



Type Approval Certificate

Germanischer Lloyd

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. 26 621 - 05 HH

Company Kawai Electronic Innovation Systems (KEI) Co., Ltd.
1-1-5 Ikuno-nishi Ikuno-ku
Osaka 544-0024, Japan

Product Description Alarm- and Monitoring Systems

Type KEI 1000 / 800

Environmental Category C, EMC1/2

Technical Data / Range of Application System may consist of following components:

Graphic Controllers type AGUII with ARCNET communication:
KEI-1630A, power supply 100VAC;
KEI-1630D, power supply 24VDC;
Colour CRT-Displays (EMC2):
KEI-CRT15M;
KEI-CRT17M;
KEI-CRT21M;
Colour LCD Displays:
KEI-LCD10A: 10.4", Power Supply 100VAC;
KEI-LCD10D: 10.4", Power Supply 24VDC;
KEI-LCD12A: 12", Power Supply 100VAC;
KEI-LCD12D: 12", Power Supply 24VDC;
KEI-LCD15A: 15", Power Supply 100VAC;
KEI-LCD15D: 15", Power Supply 24VDC;

Test Standard Guidelines for the Performance of Type Approvals Part 2, Edition 2003
Regulations for the Use of Computers and Computer Systems

Documents Test Reports: KEI-1000, KEI-1630, dated Dec.1993; NK-TYP1632-561; NK-TYPLCD15-510; LRS-TPLCD-515; NK-TYPLCD-511; LRS-TYP1000-551; LRS-TP1000-547; LRS-TP1000-545; NK-TYP1000-561; LRS-TYP1000-501; LRS-TYP1000-542; System Drawings; Software Questionnaire RC3.

Remarks None.

Valid until 2010-05-15

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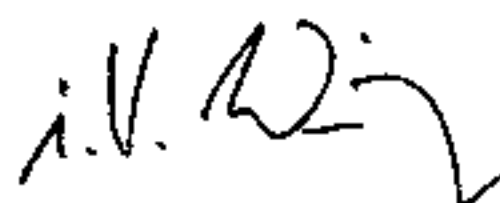
Type Approval Symbol



File No. IA.03

Hamburg, 2005-10-21

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Keyboard:

ENTRY-KEY32, 32-key compact keyboard;

Power Supply Module Board:

BTB-PW1: DC 5V, +-12V, 24V, 1.2A (5V), 0.25A(24V) with input/output isolation;

CPU Module Boards:

BTB-251/01, CPU COM20051, 16MHz, 64KByte ROM, 32KByte RAM;

BTB-834/12, CPU i8044/8344, 12MHz, 64KByte ROM, 32KByte RAM;

Numeric Processor Module Board:

BTB-NPX, CPU 80C186, 16MHz, Numeric Processor 80C187, max. 512KByte ROM, max. 832KByte RAM, ARCNET;

I/O Module Boards:

BTB-AVI 8 Channel Voltage Input Module, 0..10V;

BTB-AII 8 Channel Current Input Module, 4..20mA;

BTB-ACA 8 Channel Thermo-couple Input Module;

BTB-DI 24 Channel Binary Input Module with isolated inputs;

BTB-DO 24 Channel Binary Relay Output Module, contact rating DC24V, 0.25A;

BTB-FI 4 Channel Frequency Input Module, isolated inputs, open collector, 0..8192Hz;

BTB-UDC 2 Channel Counter Input Module, max. 100kHz, 24bit count data;

BTB-PT 8 Channel RTD Input Module, 3-wire, PT100;

BTB-MI 1 / 2 Channel Special Input Module, rheostat input 1k Ω , 2k Ω or 5k Ω , voltage / current inputs;

BTB-BVO 4 Channel Voltage Output Module, 0..5V, 0..10V, 0..+/-5V, 0..+/-10V;

BTB-BIO 4 Channel Current Output Module, 0..20mA source, burden max. 350 Ω ;

BTB-SIO 2 Channel Serial Interface Module RS232, 1200..9600bps;

BTB-DVI Ref. Container or Clock Input Module;

TRX-232 2 Channel TTL-RS232 Conversion Module;

Racks for CPU-, I/O-, and communication Boards:

KPR-007, 7-slot rack;

KPR-014, 14-slot rack;

KPR-021, 21-slot rack;

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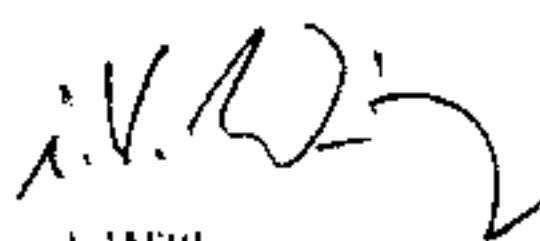
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BTB-KLS Center Module with CPU MKY33, 24MHz, 4KB RAM, KLS interface;

Compact I/O modules with screw terminals:

KLS-DI 16 Channel Binary Input;

KLS-DIO 8 Channel Binary Input, 8 Channel Binary Transistor Output;

KLS-DO 16 Channel Relay Output;

KLS-AII 8 Channel Current Input 4..20mA;

KLS-AVI 8 Channel Voltage Input 0..5V;

KLS-PT 8 Channel RTD 3-wire Input PT100;

KLS-DLS KLS bus line exchanger;

Power Supply Units:

VTB01A: Input 100VAC, Output: +5VDC, +/-12VDC;

VTB01C24: Input 24VDC, Output: +5VDC, +/-12VDC;

VTB24SA: Input 100VAC, Output: +24DC;

VTB24SC24: Input 24VDC, Output: +24VDC;

Noise Filter for Power Line:

MZS-1206-33: 100VAC/24VDC.

BTB-, KPR-, KLS and VTB-components to be mounted in a self-contained steel cabinet.

System Functions:

Alarm- and Monitoring with graphic visualisation,

Alarm printout,

Data logging, Trends,

Alarm grouping,

System diagnostic mimics.

Hardwired Extension Alarm System with LED alarm group indications and duty engineer selection.

Bridge LED-/buzzer panel with dimmer function and automatic override of dimming in case of new alarm.

Output contact for external collective engineers call function after fail to acknowledge within a preset time.

Application Software Module Versions according to version list K745, dated 2005-05-11.

Valid until 2010-05-15

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