: 21-2155768-PDA

IEC 60947-2:2019 UL 489:2016

**EU-MED Standards** NA

National Standards

**Government Standards** NA

Other Standards NA



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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.