



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA13221M

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) Limited

Place of Manufacturing:

Oaklands Park, Wokingham, Berkshire, RG41 2FD

United Kingdom

Product description:

Workstation

Model:

HP Z420 Workstation

with Mariner Kit MS3030, MS3040

Approval No.:

13A014

Valid until:

4 June 2018

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

Issued at Tokyo on 5 June 2013.

Y. Shibata

General Manager

Machinery Department

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Attached sheet -1/2 to the Certificate No. TA13221M

Specification & documents:

1. Particulars: Power supply: 100~240 VAC

2. Components and reference drawings:

- HP Z420 Workstation: DA-14261
- Flame retardant statement by Hewlett-Packard (2013/04/04 0:38)
- MS3030 A
- MS3040 A

3. Documentation and Test Reports:

- HP Z420 Workstation Serial No. CZC2171DV4 : TL-13011-EMC (7 March 2013)
- HP Z420 Workstation Serial No. CZC2171DV4 : TL-13011-ENV Issue 02 (11 March 2013)
- HP Z420 Workstation Serial No. US42030056 : TL-13012-EMC (7 March 2013)
- HP Z420 Workstation Serial No. US42030056 : TL-13012-ENV Issue 02 (11 March 2013)

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Attached sheet -2/2 to the Certificate No. TA13221M

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 $\pm 1.0 \text{ g} \times 2 \text{ hours}$)		X
Inclination test		X
Cold test (Temperature $-25^{\circ}\text{C} \times 2 \text{ hours}$)		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-B) or equivalent is to be fitted to the AC supply line.