



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA15475M

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: **Workstation**
Model: **HP Z440 Workstation with Mariner Kit MS3050 or MS3060**

Approval No.: **15A035**
Valid until: **17 August 2020**

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

Issued at Tokyo on 18 August 2015.



Y. Shibata
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. TA15475M

Specification & documents:

1. Particulars: Power supply: AC 115V/240V, 50/60Hz

2. Components and reference drawings:

Component	Drawing
HP Z440 Workstation with Mariner Kit M3050 or MS3060	DA-15098 Worldwide-Version 8-May 1, 2015 MS3050_A, MS3060_A

3. Documentation and Test Reports:

- Test Report TL15039 (22nd May 2015)
- Test Report TL15041 (22nd May 2015)
- Test Report TL15042 (26th May 2015)
- Flame retardant information from Hewlett-Packard (2015/08/13 18:37)

- 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:

- (1) The product is not allowed to be installed on open decks.
- (2) In-line power filter (RF1004-MST-C) or equivalent is to be fitted to the AC power supply line.

- The End -