



This Confirmation of Product Type Approval is valid only as of 01/OCT/2008 for the below listed product.

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 American Bureau of Shipping (ABS), on 01/OCT/2008 the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) and a valid Product Design Assessment (PDA) for the below listed product, entitling the product to type approval.

The validity of the Manufacturing Assessment is dependent on satisfactory audits as required by the Rules.

The Product Design Assessment 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. For Date of ABS Rules used for evaluation; Please refer to the ABS Rules below. 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 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.

Mariner Systems (UK) Ltd.

Model Name(s): MS1110, MS1115 or MS1120 mounting devices for use with HP 19" TFT Colour Display, Model No.s:L1950/L1950g

Presented to:

Mariner Systems (UK) Ltd.
Oaklands Park
Wokingham
Berkshire RG41 2FD
United Kingdom

Intended Service:

Environmentally tested for use with HP L1950/L1950g monitors intended for service in navigation, loading instrument and general purpose computer applications. The monitor must be used in conjunction with the above mounting devices for operation in the marine environment.

Description:

The mounting devices are for use with HP L1950/L1950g TFT monitors. The monitors are manufactured by HP. Responsibility for manufacture of the products to be used with these mounting devices is HP.

Ratings:

100 - 240 VAC, 50-60Hz

Service Restrictions:

Unit certification is not required for the mounting device. The Monitor will require Unit Certification if intended for use in any machinery monitoring or directional functions onboard an ABS classed vessel, MODU or facility.

Comments:

Approval documentation: Test report TL1114 The approved models/model numbers are listed within Mariner Systems (UK) Ltd Website: www.marinersystems.com

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 Design Assessment Certificate number 08-LD311008/1-PDA, dated 22/Sep/2008 will expire on 21/Sep/2013 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2009, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

ABS Rules: 2008, Steel Vessel Rules 1-1-4/7.7; 4-9-7/13.1 and 4-9-7/Table 9 & Table 10


National Standards:

International Standards: IEC 60945 (relevant sections) and IACS E10

Government Authority:

EUMED:

Others:



Manager, 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.