Certificate Number: 13-HS1014518-2-PDA
20/MAY/2014

Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 30/MAY/2018. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 02/MAY/2018 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

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.

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.

Product Name: Battery Charger
Model Name(s): EnerGenius IQ

Presented to:
STORED ENERGY SYSTEMS, LLC
1840 INDUSTRIAL CIRCLE
LONGMONT
United States

Intended Service:	Charging of stationary batteries while providing clean stable DC power for continuous loads in Marine and Offshore Applications.
Description:	Automatic DC Power Supply / Charger with Intelligent Battery Monitoring & Data Logging. Model QXXXYYYAZZZZZZZ Where XXX = DC output voltage Options: 012, 024, 048, 120, 240 Where YYY = DC output current Options: 006, 012, 016, 025, 035, 050, 075, 100, 150 Where A = AC input voltage Options: 3 = 208V, 60 Hz 4 = 230-240V, 50/60 Hz 8 = 480V, 60 Hz P = 115-120/208/230-240V, 50/60 Hz S = 230-240V, 60 Hz T = 115-120/208/230-240V, 60 Hz V = 400V, 50/60 Hz Z = 208/240V, 60 Hz Where Z = single digit option codes
Tier:	2
Ratings:	Output Voltage: 12, 24, 48, 120/240 VDC Nominal; Frequency: 50/60 Hz; Operating Temperature: -40°C to + 50°C; Enclosure: IP 22;
Service Restrictions:	Unit Certification is not required for this product except where used for essential or emergency services as defined by 4-8-3/5.11.1(a) of the Rules. Suitable for non-hazardous locations.
Comments:	The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. The charging facilities are to be such that a completely dishcarged battery is recharged to at least 80% capacity in not more than 10 hours. Each user must use output cables that have sufficient current carrying capacity as

per ABS Rules 4-8-2/7.7.1.

Notes / Documentation: Supporting Data: Product Specification PRODSPEC- 135, Rev. L, Sync with: Eng. Rev. C, DCN 106304, EnerGenius I/Q Utility Grade Charger and Battery Check System, dated 16 JUL 2013, 20 Pages; SENS IPX2 Q1 and Q2 Enclosure Drip Test; Cascade TEK Test Report Number: CTC C662 Dated May 22, 2013;

Term of Validity: This Product Design Assessment (PDA) Certificate 13-HS1014518-2-PDA, dated 07/May/2014 remains valid until 02/May/2018 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.

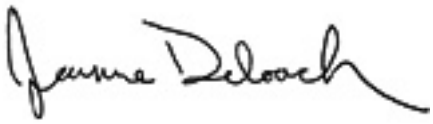
ABS Rules: 2014 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, A4, 4-8-1/7.3.3, 4-8-3/5.1, 4-8-3/5.3, 4-8-3/5.9 & 4-8-3/5.11; 2014 MODU Rules 4-3-1/3.3, 4-3-4/7.1, 4-3-4/ 7.9 , 4-3-4/7.17, 4-3-4/ 7.19, 4-3-4/7.3.1 (d);

National Standards: UL File E117114, UL 1012; ANSI/IEEE C62.41, C37.90a;

International Standards: CSA 22.2 No. 107.2; EN 60335-1, EN 60335-2-29; EN 61000-6-4 & EN 55022,Class A; IEC 61000-6-2, -4-2 to -4-6 & -4-11;

Government Authority:
EUMED:
Others:

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA	13-HS1014518-2-PDA	07/MAY/2014	02/MAY/2018



ABS Programs

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 was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. 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.