



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA20528M

This is to certify that the undernoted products 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:

KEI SYSTEM CO.,LTD.

Place of Manufacturing:

1-1-5 Ikuno-nishi, Ikuno-ku, Osaka, Japan

Product description:

LCD Panel Display Unit

Model:

KEI-LCD10

Approval No.:

98A109

Valid until:

18 June 2025

This certificate is subject to the conditions specified in the attached sheets.

Issued at Tokyo on 19 October 2020.



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. TA20528M

Specification & documents:

1. Particulars:

Power supply: AC 100V, DC 24V

2. Documentation and Test Reports:

NK-TYPLCD-502

NK-TYPLCD1012-505

TEST REPORT for Renew 2020 (DWG. No. NK-KEI-3240 & KEI-LCD10-2020502)

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Attached sheet -2/2 to the Certificate No. TA20528M

Test items & approval condition:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS(IACS UR E10 Rev.7 basis)		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)		X
Dry heat test (Temperature $55^{\circ}\text{C} \times 16 \text{ hours}$)		X
Damp heat test		X
Vibration test (Acceleration $\pm 0.7 \text{g} \times 1.5 \text{ hours}$)		X
Inclination test		X
Cold test (Temperature $5^{\circ}C \times 2$ 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.