



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA18197M

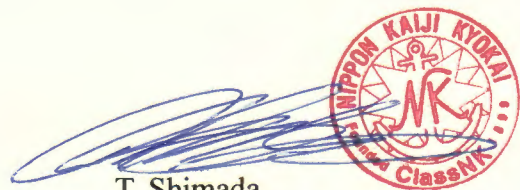
This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	Mariner Systems (UK) Ltd.
Place of Manufacturing:	Oaklands Park, Wokingham, Berkshire, RG41, 2FD, UK
Product description:	23/24/27-inch Monitor
Model:	HP EliteDisplay E233 23-inch Monitor with Mariner Kit MS1530, MS1535 or MS1540 HP EliteDisplay E243i 24-inch Monitor with Mariner Kit MS1550, MS1555 or MS1560 HP EliteDisplay E273 27-inch Monitor with Mariner Kit MS1570, MS1575 or MS1580
Approval No.:	18A008
Valid until:	6 May 2023

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 7 May 2018.



T. Shimada
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

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Attached sheet -1/2 to the Certificate No. TA18197M

Specification & documents:

1. Particulars: Power supply: AC 100V ~ 240V, 50 / 60Hz

2. Components and reference drawings:

Component	Drawing
HP EliteDisplay E233 23-inch Monitor	DA-16035 Worldwide-Version 4 October 18, 2017
Mariner Kit (Used with above) MS1530, MS1535, MS1540	MS1530_A, MS1535_A, MS1540_A
HP EliteDisplay E243i 24-inch Monitor	DA-16037 Worldwide-Version 3 September 8, 2017
Mariner Kit (Used with above) MS1550, MS1555, MS1560	MS1550_A, MS1555_A, MS1560_A
HP EliteDisplay E273 27-inch Monitor	DA-16078 Worldwide-Version 2 November 30, 2017
Mariner Kit (Used with above) MS1570, MS1575, MS1580	MS1570_A, MS1575_A, MS1580_A

3. Documentation and Test Reports:

- Test Report TL17146 (5th February 2018)
- Test Report TL17145 (5th February 2018)
- Test Report TL17150 (5th February 2018)
- Marine Type Approval Test Requirements-Issue 13 November 2017 (Including flame retardant material declaration)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±1.0g × 2 hours)		X
Inclination test		X
Cold test (Temperature -25°C × 16 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition:

The product is not allowed to be installed on open decks.

- The End -