



CERTIFICATE NUMBER

04-YO368694-PDA

DATE

25 March 2004

ABS TECHNICAL OFFICE

Yokohama

EXPIRE DATE

(Subject to the condition stated below)

24 March 2009

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
Kawai Electronic Innovation System Co., Ltd.

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; and it will remain valid for five years from the date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Computer System
MODEL: KEI-1000/800
(See attachment)
ABS RULE: 2004 Steel Vessel Rules 4-9-6 and 4-9-7
OTHER STANDARD: Not Applicable

AMERICAN BUREAU OF SHIPPING

Shigeo Higuchi

Manager - Machinery Engineering

Design Assessment (DA) Certificate Attachment for Listing

Refer to: YuK

File Ref.: GEN45021

DA Certificate No: 04-YO368694-PDA

Issue Date: 25 March 2004

Expire Date: 24 March 2009

(Subject to the condition stated on the DA Certificate)

Company: Kawai Electronic Innovation System Co., Ltd.

Factory / Office:

Country: Japan

Zip: 544-0024

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Telephone: +81-6-6712-1151

Fax: +81-6-6712-1311

Web Site: www.kei-system.co.jp

Contact E-mail: info@kei-system.co.jp

Product/Equipment: Computer System

Model: KEI-1000/800
(For Details, See Attached Sheets)

Description: KEI-1000 computer system consists of CRT/LCD, CRT controller AGU, printer and local computers KEI-800 used as Input/Output signal interface. See attachment for component details.

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

Rating: See attachment for component details.

Applicable ABS Rule: 2004 Steel Vessel Rules 4-9-6 and 4-9-7

Applicable Other Standard: Not Applicable

Service Restrictions: Unit Certification is required for this product.

Comments: ABS Surveyor's witnessed Test Report No. KO490892 dated 28 January 2004.

Revision History

Revision No	Rev Description	ABS Letter No	ABS Letter Date
0	Initial Application	368694	25 March 2004

Design Assessment (DA) Certificate Attachment for Component Details

DA Certificate No: 04-YO368694-PDA
Issue Date: 25 March 2004
Expire Date: 24 March 2009
Company: Kawai Electronic Innovation System Co., Ltd.
Factory or Works:
Product/Equipment: Computer System
Model: KEI-1000/800

KEI's List of Equipment/Module Type

Name	Type	Manufacture	Spec.outline
KEI-1000 (KEI-800)	Rack for KEI-1000/800	KEI SYSTEM Co., Ltd.	7 slot Rack
	KPR-007		
	KPR-014	Do.	14 slot Rack
	KPR-021	Do.	21 slot Rack
	Module for KEI-1000/800		
	BTB-PW1	Do.	Power module
	BTB-251	Do.	KEI-1000 CPU module
	BTB-834/12	Do.	KEI-1000 CPU module
	BTB-NPX	Do.	High speed numeric processor module
	BTB-SIO	Do.	Serial I/F module
	BTB-DI	Do.	Contact input module
	BTB-DVI	Do.	Ref. contact input module
	BTB-DO	Do.	Contact output module
	BTB-AII	Do.	Current input module
	BTB-AVI	Do.	Voltage input module
	BTB-ACA	Do.	CA input module
	BTB-ACR	Do.	CA input module
	BTB-UDC	Do.	Counter input module
	BTB-MI	Do.	Special input module
	BTB-FI	Do.	Frequency input module
	BTB-PT	Do.	3 wire Pt input module
	BTB-BIO	Do.	Current output module
	BTB-BVO	Do.	Voltage output module
	BTB-KLS	Do.	KLS CENTER module
	KLS-DI	Do.	Contact input terminal
	KLS-DIO	Do.	Contact input/output terminal
	KLS-DO	Do.	Contact output terminal
	KLS-AII	Do.	Current input terminal
	KLS-AVI	Do.	Voltage input terminal
	KLS-PT	Do.	3 wire Pt input terminal
	KLS-DLS	Do.	KLS line exchanger terminal
	TRX-232	Do.	TTL,RS232C conversion module
KEI- KEYBOARD	ENTRY-KEY32	Do.	32KEY
KEI-CRT	KEI-CRT15M	Do.	15"CRT(AC100V)
	KEI-CRT17M	Do.	17"CRT(AC100V)
	KEI-CRT21M	Do.	21"CRT(AC100V)
KEI-LCD	KEI-LCD10A	Do.	10.4"LCD display AC100V
	KEI-LCD10D	Do.	10.4"LCD display DC24V
	KEI-LCD12A	Do.	12.1"LCD display AC100V
	KEI-LCD12D	Do.	12.1"LCD display DC24V
	KEI-LCD15A	Do.	15"LCD display AC100V
	KEI-LCD15D	Do.	15"LCD display DC24V

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DA Certificate No: 04-YO368694-PDA
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Expire Date: 24 March 2009
Company: Kawai Electronic Innovation System Co., Ltd.
Factory or Works:
Product/Equipment: Computer System
Model: KEI-1000/800

Name	Type	Manufacture	Spec.outline
KEI-1630(AGU II)	KEI-1630A	Do.	AGU II(graphic unit) AC100V
	KEI-1630D	Do.	AGU II (graphic unit) DC24V
KEI-3240(AGU IV)	KEI-3240A	Do.	AGU IV (graphic unit) AC100V
	KEI-3240D	Do.	AGU IV (graphic unit) DC24V