



Confirmation of Product Type Approval 06/AUG/2009

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

This is to certify that, 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 07/JAN/2014. 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 05/AUG/2014 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.

DEIF A/S

Model Name(s): Delomatic (M/S)

Presented to:

DEIF A/S
FRISENBORGVEJ 33
SKIVE
Denmark

Intended Service:

Generator machinery monitoring systems used on board ABCU, ACC and ACCU class vessels

Description:

The multi-function system is intended for control, protection and power management of up to eight generators running in parallel and comprises Power supply module PSM-1; Control module CM-2 which allows series communication with remote control systems; Input module IPM-1; Output module OPM-1; Synchronizing / measuring module SCM-1/2; Protection relay module PRM-1; Current relay module CRM-1; Control panel CP-1; Analogue output module AOM-1

Ratings:

Power supply: 24 V DC; Enclosure Protection: IP 5X (front face of unit)

Service Restrictions:

Unit Certification is not required for this product.

Comments:

Individual application is subject to a separate plan review as per the applicable Rules. Initial approval date: 18 October 1995

Notes / Documentation:


This Product Design Assessment (PDA) is valid only 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.

Term of Validity:

This product/model is covered under Product Design Assessment (PDA) Certificate # 04-LD438856/1-PDA, dated 06/Aug/2009. This PDA Certificate expires 05/Aug/2014. It will remain valid for 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first). It is valid for all vessels contracted on or before the date of the Rules used in this

evaluation.

ABS Rules: 2009 Steel Vessel Rules 1-1-4/7.7 and 4-9-7/7
National Standards: EN 50081-1/2 (1992/1994), EN 50082-2 (1995) - EMC, EN 60529 (2004)
International Standards: IACS UR E10 Rev5:Dec 2006
Government Authority:
EUMED:
Others:



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.