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Certificate No: LR21329121TA Issue Date: 25/08/2021 Expiry Date: 24/08/2026

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer Mariner Systems (Uk) Ltd

Address Oaklands Park, Wokingham, RG41 2FD, United Kingdom

Place of Production Mariner Systems (Uk) Ltd

Oaklands Park, Wokingham, RG41 2FD, United Kingdom

Type PC Monitors

Description Marine Monitors

Trade Name HP E23 G4 FHD 23-inch Monitor / HP E24i G4 WUXGA 24-inch Monitor / HP E27

G4 FHD 27-inch Monitor

Application Marine/Offshore applications

Specified Standard LR Test Specification No.1:2020 (ENV1, ENV 2 and ENV3 categories)

IACS Unified Requirement E10 plus relevant sections of IEC 60945

Ratings Power supply: 100-240 VAC 50/60 Hz

Additional Tests Acoustic noise:

E23 G4 & E24i G4: Before test - 30dB

During test - 30,2 dB After test - 30,1 dB

Andrei Petrov

Surveyor to Lloyd's Register EMEA A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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E27 G4: Before test - 39,9 dB

During test - 40,6 dB After test - 39,9 dB

Compass safe distance:

E23 G4: 1 Degree Deflection - 500mm

0,3 Degree Deflection - 700mm

E24i G4: 1 Degree Deflection - 700mm

0,3 Degree Deflection - 900mm

E27 G4: 1 Degree Deflection - 500mm

0,3 Degree Deflection - 700mm

Shock test: +/-15g 11ms, 20 pulses

Other Conditions

Must be installed in conjunction with Mariner Kit MS1610, MS1615 or MS1620 (E23 G4); MS1630, MS1635 or MS1640 (E24i G4); MS1650, MS1655 or MS1660 (E27 G4)

(E27 G4)

Suitable for the installation on Bridge with reference to EMC aspects

Only hardware and firmware related to HP monitors is covered by this Type Approval certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR21329121TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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