



Lloyd's  
Register

## Type Approval Certificate Extension

This is to certify that Certificate No. 15/10026 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

|                            |  |
|----------------------------|--|
| <b>PRODUCER</b>            | Schneider Electric Automation GmbH<br>Schneiderplatz 1<br>97828 Marktheidenfeld Germany  |
| <b>PLACE OF PRODUCTION</b> | IDEK IZUMI TAIWAN CORPORATION<br>No. 87, Swi Kuan Road, Chu Hou Village, Jen Wu Country, Kaohsiung,<br>Hsien 814 Taiwan  |
|                            | SHINKO INDUSTRY CO., LTD.<br>501-19 Fukushima, Sanda, Hyogo, 669-1313 Japan  |
| <b>DESCRIPTION</b>         | Programmable Controller  |
| <b>TYPE</b>                | TM221 Series and TM3 Series<br>Comprising:-<br><u>CPU Modules</u><br>TM221M16R : DC Power Supply, 8-DC Input, 8-Relay Output<br>TM221M16RG<br>TM221ME16R<br>TM221ME16RG<br>TM221M16T : DC Power Supply, 8-DC Input,<br>TM221M16TG 8-Transistor Source Output<br>TM221ME16T<br>TM221ME16TG<br>TM221M32TK : DC Power Supply, 16-DC Input,<br>TM221ME32TK 16-Transistor Source Output<br>TM221C16R : AC Power Supply, 9-DC Input,<br>TM221CE16R 7-Relay Output<br>TM221C16T : DC Power Supply, 9-DC Input,<br>TM221CE16T 7-Transistor Source Output |

Certificate No. 15/10026(E1)

Issue Date 1 April 2016

Expiry Date 4 August 2020

Sheet 1 of 4

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Lloyd's Register Group Limited

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TYPE (Continued)

TM221C24R : AC Power Supply, 14-DC Input,  
10-Relay Output  
TM221CE24R : DC Power Supply, 14-DC Input,  
10-Transistor Source Output  
TM221C24T : AC Power Supply, 24-DC Input,  
16-Relay Output  
TM221CE24T : DC Power Supply, 24-DC Input,  
16-Transistor Source Output  
TM221C40R : DC Power Supply, 9-DC Input,  
7-Transistor Sink Output  
TM221CE40R : DC Power Supply, 14-DC Input,  
10-Transistor Sink Output  
TM221C40T : DC Power Supply, 24-DC Input,  
16-Transistor Sink Output  
TM221CE40T : DC Power Supply, 24-DC Input,  
16-Transistor Sink Output  
TM221C16U : DC Power Supply, 14-DC Input,  
10-Transistor Sink Output  
TM221CE16U : DC Power Supply, 24-DC Input,  
16-Transistor Sink Output  
TM221C24U : DC Power Supply, 14-DC Input,  
10-Transistor Sink Output  
TM221CE24U : DC Power Supply, 24-DC Input,  
16-Transistor Sink Output  
TM221C40U : DC Power Supply, 24-DC Input,  
16-Transistor Sink Output  
TM221CE40U : DC Power Supply, 24-DC Input,  
16-Transistor Sink Output

Input Modules

TM3DI8 : DC Power Supply (Internal), 8-DC Input  
TM3DI8G : DC Power Supply (Internal), 16-DC Input  
TM3DI16 : DC Power Supply (Internal), 16-DC Input  
TM3DI16G : DC Power Supply (Internal), 32-DC Input  
TM3DI16K : DC Power Supply (Internal), 8-AC Input  
TM3DI32K : DC Power Supply (Internal), 8-AC Input  
TM3DI8A : DC Power Supply (Internal), 8-AC Input  
TM3DI8AG : DC Power Supply (Internal), 8-AC Input

Output Modules

TM3DQ8R : DC Power Supply (internal), 8-Relay Output  
TM3DQ8RG : DC Power Supply (internal), 16-Relay Output  
TM3DQ16R : DC Power Supply (internal), 16-Relay Output  
TM3DQ16RG : DC Power Supply (internal), 8-Transistor Source Output  
TM3DQ8T : DC Power Supply (internal), 8-Transistor Source Output  
TM3DQ8TG : DC Power Supply (internal), 16-Transistor Source Output  
TM3DQ16T : DC Power Supply (internal), 16-Transistor Source Output  
TM3DQ16TG : DC Power Supply (internal), 32-Transistor Source Output  
TM3DQ16TK : DC Power Supply (internal), 32-Transistor Source Output  
TM3DQ32TK : DC Power Supply (internal), 32-Transistor Source Output  
TM3DQ8U : DC Power Supply (internal), 8-Transistor Sink Output  
TM3DQ8UG : DC Power Supply (internal), 8-Transistor Sink Output

Certificate No. 15/10026(E1)

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Sheet 2 of 4

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TYPE (Continued)

TM3DQ16U : DC Power Supply (internal),  
TM3DQ16UG 16-Transistor Sink Output  
TM3DQ16UK  
TM3DQ32UK : DC Power Supply (internal),  
32-Transistor Sink Output

I/O Mixture Modules

TM3DM8R : DC Power Supply (internal), 4-DC Input,  
TM3DM8RG 4-Relay Output  
TM3DM24R : DC Power Supply (internal), 16-DC Input,  
TM3DM24RG 8-Relay Output  
TM3XTYS4 : DC Power Supply (internal), 12-DC Input,  
8-Transistor Source Output

Analog Modules

TM3AI2H : 2-Analog Input  
TM3AI2HG  
TM3AI4 : 4-Analog Input  
TM3AI4G  
TM3AI8 : 8-Analog Input  
TM3AI8G  
TM3AQ2 : 2-Analog Output  
TM3AQ2G  
TM3AQ4 : 4-Analog Output  
TM3AQ4G  
TM3AM6 : 4-Analog Input, 2-Analog Output  
TM3AM6G  
TM3TM3 : 2-Analog Input, 1-Analog Output  
TM3TM3G  
TM3TI4 : 4-Analog Input  
TM3TI4G  
TM3TI8T : 8-Analog Input  
TM3TI8TG  
TM3XPID2 : 2-Analog Input, 2-Analog Output or  
2-Transistor Output

Option Modules

TMC2AI2 : 2-Analog Input  
TMC2HOIS01  
TMC2PACK01

Certificate No. 15/10026(E1)  
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Sheet 3 of 4

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|                  |            |  |
|------------------|------------|--|
| TYPE (Continued) | TMC2AQ2V   | : 2-Analog Output                        |
|                  | TMC2AQ2C   | : 2-Analog Output                        |
|                  | TMC2TI2    | : 2-Analog Input                         |
|                  | TMC2SL1    | : 2-Serial Communications (RS232C/RS485) |
|                  | TMC2CONV01 | : 2-Serial Communications (RS232C/RS485) |

**APPLICATION** Marine and offshore applications for use in environmental categories ENV2 & ENV3 in the "General Power Distribution Zones" as defined in LR Type Approval System Test Specification No. 1-2013 where the Test Specification is satisfactory for the intended operation.

**DESIGN CODE STANDARD** Manufacture's specification  
- Identical with FC6A Series Programmable Controller in LR Type Approval Certificate No. 15/10025(E1) issued to IDEC Corporation  
- Refer to the comparison List & Cross reference list between FC6A series and TM221&TM3 series

**RATINGS** Power Supply : 24 VDC, 100-240VAC 50/60Hz

**OTHER CONDITIONS** The certificate attests to the hardware's suitability for the environmental categories stated.

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.

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

*The attached Design Appraisal Document No. 15/10026(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 15/10026 to which this extension should be attached

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**Sheet** 4 of 4

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