



CERTIFICATE NUMBER 20-2034358-PDA

EFFECTIVE DATE 06-APR-2020

EXPIRATION DATE 05-APR-2025

ABS TECHNICAL OFFICE Yokohama Engineering Services

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

KEI SYSTEM CO., LTD.

located at

OSAKA CITY, JAPAN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Computer System

Model KEI-3240

This Product Design Assessment (PDA) Certificate 20-2034358-PDA, dated 6/April/2020 remains valid until 5/April/2025 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

American Bureau of Shipping

Motohiro Tamura
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

KEISYSTEMCO., LTD.

1-5 IKUNO-NISHI 1 CHOME

IKUNO-KU OSAKA

Japan 544-0024

Telephone: +81-6-6712-1151

Fax: +81-6-6712-1311

Email: info3@kei-system.co.jp

Web: www.kei-system.co.jp

Tier: 2 - PDA Issued

Product: Computer System

Model: KEI-3240

Intended Service:

Monitoring, alarm, data logging, and valve control system for Vessels with ACC, ACCU or ABCU notation.

Description:

KEI-3240 computer system consists of AGU IV Host Computer/ Graphic Computer Type KEI-3240A/ KEI-3240D, ILS System I/F Module, ILS System and its Local Unit, Keyboard, and LCD Panel Display. See attachment for component details.

Rating:

Rated Voltage : AC100V, DC24V.

(1) Ambient Temperature: 0-55 degree C

KEI-3240A, KEI-3240D, PC4-ILS, ENTRY-KEY32, KEI-LCD10A, KEI-LCD10D

(2) Ambient Temperature: 0-70 degree C

SVA24SA, SVA24SC24, MBW-12R5-22, ILS-DI, ILS-DV, ILS-DO, ILS-AII, ILS-AVI, ILS-PT, ILS-VR4, ILS-BIO, ILS-BVO, ILS-REP

Also see attachment for details.

Service Restriction:

Unit Certification is not required for this product. However, unit certification is required by the user to customize this equipment where this equipment is used for Computer-based Systems Category II services in 4-9-3 of the Marine Vessel Rules as applicable. The tests in the presence of the Surveyor are required in accordance with 4-9-9/Table 2 of the Rules "Performance Tests" where it is used for control, monitoring and safety systems of propulsion machinery, propulsion boilers, vital auxiliary pumps and electrical generating plants. The performance tests are to be carried out at the assembled plant before installation onboard or after installation onboard.

If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

(1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

(2) The following items for the requirement applicable to Computer-based Systems in accordance with 4-9-3 of the Marine Vessel Rules ;

(a) The assigned system Category II.

(b) The required evidence to be kept by the manufacturer in accordance with 4-9-3/Table 2 of the Marine Vessel Rules.

(3) Unless specially directed by Administration, this approval is not to be construed as a substitute for flag Administration's approval for the purpose of SOLAS 1974 as amended.

Notes/Drawing/Documentation:

(1) KEI System Dwg No.KEI-3240, Data Logger System, dated 21 November 2008.

(2) KEI System Test Report Dwg No.ABS-TYP3240ILS-531, dated 28 September 2004.

(3) ABS Surveyor's witnessed Test Report No. KO536563 dated 23 July 2004.

(4) TEST REPORT for Revalidation 2020 KEI-3240 Computer system (ABS Product Design Assessment) Dwg No. ABS-KEI-3240-2020502 dated 30 July, 31 July, 3 August, 18 August and 19 August 2020 issued by KEI SYSTEM Co., Ltd.

(5) TEST PROCEDURE for Revalidation 2020 KEI-3240 Computer system (ABS Product Design Assessment) Dwg No. ABS-KEI-3240-2020501, Received date: 10 June 2020.

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 05/Apr/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment

KEISYSTEMCO., LTD.

1-5 IKUNO-NISHI 1 CHOME

IKUNO-KU OSAKA

Japan 544-0024

Telephone: +81-6-6712-1151

Fax: +81-6-6712-1311

Email: info3@kei-system.co.jp

Web: www.kei-system.co.jp

Tier: 2 - PDA Issued

(whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2020 Marine Vessels Rules 1-1-4/7.7, 1-1-A3 and 1-1-A4, 4-8-3/5, 4-9-3 (Cat III) and 4-9-9/13;

2020 High Speed Craft Rules 1-1-4/11.9, 1-1-A2 and 1-1-A3, 4-6-3/3.13, 4-7-8 (Cat III) and 4-7-9/15;

2020 Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2 and 1-1-A3, 4-3-3/3.13 and 4-3-4/5

National:

NA

International:

IACS UR E10 (Rev.7 Oct. 2018) and E22 (Rev. 2 2016)

Government:

NA

EUMED:

NA

OTHERS:

NA

Design Assessment (DA) Certificate Attachment for Component Details

DA Certificate No: 20-2034358-PDA
Issue Date: 06 April 2020
Expire Date: 05 April 2025
Company: KEI SYSTEM CO., LTD.
Factory or Works:
Product/Equipment: Computer System
Model: KEI-3240

KEI's List of Equipment / Unit (Module) Type

Name	Type	Manufacturer	Outline
AGU IV HOST & GRAPHIC COMPUTER	KEI-3240A KEI-3240D	KEI system Co., Ltd	(AC100V) (DC+24V)
KEI-ILS ILS SYSTEM I/F MODULE	PC4-ILS	KEI system Co., Ltd	ILS I/F module
KEI-ILS LOCAL	Power supply for LOCAL SVA24SA	Arusu Co.,Ltd.	OUT: +24V IN: AC100v
	SVA24SC24		OUT: +24V IN: DC24V
	Noise filter for power line MBW-12R5-22	TDK-Lambda Corpor ation	AC100V/DC24V
ILS LOCAL UNIT (MODULE)	ILS-DI ILS-DV ILS-DO ILS-AII ILS-AVI ILS-PT ILS-VR4 ILS-BIO ILS-BVO ILS-REP	KEI system Co., Ltd	Contact input unit AC voltage input unit Contact output unit Current input unit Voltage input unit 3 wire Pt input unit Potentiometer input unit Current output unit Voltage output unit ILS line repeater unit
KEI-KEYBOARD	ENTRY-KEY32	KEI system Co., Ltd	32 KEY
KEI LCD PANEL DISPLAY	KEI-LCD10A	KEI system Co., Ltd	10" LCD display (AC100V)
	KEI-LCD10D		10" LCD display (DC+24V)