



# Certificate of Compliance

**Certificate:** 2684938

**Master Contract:** 248779

**Project:** 70148163

**Date Issued:** 2017-09-20

**Issued to:** Schneider Electric Automation GmbH  
SchneiderPlatz 1  
Marktheidenfeld, 97828  
GERMANY

*The products listed below are eligible to bear the CSA Mark shown*



**Issued by:** Daniel Duguay  
Daniel Duguay

## **PRODUCTS**

CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-  
CLASS - C225351 - PROGRAMMABLE CONTROLLER

Programmable controllers, Din-rail mounted, open type, modules:

Class I Division 2 Groups A, B, C and D Temperature Code T4

CPU (Book)	Power supply	Inputs	Outputs
TM221M16R	24 Vdc, 150 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM221ME16R	24 Vdc, 180 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM221M16RG	24 Vdc, 150 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	8 relay outputs:240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM221ME16RG	24 Vdc, 180 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM221M16T	24 Vdc, 135 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt; Max 28.8 mA (total)	8 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 3.2 A (total)
TM221ME16T	24 Vdc, 165 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt; Max 28.8 mA (total)	8 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 3.2 A (total)



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TM221M16TG	24 Vdc, 135 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt; Max 28.8 mA (total)	8 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 3.2 A (total)
TM221ME16TG	24 Vdc, 165 mA	8 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt; Max 28.8 mA (total)	8 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 3.2 A (total)
TM221M32TK	24 Vdc, 145 mA	16 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt; Max 62.4 mA (total)	16 transistor source outputs: 24 Vdc, 0.1 A/pt; Max 1.3 A (total)
TM221ME32TK	24 Vdc, 175 mA	16 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt; Max 62.4 mA (total)	16 transistor source outputs: 24 Vdc, 0.1 A/pt; Max 1.3 A (total)

CPU (Brick)	Power supply	Inputs	Outputs
TM221C16R	100-240 Vac, 50/60Hz, 31 VA	9 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	7 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common; Auxiliary 24 Vdc, 250 mA
TM221CE16R	100-240 Vac, 50/60Hz, 33VA	9 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	7 relay outputs:240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common; Auxiliary 24 Vdc, 250 mA
TM221C24R	100-240 Vac, 50/60Hz, 32 VA	14 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	10 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common; Auxiliary 24 Vdc, 250 mA
TM221CE24R	100-240 Vac, 50/60Hz, 35 VA	14 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	10 relay outputs:240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common; Auxiliary 24 Vdc, 250 mA
TM221C40R	100-240 Vac, 50/60Hz, 37 VA	24 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	16 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common; Auxiliary 24 Vdc, 250 mA
TM221CE40R	100-240 Vac, 50/60Hz, 41 VA	24 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	16 relay outputs:240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common; Auxiliary 24 Vdc, 250 mA
TM221C16T	24 Vdc, 160 mA	9 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	7 transistor source outputs: 24 Vdc, 0.5 A/pt
TM221CE16T	24 Vdc, 190 mA	9 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	7 transistor source outputs: 24 Vdc, 0.5 A/pt
TM221C24T	24 Vdc, 170 mA	14 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	10 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 5 A/common
TM221CE24T	24 Vdc, 200 mA	14 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	10 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 5 A/common
TM221C40T	24 Vdc, 172 mA	24 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	16 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 4 A/common
TM221CE40T	24 Vdc, 205 mA	24 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	16 transistor source outputs: 24 Vdc, 0.5 A/pt; Max 4 A/common



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Input modules	Power supply	Inputs
TM3DI8	5 Vdc, 30 mA	8 inputs: 24 Vdc, 7 mA/pt
TM3DI8G	5 Vdc, 30 mA	8 inputs: 24 Vdc, 7 mA/pt
TM3DI16	5 Vdc, 40 mA	16 inputs: 24 Vdc, 7 mA/pt; Max 123.2 mA (total)
TM3DI16G	5 Vdc, 40 mA	16 inputs: 24 Vdc, 7 mA/pt; Max 123.2 mA (total)
TM3DI16K	5 Vdc, 40 mA	16 inputs: 24 Vdc, 5 mA/pt; Max 72 mA (total)
TM3DI32K	5 Vdc, 65 mA	32 inputs: 24 Vdc, 5 mA/pt; Max 144 mA (total)
TM3DI8A	5 Vdc, 40 mA	8 inputs: 120 Vac, 50/60 Hz, 15 mA/pt
TM3DI8AG	5 Vdc, 40 mA	8 inputs: 120 Vac, 50/60 Hz, 15 mA/pt

Analog Input	Power supply	Inputs
TM3AI2H	24 Vdc, 25 mA; 5 Vdc, 40 mA	2 analog inputs
TM3AI2HG	24 Vdc, 25 mA; 5 Vdc, 40 mA	2 analog inputs
TM3AI4	24 Vdc, 30 mA; 5 Vdc, 45 mA	4 analog inputs
TM3AI4G	24 Vdc, 30 mA; 5 Vdc, 45 mA	4 analog inputs
TM3AI8	24 Vdc, 40 mA; 5 Vdc, 40 mA	8 analog inputs
TM3AI8G	24 Vdc, 40 mA; 5 Vdc, 40 mA	8 analog inputs
TM3TI4	24 Vdc, 40 mA; 5 Vdc, 50 mA	4 analog inputs
TM3TI4G	24 Vdc, 40 mA; 5 Vdc, 50 mA	4 analog inputs
TM3TI8T	24 Vdc, 30 mA; 5 Vdc, 45 mA	8 analog inputs
TM3TI8TG	24 Vdc, 30 mA; 5 Vdc, 45 mA	8 analog inputs

Output modules	Power supply	Outputs
TM3DQ8R	24 Vdc, 50 mA; 5 Vdc, 35 mA	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM3DQ8RG	24 Vdc, 50 mA; 5 Vdc, 35 mA	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM3DQ16R	24 Vdc, 100 mA; 5 Vdc, 50 mA	16 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 8 A/common
TM3DQ16RG	24 Vdc, 100 mA; 5 Vdc, 50 mA	16 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 8 A/common
TM3DQ8T	24 Vdc, 25 mA; 5 Vdc, 15 mA	8 transistor source outputs: 24 Vdc, 0.5 A/pt
TM3DQ8TG	24 Vdc, 25 mA; 5 Vdc, 30 mA	8 transistor source outputs: 24 Vdc, 0.5 A/pt
TM3DQ16T	24 Vdc, 25 mA; 5 Vdc, 30 mA	16 transistor source outputs: 24 Vdc, 0.5 A/pt
TM3DQ16TG	24 Vdc, 25 mA; 5 Vdc, 30 mA	16 transistor source outputs: 24 Vdc, 0.5 A/pt
TM3DQ16TK	24 Vdc, 25 mA; 5 Vdc, 30 mA	16 transistor source outputs: 24 Vdc, 0.1 A/pt
TM3DQ32TK	24 Vdc, 45 mA; 5 Vdc, 50 mA	32 transistor source outputs: 24 Vdc, 0.1 A/pt
TM3DQ8U	24 Vdc, 15 mA; 5 Vdc, 25 mA	8 transistor sink outputs: 24 Vdc, 0.5 A/pt
TM3DQ8UG	24 Vdc, 15 mA; 5 Vdc, 25 mA	8 transistor sink outputs: 24 Vdc, 0.5 A/pt
TM3DQ16U	24 Vdc, 25 mA; 5 Vdc, 30 mA	16 transistor sink outputs: 24 Vdc, 0.5 A/pt
TM3DQ16UG	24 Vdc, 25 mA; 5 Vdc, 30 mA	16 transistor sink outputs: 24 Vdc, 0.5 A/pt
TM3DQ16UK	24 Vdc, 25 mA; 5 Vdc, 30 mA	16 transistor sink outputs: 24 Vdc, 0.1 A/pt
TM3DQ32UK	24 Vdc, 50 mA; 5 Vdc, 45 mA	32 transistor sink outputs: 24 Vdc, 0.1 A/pt



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Analog Output	Power supply	Outputs
TM3AQ2	24 Vdc, 70 mA; 5 Vdc, 40 mA	2 analog outputs
TM3AQ2G	24 Vdc, 70 mA; 5 Vdc, 40 mA	2 analog outputs
TM3AQ4	24 Vdc, 125 mA; 5 Vdc, 50 mA	4 analog outputs
TM3AQ4G	24 Vdc, 125 mA; 5 Vdc, 50 mA	4 analog outputs

I/O modules	Power supply	Inputs	Outputs
TM3DM8R	24 Vdc, 25 mA; 5 Vdc, 30 mA	4 inputs: 24 Vdc, 7 mA/pt	4 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM3DM8RG	24 Vdc, 25 mA; 5 Vdc, 30 mA	4 inputs: 24 Vdc, 7 mA/pt	4 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM3DM24R	24 Vdc, 50 mA; 5 Vdc, 55 mA	16 inputs: 24 Vdc, 7 mA/pt; Max 123.2 mA (total)	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM3DM24RG	24 Vdc, 50 mA; 5 Vdc, 55 mA	16 inputs: 24 Vdc, 7 mA/pt; Max 123.2 mA (total)	8 relay outputs: 240 Vac/30 Vdc, 2 A (resistive); Max 7 A/common
TM3XTYS4	24 Vdc, 25 mA; 5 Vdc, 50 mA	12 inputs: 24 Vdc, 5 mA/pt	16 transistor source outputs: 24 Vdc, 0.3 A/pt

Analog I/O	Power supply	Inputs	Outputs
TM3AM6	24 Vdc, 100 mA; 5 Vdc, 55 mA	4 analog inputs	2 analog outputs
TM3AM6G	24 Vdc, 100 mA; 5 Vdc, 55 mA	4 analog inputs	2 analog outputs
TM3TM3	24 Vdc, 80 mA; 5 Vdc, 60 mA	2 analog inputs	1 analog output
TM3TM3G	24 Vdc, 80 mA; 5 Vdc, 60 mA	2 analog inputs	1 analog output

Option Analog	Power supply	Inputs	Outputs
TMC2AI2	3.3 Vdc, 30 mA	2 analog inputs	-
TMC2TI2	3.3 Vdc, 30 mA	2 analog inputs	-
TMC2HOIST01	3.3 Vdc, 30 mA	2 analog inputs	-
TMC2PACK01	3.3 Vdc, 30 mA	2 analog inputs	-
TMC2AQ2C	5 Vdc, 185 mA; 3.3 Vdc, 30 mA	-	2 analog outputs
TMC2AQ2V	5 Vdc, 70 mA; 3.3 Vdc, 30 mA	-	2 analog outputs
TMC2SL1 (communications)	5 Vdc, 12 mA; 3.3 Vdc, 4.5 mA	-	-
TMC2CONV01 (communications)	5 Vdc, 12 mA; 3.3 Vdc, 4.5 mA	-	-

Class I Division 2 Groups A, B, C and D Temperature Code T4A



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<u>CPU (Brick)</u>	<u>Power supply</u>	<u>Inputs</u>	<u>Outputs</u>
TM221C16U	24 Vdc, 160 mA	9 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	7 transistor sink outputs: 24 Vdc, 0.5 A/pt; Max 3.5 A/common
TM221CE16U	24 Vdc, 190 mA	9 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	7 transistor sink outputs: 24 Vdc, 0.5 A/pt; Max 3.5 A/common
TM221C24U	24 Vdc, 170 mA	14 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	10 transistor sink outputs: 24 Vdc, 0.5 A/pt; Max 5 A/common
TM221CE24U	24 Vdc, 200 mA	14 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	10 transistor sink outputs: 24 Vdc, 0.5 A/pt; Max 5 A/common
TM221C40U	24 Vdc, 172 mA	24 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	16 transistor sink outputs: 24 Vdc, 0.5 A/pt; Max 4 A/common
TM221CE40U	24 Vdc, 205 mA	24 inputs: 24 Vdc, 0, 1, 6, 7: 5 mA/pt, others:7 mA/pt	16 transistor sink outputs: 24 Vdc, 0.5 A/pt; Max 4 A/common

Maximum surrounding air temperature (ambient, open type): 55°C

Notes:

- 1) Open type devices are Certified as components for use only in other Certified equipment where the suitability of the combination is to be determined by CSA International.
- 2) These devices are Certified as open type for Pollution degree 2 microenvironment and to be installed in a suitable grounded enclosure.
- 3) These devices are intended for use in circuits rated with voltage range:  
 151-300 Vrms: “Low voltage primary and secondary circuits in equipment rated at 2000 VA and less”;  
 0-30 Vrms: “Class 2 Extra-low voltage secondary circuits”.
- 4) The wiring terminals are not suitable for field wiring. The wiring terminals are to be factory wired only and the suitability of the connection shall be determined.
- 5) These devices have only been tested for electrical safety. No evaluation of functional safety and performance characteristics has been conducted (such as for process control equipment where reliability could be an issue).

**APPLICABLE REQUIREMENTS**

- CSA-C22.2 No. 0-10 - General Requirements - Canadian Electrical Code, Part II
- CSA-E61131-2:06 - Programmable Controllers-Part 2: Equipment Requirements and Tests
- CSA-C22.2 No. 213-M1987 - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
70148163	2017-09-20	CSA report update (2684938) to cover a fuse value change from 2A to 3.15 (on TM221C16R, TM221CE16R, TM221C24R, TM221CE24R, TM221C40R, TM221CE40R) and the addition of alternate relays (for all models).
70127930	2017-08-23	CSA report update (2684938) for the addition of new accessory modules TM3TI4D and TM3TI4DG, and other minor changes (new PCB supplier, modification of PCB layout and/or schematic drawing of some input/output accessories) performed under the SMTC program.
70032634	2015-09-08	CSA Certification update for the addition of new sink type output modules: TM221C16U, TM221C24U, TM221C40U, TM221CE16U, TM221CE24U and TM221CE40U.
70004208	2014-06-10	Update of report 248779-2684938, Programmable Logic Controllers, open type, Series TM221 and TM3, for addition of 39 nos new modules, with testing under CSA-SMTC Program and draft-Descriptive of modules and drawings (schematics and circuit layouts-spacings) to be provided, including representative samples.
2684938	2013-12-23	Initial CSA Certification Programmable controllers: CPU Series TM221Mxxxx, Input Series TM3DIxxx, Output Series TM3DQxxxx, I/O mixture Series TM3DMxxxx and TMXTYS4.