

CERTIFICATE NUMBER18-LD1798611-PDAEFFECTIVE DATE21-Dec-2018EXPIRATION DATE20-Dec-2023ABS TECHNICAL OFFICELondon Engineering Dpt

## **CERTIFICATE OF**

# **Product Design Assessment**

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

# VAMP LTD

located at

## YRITTAJANKATU 15, VAASA, Finland, FI-65380

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 Easergy P3F30, P3L30, P3M30, P3M32, P3T32, P3G30 and P3G32

This Product Design Assessment (PDA) Certificate remains valid until 21-Dec-2023 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)

Certificate of Product Design Assessment Rev.2

VAMP LTD YRITTAJANKATU 15 VAASA Finland FI-65380 Telephone: +358 20 7533 200 Fax: NA Email: petri.hakamaki@schneider-electric.com Web: www.schneider-electric.com

Tier: 2 - PDA Issued

#### **Product: Protection Relay**

#### Model: Easergy P3F30, P3L30, P3M30, P3M32, P3T32, P3G30 and P3G32

**Intended Service:** 

ABS classed vessels and offshore installations in accordance with the listed ABS Rules and International standards.

## **Description:**

The relay has a modular design and it can be optimized to almost all type of feeder, motor, transformer protection applications in low and medium voltage distribution systems. The relay has all the necessary protection for industrial and utility applications for power distribution networks. Synchrochec and auto-reclosing extend automatic network control.

The relay has an optional interface for connecting 4 arc flash point sensors.

Two alternative display options

- 128 x 128 LCD matrix

- 128 x 128 LCD matrix detachable

Power quality measurements and disturbance recorder enable capture of quick network phenomena. Wide range of communication protocols i.e. IEC61850, Profibus DP to Modbus TCP.

#### Rating:

Temperature: -40°C and 70°C Vibration: 5 – 100 Hz, ±1mm / 0.7gn, 10 -150 Hz ±0.075mm / 1gn Shock: 100 m/s2 (10gn), 300 m/s2 (30gn) Bump: 200 m/s2 (20gn) EMC: general power distribution zones Enclosure: IP20 (back side), IP54 without vacuum front panel Power Supply: 110 to 230V ac/dc, 24 to 48V dc

#### 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.

#### **Comments:**

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

### Notes/Drawing/Documentation:

Notes/Drawing/Documentation: Drawing No. EMC Test report 288368-1-1 P3x3x EN (IEC60255), EMC Test report according to IEC 60255 for Easergy P3xx, Date: 04-Sep-2017, SGS Fimko Ltd, Revision: 1, Pages: 1 Drawing No. EMC Test report 288368-1-2 P3x3x IACS, EMC Test report according to IACS E10 for Easergy P3xx, Date: 07-Sep-2017, SGS Fimko Ltd, Revision: 1, Pages: 1 Drawing No. Easergy P3 CE declaration-Nov 2017, Easergy P3 CE declaration, Revision: 1, Pages: 1 Drawing No. Easergy P3 Test report list (12.2.2018), Easergy P3xx Test report list, Revision: 1, Pages: 1 Drawing No. JW171855E P3x, Test report for additional tests according to IEC 60255-1, -27, Date: 24-Nov-2017, Vueberg VETOR Testing Pagererab Institute Co. Ltd. Revision: 1 Xuchang KETOP Testing Research Institute Co Ltd, Revision: 1, Pages: 1 Drawing No. JW171856E P3x (Power D), Test report for additional tests according to IEC 60255-1, -27, Date: 24-Nov-2017, Xuchang KETOP Testing Research Institute Co Ltd, Revision: 1, Pages: 1 Drawing No. MRTA c18-00068 - Easergy P3 37321 (1762004) JB signed, MRTA certificate Easergy P3xx, Revision: 1, Pages: 1 Drawing No. Order codes Easergy P3xx 2018, Easergy P3xx Order codes, Revision: 1, Pages: 1 Drawing No. P3F30\_en\_M\_B003\_web, P3F30 user manual, Revision: 003, Pages: 1 Drawing No. P3G30 32 en M B003 web, P3G30 user manual, Revision: 003, Pages: 1 Drawing No. P3L30 en M B003 web, P3L30 user manual, Revision: 003, Pages: 1 Drawing No. P3M30 32 en M B003 web, P3M30 and P3M32 user manual, Revision: 003, Pages: 1 Drawing No. P3T32 en M B003 web, P3T32 user manual, Revision: 003, Pages: 1

VAMP LTD YRITTAJANKATU 15 VAASA Finland FI-65380 Telephone: +358 20 7533 200 Fax: NA Email: petri.hakamaki@schneider-electric.com Web: www.schneider-electric.com

Tier: 2 - PDA Issued 10

Drawing No. Test Report 288277-1A P3x IP54, Degree of protection (IEC 60529, IP54) provided by enclosure of Easergy P3xx, Date: 20-Aug-2017, SGS Fimko Ltd, Revision: 1, Pages: 1 Easergy P3xx, Date: 20-Aug-2017, SGS Fimko Ltd, Revision: 1, Pages: 1 Drawing No. Test Report 288277-1B P3x ENV, Environmental and safety test report according to IEC 60255-1, IEC60255-27 and IACS E10, Date: 13-Oct-2017, SGS Fimko Ltd, Revision: 1, Pages: 1 Drawing No. VAMP\_ISO\_14001\_exp14November2020, ISO 14001 certificate, Revision: 1, Pages: 1 Drawing No. VAMP\_ISO\_9001\_exp14November2020, ISO 9001 certificate, Revision: 1, Pages: 1 Drawing No. VTT-S-04577-17 (mechanical IEC60255), Mechanical test report according to IEC 60255-21-x, 13-Aug-2017, FINAS, Revision: 1, Pages: 1 Drawing No. VTT-S-04578-17 (mechanical marine), Mechanical test report according to IACS, Revision: 1, 24-Aug-2017, FINAS\_Pages: 1 2017, FINAS, Pages: 1

#### **Terms of Validity:**

This Product Design Assessment (PDA) Certificate 18-LD1798611-PDA, dated 21/Dec/2018 remains valid until 20/Dec/2023 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.

#### **STANDARDS**

#### **ABS Rules:**

- Steel Vessel Rules (2018): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-5/3.7.2, 4-8-3/5.3.3, 4-9-8/7, 4-9-8/13, 4-9-8/Table1

- Steel Vessels Under 90 Meters (295 Feet) in Length Rules (2018): 1-1-4/7.7, 1-1-A3, 1-1-A4

- Facilities on Offshore Installations Rules (2018): 1-1-4/9.7, 1-1-A2, 1-1-A3 - Offshore Support Vessels Rules (2018): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-5/3.7.2, 4-8-3/5.3.3, 4-9-8/7, 4-9-8/13, 4-9-8/Table1

- Mobile Offshore Drilling Units Rules (2018): 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13

- Steel Vessels for Service on Rivers and Intracoastal Waterways Rules (2018): 1-1-4/7.7, 1-1-A3, 1-1-A4

- High Speed Crafts Rules (2018): 1-1-4/11.9, 1-1-A2, 1-1-A3

- Steel Barge Rules (2018): 1-1-4/7.9, 1-1-A3, 1-1-A4

National:

NA

International: IACS UR E10, Rev.6:2014 IEC 60255-1:2009 IEC 60529:1989 + A1:1999

**Government:** NA

VAMP LTD YRITTAJANKATU 15 VAASA Finland FI-65380 Telephone: +358 20 7533 200 Fax: NA Email: petri.hakamaki@schneider-electric.com Web: www.schneider-electric.com

Tier: 2 - PDA Issued

EUMED: NA **OTHERS:** 

OTHERS: NA