

# Type Approval Certificate

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

<b>Manufacturer</b>	<b>IDEC Corporation</b>
<b>Address</b>	2-6-64, Nishimiyahara, Osaka-shi, 532-0004, Japan
<b>Place of Production</b>	SHINKO TECHNOS CO., LTD. SANDA FACTORY 501-19 Fukushima, Sanda, Hyogo, 669-1313, Japan
<b>Place of Production</b>	KAYBRIGHT ELECTRICITY (HUIZHOU) CO., LTD. Shunju Village, Chayuan Village, Qiuchang Road, Huiyang District, Huizhou City, Guangdong, 516221, China
<b>Type</b>	Control Units
<b>Description</b>	Programmable Logic Controller, FT1A Series
<b>Trade Name</b>	(See Appendix for details)
<b>Application</b>	Marine and offshore applications for use in environmental categories ENV 2 and ENV 3 for Touch and Lite, ENV 2 for Pro on/in the following Zone as defined in LR Type Approval System Test Specification No. 1-2020 where the Test Specification is satisfactory for the intended operation. - on the "Bridge and Deck Zone" : Touch - in the "General Power Distribution Zones" : Lite and Pro

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## Type Approval Certificate

<b>Ratings</b>	Power Supply: 24VDC or 100-240VAC
<b>Additional Tests</b>	IACS Unified Requirement E10 Rev.7
<b>Other Conditions</b>	<p>The certificate attests to the hardware's suitability for the environmental categories stated.</p> <p>Suitability of the software and system configuration is subject to a separate plan appraisal according to the Lloyd's Register Rules and Regulations when placed on Lloyd's Register classed vessels.</p> <p>The following ferrite cores have been used to pass the tests:- Type : ZCAT3035 and/or ZCAT1730-0730, Manufacture : TDK</p> <p>Accordingly, the above or equivalent ones are to be provided for installations on board.</p>

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Group Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** 16/10005 & 14/10011(E1)

The Design Appraisal Document LR2141319TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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## **Appendix**

### **TRADE NAME**

#### FT1A Series

##### Touch (Display Type)

Rated voltage 24VDC

STN Monochrome

FT1A-M14KA-W	:	6-Tr. Source Input, 2-Analog Input
FT1A-M14KA-B		4-Tr. Sink Output, 2-Analog Output
FT1A-M14KA-S		
FT1A-M14SA-W	:	6-Tr. Sink Input, 2-Analog Input
FT1A-M14SA-B		4-Tr. Source Output, 2-Analog Output
FT1A-M14SA-S		
FT1A-M12RA-W	:	8 inputs (6 Digital, 2 Analog)
FT1A-M12RA-B		4 outputs (Relay)
FT1A-M12RA-S		

#### TFT Color

FT1A-C14KA-W	:	6-Tr. Source Input, 2-Analog Input
FT1A-C14KA-B		4-Tr. Sink Output, 2-Analog Output
FT1A-C14KA-S		
FT1A-C14SA-W	:	6-Tr. Sink Input, 2-Analog Input
FT1A-C14SA-B		4-Tr. Source Output, 2-Analog Output
FT1A-C14SA-S		
FT1A-C12RA-W	:	8 inputs (6 Digital, 2 Analog)
FT1A-C12RA-B		4 outputs (Relay)
FT1A-C12RA-S		

#### Pro (LCD Models)

Rated voltage 24VDC

FT1A-H12RA	:	8 inputs (6 Digital, 2 Analog)
		4 outputs (Relay)
FT1A-H24RA	:	16 inputs (12 Digital, 4 Analog)
		8 outputs (Relay)
FT1A-H40RKA	:	24 inputs (18 Digital, 6 Analog)
		16 outputs (12 Relay, 4 Tr. Sink)
FT1A-H40RSA	:	24 inputs (18 Digital, 6 Analog)
		16 outputs (12 Relay, 4 Tr. Source)
FT1A-H48KA	:	30 inputs ( 22 Digital, 8 Analog)
		18 outputs (Tr. Sink)
FT1A-H48SA	:	30 inputs ( 22 Digital, 8 Analog)
		18 outputs (Tr. Source)

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Rated Voltage 100-240VAC

FT1A-H12RC	:	8 inputs (Digital) 4 outputs (Relay)
FT1A-H24RC	:	16 inputs (Digital) 8 outputs (Relay)
FT1A-H40RC	:	24 inputs (Digital) 16 outputs (Relay)
FT1A-H48KC	:	30 inputs (Digital) 18 outputs (Tr. Sink)
FT1A-H48SC	:	30 inputs (Digital) 18 outputs (Tr. Source)

Lite (No LCD Models)

Rated voltage 24VDC

FT1A-B12RA	:	8 inputs (6 Digital, 2 Analog) 4 outputs (Relay)
FT1A-B24RA	:	16 inputs (12 Digital, 4 Analog) 8 outputs (Relay)
FT1A-B40RKA	:	24 inputs (18 Digital, 6 Analog) 16 outputs (12 Relay, 4 Tr. Sink)
FT1A-B40RSA	:	24 inputs (18 Digital, 6 Analog) 16 outputs (12 Relay, 4 Tr. Source)
FT1A-B48KA	:	30 inputs (22 Digital, 8 Analog) 18 outputs (Tr. Sink)
FT1A-B48SA	:	30 inputs (22 Digital, 8 Analog) 18 outputs (Tr. Source)

Rated Voltage 100-240VAC

FT1A-B12RC	:	8 inputs (Digital) 4 outputs (Relay)
FT1A-B24RC	:	16 inputs (Digital) 8 outputs (Relay)
FT1A-B40RC	:	24 inputs (Digital) 16 outputs (Relay)
FT1A-B48KC	:	30 inputs (Digital) 18 outputs (Tr. Sink)
FT1A-B48SC	:	30 inputs (Digital) 18 outputs (Tr. Source)

Option;

Extended Analog Cartridge

FC6A-PJ2A : 2-Analog Input  
FC6A-PK2AV : 2-Analog Output  
FC6A-PK2AW : 2-Analog Output  
FC6A-PJ2CP : 2-Analog Input

Extended Communication Cartridge

FT1A-PC1 : RS232C, mini DIN connector type  
FT1A-PC2 : RS485, mini DIN connector type  
FT1A-PC3 : RS485, terminal type

Memory Cartridge

FT1A-PM1

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