



CERTIFICATE NUMBER

11-LD769194-PDA

DATE

20 June 2011

ABS TECHNICAL OFFICE

London Ship Engineering

# CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of  
**EATON POWER QUALITY OY - ESPOO**

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: **Uninterruptible Power System**

MODEL: **9155 & 9355**

This Product Design Assessment (PDA) Certificate 11-LD769194-PDA, dated 20/Jun/2011 remains valid until 19/Jun/2016 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

Jean-Claude G. Dennemont  
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 POWER QUALITY OY**

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**Product:** Uninterruptible Power System

**Model:** 9155 & 9355

**Intended Service:**

Marine and Offshore applications.

**Description:**

Uninterruptible Power Supply Units (1ph & 3ph) with optional internal and external battery modules.

**Ratings:**

Power Ratings : 5/8/10/12/15 kVA

Input Voltage (configurable): 100V-690V, 50/60Hz

Output Voltage (configurable): 100V-690V, 50/60Hz

See attached data sheet for more details.

**Service Restrictions:**

Unit Certification is required for this product if it to be used for propulsion control and safety systems as required by 4-9-7/13.3 of the Rules.

**Comments:**

UPS requires earth fault monitoring facility if is not provided in the same galvanically connected network.

Maintenance free VRLA batteries or NiCd are to be sized such that completely discharged battery can be recharged to 80% capacity in not more than 10 hours.

**Notes / Drawings / Documentation:**

Test reports- CENTRIA Report no:23092010.21, Nemko Reports:111912A, 1032216 & 158646, Eaton 9x55 5-15kVA TA Factory Test report, User manuals - 9155 & 9355

**Term of Validity:**

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**STANDARDS**

**ABS Rules:**

Steel Vessel Rules (2011) 1-1-4/7.7, 4-8-3/5.9.3 & 5.9.4 and 4-9-7/Table 9 & 10, and MODU 4-3-4/7.19.3 and 4-3-4/7.19.4

**National:**

NA

**International:**

NA

