



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA23441M

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:	KEI SYSTEM Co., Ltd
Place of Manufacturing:	2-2-23 Kishinosato Nishinari-ku Osaka, Japan
Product description:	KEI-64S Computer System
Model:	KEI-64S-A, KEI-64S-D, PLA30F-12, STMGFS302412, ESS50-12, SVB12SC24, LRS-35-12, RSD-30G-12, ILS-ETH, ESS15-24, ESS30-24, ESS50-24, ESS75-24, ESS100-24, ESS150-24, RSAN-2006, RSAN-2010, RSAN-2016, ILS-DI, ILS-DV, ILS-DO, ILS-AII, ILS-AVI, ILS-PT, ILS-VR4, ILS-BIO, ILS-BVO, ILS-REP
Approval No.:	18A018
Valid until:	27 August 2028

The details are described in the attached sheet(s).

Issued at Tokyo on 20 September 2023.

S. Oishi
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:

1. Particulars: Power supply: DC 24V, AC 100V – 220V

2. Components and reference drawings:

Components	Type	Drawing
Host computer	KEI-64S-A	KEI-64S-101
	KEI-64S-D	KEI-64S-101
Power supply	PLA30F-12	PLA30F-12-101
	STMGFS302412	STMGFS302412-101
	ESS50-12 (ES series)	ESS50-12-101
	SVB12SC24(Already approved No. 08A003)	SVB12SC24-101
	LRS-35-12	LRS-35-12-701
	RSD-30G-12	RSD-30G-12-701
ILS module (Already approved No. 04A037)	ILS-DI	ILS-DI1/0X-101
	ILS-DV	ILS-DVx/01-101
	ILS-DO	ILS-DO1/02-101 ILS-DO2/0X-101
	ILS-AII	ILS-AIIx/01-101
	ILS-AVI	ILS-AVIx/01-101
	ILS-PT	ILS-PTx/01-101
	ILS-VR4	ILS-VR4/0X-101
	ILS-BIO	ILS-BIO2/01-101
	ILS-BVO	ILS-BVOx/01-101
	ILS-REP	ILS-REP/0X-101
ILS interface module	ILS-ETH	ILS-ETH-101
Power supply (ES series)	ESS15-24	ESS15-24-101
	ESS30-24	ESS30-24-101
	ESS50-24	ESS50-24-101
	ESS75-24	ESS75-24-101
	ESS100-24	ESS100-24-101
	ESS150-24	ESS150-24-101
Noise Filter	RSAN-2006	RSAN-101
	RSAN-2010	
	RSAN-2016	

- To be continued -

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Attached sheet -2/3 to the Certificate No. TA23441M

3. Documentation and Test Reports:

TEST PROCEDURE (DWG.No.NK-KEI-64S-501A)
TEST REPORT (DWG.No.NK-KEI-64S-505)
SPECIFICATION (DWG.No.NK-KEI-64S-502B)
STMGFS302412 Manual (DWG.No. STMGFS302412-701)
ESS50-12 Manual (DWG.No.ESS50-12-701)
ILS modules Manual (DWG.No.ILS-XXX-701)
ESS series Manual (DWG.No.ESSxx-24-701)
ILS-ETH Manual (DWG.No.ILS-ETH-701)
KEI-64S Manual (DWG.No.KEI-64S-701)
PLA30F-12 Manual (DWG.No.PLA30F-12-701)
RSAN (Noise Filter) Manual (DWG.No.RSAN-701)
Test Report (DWG.No.A-010-21-A)
Test Report (DWG.No.A-405-20-A)
Test Report (DWG.No. NK-KEI-64S-PS-2023-505)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.8 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)		--
Dry heat test (Temperature 70°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. Approved condition:

- a) The product is not allowed to be installed on open deck.
- b) ILS module and power supply and noise filter are to be placed inside the Local Box.

- The End -