



NIPPON KAIJI KYOKAI

**TYPE APPROVAL CERTIFICATE
FOR AUTOMATIC DEVICES AND EQUIPMENT**

Certificate No. TA17297M

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:	20/23/24 -inch Monitor
Model:	HP EliteDisplay E202 20-inch Monitor when installed in conjunction with Mariner Kit MS1450, MS1455 or MS1460. HP EliteDisplay E232 23-inch Monitor when installed in conjunction with Mariner Kit MS1470, MS1475 or MS1480. HP EliteDisplay E242 24-inch Monitor when installed in conjunction with Mariner Kit MS1510, MS1515 or MS1520.
Approval No.:	17A014
Valid until:	13 July 2022

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

Issued at Tokyo on 14 July 2017


F. Taguchi
General Manager
Machinery Department

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

Specification & documents:

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

2. Components and reference drawings:

- HP EliteDisplay E202 20-inch Monitor QuickSpecs: c04924740-DA-15508-Worldwide-Version 2
-January 19, 2016

- HP EliteDisplay E232 23-inch Monitor QuickSpecs: c04784501-Worldwide-Version 3
-October 15, 2015

- HP EliteDisplay E242 24-inch Monitor QuickSpecs: c04820064-DA-15432-Worldwide-Version 2
-October 16, 2015

-MS1450 ASSEMBLY: DWG No.MS1450_A (16 May 2016)

-MS1455 ASSEMBLY: DWG No.MS1455_A (16 May 2016)

-MS1460 ASSEMBLY: DWG No.MS1460_A (16 May 2016)

-MS1460 DRILLING DETAIL: DWG No.MS1460_DD (16 May 2016)

-MS1470 ASSEMBLY: DWG No.MS1470_A (4 January 2016)

-MS1475 ASSEMBLY: DWG No.MS1475_A (4 January 2016)

-MS1480 ASSEMBLY: DWG No.MS1480_A (17 December 2015)

-MS1480 DRILLING DETAIL: DWG No.MS1480_DD (16 November 2015)

-MS1510 ASSEMBLY: DWG No.MS1510_A (4 January 2016)

-MS1515 ASSEMBLY: DWG No.MS1515_A (4 January 2016)

-MS1520 ASSEMBLY: DWG No.MS1520_A (17 December 2015)

-MS1520 DRILLING DETAIL: DWG No.MS1520_DD (17 December 2015)

-Marine Type Approval Test Requirements (Issue 10), April 2015

-Marine Type Approval Test Requirements (Issue 11), February 2016
(Including Flame retardant declaration)

3. Documentation and Test Reports:

-Marine Type Approval Testing (HP EliteDisplay E202 20" Monitor): TL16045 (7th April 2016)

-Marine Type Approval Testing (HP EliteDisplay E232 23" Monitor): TL15099 (9th November 2015)

-Marine Type Approval Testing (HP EliteDisplay E242 24" Monitor): TL16003 (1st February 2016)

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 $\pm 1.0g \times 2$ 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 -