



NIPPON KAIJI KYOKAI

Certificate

Certificate No. TA09386M

OF APPROVAL

FOR AUTOMATIC DEVICES AND EQUIPMENT

Manufacturer:	Mariner Systems (UK) Ltd.
Place of Manufacturing:	Oaklands Park, Workingham, Berkshire, RG41 2FD, UK
Product description:	Workstation
Model:	Z400
Approval No.:	09A022
Specification & documents:	As shown on the attached sheet (-1/2)
Testing items & approval conditions:	As shown on the attached sheet (-2/2)

THIS IS TO CERTIFY that the above mentioned model of the product has been type 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 relevant Society's Rules.

This certificate is valid until 6 August 2014.

Issued at Tokyo on 7 August 2009.

T. Narisawa
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 Certificate No. TA09386M

Specification & documents :

1. Ratings: AC 100-240V, 50/60Hz

2. Component and reference drawing:

Component	Drawing
HP Z400 Workstation used with Mariner Kit MS3010 and MS3020	DA-13276

3. Test report etc:

- Environmental Test File No. TL1313 (18 June 2009)
- Data for flame retardant material

4. Software (as operating system):

- Windows Vista Business 64
- Windows Vista Business 32
- Windows Vista Business 64 with downgrade to Windows XP Professional 64
- Windows Vista Business 32 with downgrade to Windows XP Professional 32
- Linux
- Novell Suse SLED 11

-- To be continued --

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Attached sheet - 2/2 to Certificate No. TA09386M

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 x 16hours)		X
Damp heat test		X
Vibration test		X
Inclination test		X
Cold test (Temperature : -25°C x 16hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test (Frequency : 30kHz~2GHz)		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test (Frequency : 10kHz~80MHz)		X
Burst/Fast transient immunity test		X
Surge immunity test		X
Radiated emission test (Frequency : 10kHz~2GHz)		X
Conducted emission test		X
Flame retardant test		--

-- The end --