



# NIPPON KAIJI KYOKAI

## TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA15343M

**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: **Kawai Electronic Innovation System Co., Ltd**  
Place of Manufacturing: **1-1-5 Ikuno-nishi, Ikuno-ku, Osaka, Japan**  
Product description: **LCD Panel Display Unit**  
Model: **KEI-LCD10, 12**

Approval No.: **98A109**  
Valid until: **18 June 2020**

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

Issued at Tokyo on 22 June 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.

**NIPPON KAIJI KYOKAI**

Attached sheet -1/2 to the Certificate No. TA15343M

**Specification & documents:**

1. Particulars: Power supply: AC 100V, DC 24V

2. Documentation and Test Reports:

NK-TYPLCD-502

NK-TYPLCD1012-505

**- To be continued -**

**Test items & approval condition:**

## 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)		X
Dry heat test (Temperature 55°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration $\pm 0.7g \times 1.5$ hours)		X
Inclination test		X
Cold test (Temperature 5°C × 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:

Nil