

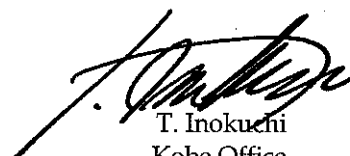
Type Approval Certificate Extension

This is to certify that Certificate No. 02/10016(E3) and 04/10008(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	<p>IDEC CORPORATION 7-31 Nishimiyahara 1-Chome, Yodogawa-ku Osaka 532-8550, JAPAN</p>																								
PLACE OF PRODUCTION	<p>IDEC CORPORATION Tsukuba Plant 1-9 Koyodai, Ryugasaki-Shi, Ibaragi-Ken 301-0852, JAPAN</p> <p>IDEC IZUMI TAIWAN CORPORATION No. 87 Swi Kuan Road, Chu Hou Village Jen Wu Country, Kaohsiung Hsien 814 Taiwan</p>																								
DESCRIPTION	Programmable Logic Controller																								
TYPE	<p>FC4A and FC5A Series FC4A Series comprising:- CPU Module All-In-One Type:</p> <table> <tr> <td>FC4A-C10R2</td><td>AC Type, 6-point Input, 4-point Relay Output</td></tr> <tr> <td>FC4A-C16R2</td><td>AC Type, 9-point Input, 7-point Relay Output</td></tr> <tr> <td>FC4A-C24R2</td><td>AC Type, 14-point Input, 10-point Relay Output</td></tr> <tr> <td>FC4A-C10R2C</td><td>DC Type, 6-point Input, 4-point Relay Output</td></tr> <tr> <td>FC4A-C16R2C</td><td>DC Type, 9-point Input, 7-point Relay Output</td></tr> <tr> <td>FC4A-C24R2C</td><td>DC Type, 14-point Input, 10-point Relay Output</td></tr> </table> <p>CPU Module Slim Type:</p> <table> <tr> <td>FC4A-D20RK1</td><td>DC Type, 12-point Input, 2-point Transistor Sink Output, 6-point Relay Output</td></tr> <tr> <td>FC4A-D20RS1</td><td>DC Type, 12-point Input, 2-point Transistor Source Output, 6-point Relay Output</td></tr> <tr> <td>FC4A-D20K3</td><td>DC Type, 12-point Input, 8-point Transistor Sink Output</td></tr> <tr> <td>FC4A-D20S3</td><td>DC Type, 24-point Input, 8-point Transistor Source Output</td></tr> <tr> <td>FC4A-D40K3</td><td>DC Type, 24-point Input, 16-point Transistor Sink Output</td></tr> <tr> <td>FC4A-D40S3</td><td>DC Type, 24-point Input, 16-point Transistor Source Output</td></tr> </table>	FC4A-C10R2	AC Type, 6-point Input, 4-point Relay Output	FC4A-C16R2	AC Type, 9-point Input, 7-point Relay Output	FC4A-C24R2	AC Type, 14-point Input, 10-point Relay Output	FC4A-C10R2C	DC Type, 6-point Input, 4-point Relay Output	FC4A-C16R2C	DC Type, 9-point Input, 7-point Relay Output	FC4A-C24R2C	DC Type, 14-point Input, 10-point Relay Output	FC4A-D20RK1	DC Type, 12-point Input, 2-point Transistor Sink Output, 6-point Relay Output	FC4A-D20RS1	DC Type, 12-point Input, 2-point Transistor Source Output, 6-point Relay Output	FC4A-D20K3	DC Type, 12-point Input, 8-point Transistor Sink Output	FC4A-D20S3	DC Type, 24-point Input, 8-point Transistor Source Output	FC4A-D40K3	DC Type, 24-point Input, 16-point Transistor Sink Output	FC4A-D40S3	DC Type, 24-point Input, 16-point Transistor Source Output
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FC4A-D40S3	DC Type, 24-point Input, 16-point Transistor Source Output																								

Certificate No.	02/10016(E4)
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Expiry Date	09 April 2012
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TYPE (Continued)

Expansion Module:

FC4A-N08B1	8-point Input
FC4A-N16B1	16-point Input
FC4A-N16B3	16-point Input
FC4A-N32B3	32-point Input
FC4A-R081	8-point Relay Output
FC4A-R161	16-point Relay Output
FC4A-M08BR1	4-point Input, 4-point Relay Output
FC4A-M24BR2	16-point Input, 8-point Relay Output
FC4A-T08K1	8-point Transistor Sink Output
FC4A-T08S1	8-point Transistor Source Output
FC4A-T16K3	16-point Transistor Sink Output
FC4A-T16S3	16-point Transistor Source Output
FC4A-T32K3	32-point Transistor Sink Output
FC4A-T32S3	32-point Transistor Source Output

Analog Module:

FC4A-L03AP1	2-point Analog Input, 1-point Analog Output
FC4A-L03A1	2-point Analog Input, 1-point Analog Output
FC4A-J2A1	2-point Analog Input
FC4A-K1A1	1-point Analog Output
FC4A-K2C1	2-point Analog Output
FC4A-J8C1	8-point Analog Input
FC4A-J8AT1	8-point Analog Input
FC4A-J4CN1	4-point Analog Input

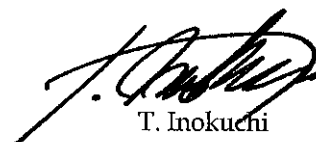
Communication Module:

FC4A-HPC1	RS232C DIN Terminal Type
FC4A-HPC2	RS485 DIN Terminal Type
FC4A-HPC3	RS485 Terminal Block Type

Option Module:

FC4A-PC1	RS485 with DIN Terminal Type
FC4A-PC2	RS485 with DIN Terminal Type
FC4A-PC3	RS232C with Terminal Block Type
FC4A-PT1	Clock
FC4A-PM32	Memory Cartridge
FC4A-PM64	Memory Cartridge
FC4A-PH1	Small Display
FC4A-HPH1	Adapter for Small Display

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TYPE (Continued)

FC5A Series comprising:-

CPU Module All-In-One Type:

FC5A-C10R2	AC Type, 6-point Input, 4-point Relay Output
FC5A-C16R2	AC Type, 9-point Input, 7-point Relay Output
FC5A-C24R2	AC Type, 14-point Input, 10-point Relay Output
FC5A-C10R2C	DC Type, 6-point Input, 4-point Relay Output
FC5A-C16R2C	DC Type, 9-point Input, 7-point Relay Output
FC5A-C24R2C	DC Type, 14-point Input, 10-point Relay Output

CPU Module Slim Type:

FC5A-D16RK1	DC Type, 8-point Input, 2-point Transistor Sink Output, 6-point Relay Output
FC5A-D16RS1	DC Type, 8-point Input, 2-point Transistor Source Output, 6-point Relay Output
FC5A-D32K3	DC Type, 16-point Input, 16-point Transistor Sink Output
FC5A-D32S3	DC Type, 16-point Input, 16-point Transistor Source Output

APPLICATION

Marine, offshore and industrial applications suitable for use in environmental categories ENV 1 and ENV2 in "General power Distribution Zones" as defined in LR's Test Specification No. 1-2002.

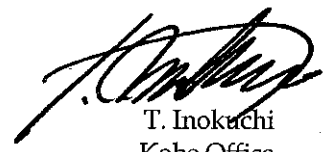
ADDITIONAL TEST

Low temperature test at 0 °C

DESIGN CODE STANDARD

Manufacture's specification (User's Manual) ; EM342-1 and FC9Y-B927

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RATINGS

CPU Module

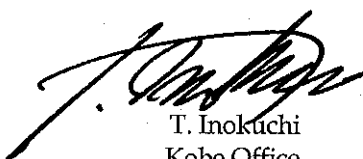
Module	Power Supply	Input	Output	Auxiliary Output
FC4A-C10R2	100-240 V ac, 50/60 Hz, 30 VA	24V dc, Input 0,1: 11 mA/pt Others: 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	24 V dc, 250 mA
FC4A-C16R2	100-240 V ac, 50/60 Hz, 31 VA	24V dc, Input 0,1: 11 mA/pt Others: 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	24 V dc, 250 mA
FC4A-C24R2	100-240 V ac, 50/60 Hz, 40 VA	24V dc, Input 0,1: 11 mA/pt Others: 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	24 V dc, 250 mA
FC4A-C10R2C	24 V dc, 160 mA	24V dc, Input 0,1: 11 mA/pt Others: 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	
FC4A-C16R2C	24 V dc, 190 mA	24V dc, Input 0,1: 11 mA/pt Others: 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	
FC4A-C24R2C	24 V dc, 230 mA	24V dc, Input 0,1: 11 mA/pt Others: 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	
FC4A-D20RK1	24 V dc, 120 mA	24 V dc, Input 0,1,6,7: 5 mA/pt Others: 7 mA/pt	Relay: 240 V ac, 2A (GEN/RES) 30 V dc, 2A (GEN/RES) Transistor: 24 V dc, 0.3 A/pt	
FC4A-D20RS1	24 V dc, 120 mA	24 V dc, Input 0,1,6,7: 5 mA/pt Others: 7 mA/pt	Relay: 240 V ac, 2A (GEN/RES) 30 V dc, 2A (GEN/RES) Transistor: 24 V dc, 0.3 A/pt	
FC4A-D20K3	24 V dc, 80 mA	24 V dc, Input 0,1,6,7: 5 mA/pt Others: 7 mA/pt	24V dc, 0.3 A/pt	
FC4A-D20S3	24 V dc, 80 mA	24 V dc, Input 0,1,6,7: 5 mA/pt Others: 7 mA/pt	24V dc, 0.3 A/pt	
FC4A-D40K3	24 V dc, 120 mA	24 V dc, Input 0,1,6,7: 5 mA/pt Others: 7 mA/pt	24V dc, 0.3 A/pt	
FC4A-D40S3	24 V dc, 120 mA	24 V dc, Input 0,1,6,7: 5 mA/pt Others: 7 mA/pt	24V dc, 0.3 A/pt	

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RATINGS (Continued)

CPU Module (Continued)

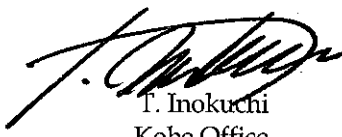
FC5A-C10R2	100-240 V ac, 50/60 Hz, 30 VA	24V dc, Input : 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	24 V dc, 250 mA
FC5A-C16R2	100-240 V ac, 50/60 Hz, 31 VA	24V dc, Input : 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	24 V dc, 250 mA
FC5A-C24R2	100-240 V ac, 50/60 Hz, 40 VA	24V dc, Input : 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	24 V dc, 250 mA
FC5A-C10R2C	24 V dc, 3.9 W	24V dc, Input : 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	
FC5A-C16R2C	24 V dc, 4.6 W	24V dc, Input : 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	
FC5A-C24R2C	24 V dc, 5.6 W	24V dc, Input : 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)	
FC5A-D16RK1	24 V dc, 125 mA	24 V dc, Input 0, 1, 3, 4, 6, 7: 5 mA Others: 7 mA	0, 1: 24v DC, 0.3A/pt Others: 240 V ac, 2A (GEN/RES) 30 V dc, 2A (GEN/RES)	
FC5A-D16RS1	24 V dc, 125 mA	24 V dc, Input 0, 1, 3, 4, 6, 7: 5 mA Others: 7 mA	0, 1: 24v DC, 0.3A/pt Others: 240 V ac, 2A (GEN/RES) 30 V dc, 2A (GEN/RES)	
FC5A-D32K3	24 V dc, 140 mA	24 V dc, Input 0, 1, 3, 4, 6, 7: 5 mA Others: 7 mA	24v DC, 0.3A/pt Total Max. 2A	
FC5A-D32S3	24 V dc, 140 mA	24 V dc, Input 0, 1, 3, 4, 6, 7: 5 mA Others: 7 mA	24v DC, 0.3A/pt Total Max. 2A	

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RATINGS (Continued)

Expansion Module

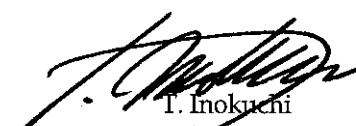
Module	Input Power (Internal)	Input	Output
FC4A-N08B1	5V dc, 25 mA	24V dc, 7 mA/pt	
FC4A-N16B1	5 V dc, 40 mA	24 V dc, 7 mA/pt	
FC4A-N16B3	5 V dc, 35 mA	24 V dc, 5 mA/pt	
FC4A-N32B3	5 V dc, 65 mA	24 V dc, 5 mA/pt	
FC4A-R081	24 V dc, 40 mA 5 V dc, 30 mA		240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)
FC4A-R161	24 V dc, 75 mA 5 V dc, 45 mA		240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)
FC4A-M08BR1	24 V dc, 20 mA 5 V dc, 25 mA	24 V dc, 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)
FC4A-M24BR2	24 V dc, 45 mA 5 V dc, 65 mA	24 V dc, 7 mA/pt	240 V ac, 2 A (GEN/RES) 30 V dc, 2 A (GEN/RES)
FC4A-T08K1	24 V dc, 20 mA 5 V dc, 10 mA		24V dc, 0.3 A/pt
FC4A-T08S1	24 V dc, 20 mA 5 V dc, 10 mA		24 V dc, 0.3 A/pt
FC4A-T16K3	24 V dc, 40 mA 5 V dc, 10mA		24 V dc, 0.1 A/pt
FC4A-T16S3	24 V dc, 40 mA 5 V dc, 10 mA		24 V dc, 0.1 A/pt
FC4A-T32K3	24 V dc, 70 mA 5V dc, 20 mA		24 V dc, 0.1 A/pt
FC4A-T32S3	24 V dc, 70 mA 5 V dc, 20 mA		24 V dc, 0.1 A/pt

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RATINGS (Continued)

Analog Module

Module	Power Supply	Input	Output
FC4A-L03AP1	24Vdc, 40 mA 5 V dc, 50 mA (Internal)	Analog Input	Analog Output
FC3A-L03A1	24Vdc, 40 mA 5 V dc, 50 mA (Internal)	Analog Input	Analog Output
FC4A-J2A1	24Vdc, 40 mA 5 V dc, 50 mA (Internal)	Analog Input	
FC4A-K1A1	24Vdc, 40 mA 5 V dc, 50 mA (Internal)		Analog Output
FC4A-K2C1	24Vdc, 85 mA 5 V dc, 60 mA (Internal)		Analog Output
FC4A-J8C1	24Vdc, 50 mA 5 V dc, 40 mA (Internal)	Analog Input	
FC4A-J8AT1	24Vdc, 55 mA 5 V dc, 45 mA (Internal)	Analog Input	
FC4A-J4CN1	24Vdc, 55 mA 5 V dc, 50 mA (Internal)	Analog Input	

Communication Module

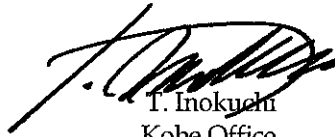
Module	Power Supply	Input	Output
FC4A-HPC1	5 V dc, 25 mA		
FC4A-HPC2	5 V dc, 5 mA		
FC4A-HPC3	5 V dc, 5 mA		

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"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 Asia of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 02/10016(E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 02/10016(E3) and 04/10008(E1) to which this extension should be attached.

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