

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, Berkshire, RG41 2FD, United Kingdom
Place of Production	Mariner Systems (Uk) Ltd. Oaklands Park, Wokingham, Berkshire, RG41 2FD, United Kingdom
Type	Control Systems
Description	LED monitor suitable for marine environment
Trade Name	HP EliteDisplay E190i 19-inch IPS LED Backlit Monitor with Mariner MS1170, MS1175 or MS1180 kit
Application	Marine use in environmental categories ENV1, ENV2 and ENV3 as described in LR Test Specification No. 1: 2019 Monitor must be installed in conjunction with Mariner MS1170, MS1175 or MS1180 kit.
Specified Standard	IACS Unified Requirement E10 plus relevant sections of EN60945

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Ratings	Operating Voltage Range: AC100V-240V, 50/60Hz Max power: 28W Operating temperature: 0° to 40°C Video/other inputs: VGA, DVI-D, Display Port & USB
Additional Tests	Acoustic Noise IEC 60945 Peak level <60dB (A) at a distance of 1m from any part of product. Reading= 37.4dB Compass Safe Distance IEC 60945 1°deflection at 600mm 0.3°deflection at 700mm Shock Test 15g 11mS applied for 20 pluses
Other Conditions	All other details remain as the previous Certificate No.14/00073 to which this extension should be attached.

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 No. LR2001274TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.