



NIPPON KAIJI KYOKAI

**TYPE APPROVAL CERTIFICATE
FOR AUTOMATIC DEVICES AND EQUIPMENT/
COMPUTER BASED SYSTEMS**

Certificate No.TA20527M

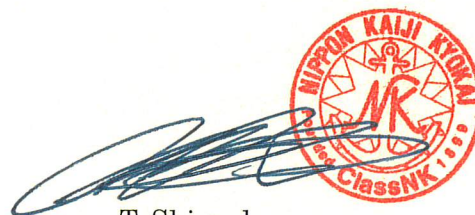
This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1 and Chapter 8, Part 7 of “Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use” and the relevant Society's Rules.

This certificate is issued to

| | |
|-------------------------|---|
| Manufacturer: | KEI SYSTEM CO.,LTD. |
| Place of Manufacturing: | 1-1-5 Ikuno-nishi, Ikuno-ku Osaka, Japan |
| Product description: | Computer System |
| Model: | KEI-3240 |
| Software No.: | K3240 |
| Category: | II (Data Logger and Valve Remote Control System) |
| Approval No.: | 04A037 / 19CP005 |
| Valid until: | 29 July 2025 |

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

Issued at Tokyo on 19 October 2020.



T. Shimada
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

Particulars & Components:

AGU IV Host & Graphic Computer

| | |
|------------|------------|
| KEI-3240A | for AC100V |
| KEI-3240A2 | for AC220V |
| KEI-3240D | for DC24V |

ILS System I/F Module

| | |
|---------|-------------------|
| PC4-ILS | ILS CENTER module |
|---------|-------------------|

ILS System Local

| | |
|-------------|-----------------------------|
| SVA24SA | Power supply AC100V |
| SVA24SB | Power supply AC220V |
| SVA24SC24 | Power supply DC24V |
| MBW-12R5-22 | Noise filter for power line |

ILS System Local Unit

| | |
|---------|--------------------------|
| ILS-DI | Contact input unit |
| ILS-DV | AC voltage input unit |
| ILS-DO | Contact output unit |
| ILS-AII | Current input unit |
| ILS-AVI | Voltage input unit |
| ILS-PT | 3 wire PT input unit |
| ILS-VR4 | Potentiometer input unit |
| ILS-BIO | Current output unit |
| ILS-BVO | Voltage output unit |
| ILS-REP | ILS line repeater unit |

KEI-Key Board

| | |
|-------------|-------|
| ENTRY-KEY32 | 32Key |
|-------------|-------|

Computer based systems:

- The product has been assigned Category II in accordance with the Annex D18.1.1. Part D of the Guidance for the Survey and Construction of Steel Ships, as amended by IACS UR E22 Rev.2.
- The product is satisfied requirement of the Annex D18.1.1. Part D of the Guidance for the Survey and Construction of Steel Ships, as amended by IACS UR E22 Rev.2.

- To be continued -

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Attached sheet -2/3 to the Certificate No.TA20527M

Documentation and Test Reports:

KEI-3240-111, KEI-3240-112, KEI-3240-113, PC4-ARC/01-101, PC4-ILS/01-101,
KEI-ILSLOTA-101, KEI-ILSLOTA-101, KEI-MBW12R5-101, KEI-SVA**-111,
ILS-DI1/0X-101, ILS-DVx/01-101, ILS-DO1/02-101, ILS-DO2/0X-101, ILS-AIIX/01-101,
ILS-AVIx/01-101, ILS-PTx/01-101, ILS-VR4/0X-101, ILS-BIO2/01-101,
ILS-BVOx/01-101, ILS-REP/0X-101, KEY-032/02-101, KQ1-001, KS6-01, rev.140226.m,
KQD-JT01, KQD-J002, KQD-J001, KQD-JA01, Ver3.04 2012-10-19, KQV-J001
TEST REPORT for Renew 2020 (DWG. No. NK-KEI-3240 & KEI-LCD10-2020502)
Flame retardant material declaration: NK-TYP3240ILS-553
Document for software quality control: NK-TYP3240ILS-554

- To be continued -

Attached sheet -3/3 to the Certificate No.TA20527M

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 | | -- |
| Pressure test (Pneumatic and Hydraulic) | | X |
| Dry heat test (Temperature 70°C × 16 hours) | | X |
| Damp heat test | | X |
| Vibration test | | 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:

The product is not allowed to be installed on open decks.

- The End -