



CERTIFICATE NUMBER 19-LD1833832-PDA

EFFECTIVE DATE 16-May-2019

EXPIRATION DATE 15-May-2024

ABS TECHNICAL OFFICE London Engineering Dpt

CERTIFICATE OF

Product Design Assessment

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

ABB OY, DISTRIBUTION SOLUTIONS

located at

MUOTTITIE 2 A, VAASA, Finland, FIN 65320

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 Protection Relay

Model 615 Series: REF615, RED615, REG615, REM615, RET615, REU615, REV615

This Product Design Assessment (PDA) Certificate remains valid until 15-May-2024 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.

American Bureau of Shipping

Theodoros Chatzigkaidas, Senior 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 ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

ABB OY

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Tier: 2 - PDA Issued *TC***Product: Protection Relay****Model: 615 Series: REF615, RED615, REG615, REM615, RET615, REU615, REV615****Intended Service:**

Phase-segregated, high speed, longitudinal differential protection for cable feeders for use on ABS classed vessels and offshore installations in accordance with the listed ABS Rules and International Standards.

Description:

Compact and versatile solution for utility and industrial power distribution systems with integration of protection, control, monitoring and supervision in one relay.

REF615 Feeder protection and control

RED615 Line differential protection and control

RET615 Transformer protection and control

REU615 Voltage protection and control

REM615 Motor protection and control

REV615 Capacitor bank protection and control

REG615 Generator and interconnection protection

Rating:

Power Supply U(aux) 100/110/120/220/240V AC & 48/60/110/220/250V DC or U(aux)24/30/48/60V DC

Service Restriction:

Unit certification is not required for this product.

Comments:

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

Notes/Drawing/Documentation:

Drawing No. 1707999STO-001 Test Report, Intertek Test Report, Date: Sep-2014, Intertek, Revision: -, Pages: -

Drawing No. 1708538STO-001 Ed3, EMC Test Report, Date: 23-Feb-2018, Intertek, Revision: -, Pages: -

Drawing No. 1720426STO-100, Intertek Test Report, Date: 04 and 12-Apr-2018, Intertek Semko AB, Revision: -, Pages: -

Drawing No. 1805433STO-001, Intertek EMC Test Report, Date: 20-Jun-2018, Intertek Semko AB, Revision: -, Pages: -

Drawing No. 1KHL503830 ComP RE, Technical Construction File, Revision: -, Pages: -

Drawing No. 1MRS082172A, Type Test Report, 12-Sep-2019, ABB, Revision: -, Pages: -

Drawing No. 20170926, 615 materials listing, Revision: -, Pages: -

Drawing No. 204526A, TRF EMC, Date: 23-Mar-2012, NEMKO, Revision: -, Pages: -

Drawing No. 204526B, TRF EMC, Date: 23-Mar-2012, NEMKO, Revision: -, Pages: -

Drawing No. 2RCA033251A0001_C ECO-C0001611 FISUB, Main Assembly Diagram, Revision: -, Pages: -

Drawing No. List of changes, List of changes, Revision: -, Pages: -

Drawing No. VTT-S-03681-14, IP 54 Tightness Test, Date: 22-08-2014, FINAS, Revision: -, Pages: -

Drawing No. VTT_S_02672_11, Sine Vibration Test Report, Date: 28-Apr-2011, FINAS, Revision: -, Pages: -

Drawing No. VTT_S_02673_11, Sine Vibration Test Report, Date: 20-Apr-2011, FINAS, Revision: -, Pages: -

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-LD1833832-PDA, dated 16/May/2019 remains valid until 15/May/2024 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.

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Tier: 2 - PDA Issued

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.

STANDARDS

ABS Rules:

- Marine Vessels Rules (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/5.3.3.(a), 4-9-9/13
- Steel Vessels for Service on Rivers and Intracoastal Waterways (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4
- Steel Barge Rules (2019): 1-1-4/7.9, 1-1-A3, 1-1-A4;
- High Speed Crafts (2019): 1-1-4/11.9, 1-1-A2, 1-1-A3, 4-6-4/11.1;
- Mobile Offshore Units (2019): 1-1-4/9.7, 1-1-A2&A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13, 6-1-7/13.1;
- Facilities on Offshore Installations (2019): 1-1-4/9.7, 1-1-A2, 1-1-A3, 3-6/13.3.3(a)

National:

NA

International:

- IEC 60255-27:2013, Ed. 2
- IEC 60255-26:2013, Ed. 3
- IEC 60529:2013, Ed. 2.2
- IEC 60255-1:2009, Ed. 1.0

Government:

NA

EUMED:

NA

OTHERS: 

NA