# Product datasheet Characteristics

# TM3DQ16RG module TM3 - 16 outputs relays spring



Price\*: 124.00 GBP



#### Main

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Range of product	Modicon TM3	
Product or component type	Discrete output module	
Range compatibility	Modicon M241 Modicon M251 Modicon M221	f these prod
Discrete output type	Relay normally open	
Discrete output number	16	
Discrete output logic	Positive or negative	
Discrete output voltage	240 V AC for relay output 30 V DC for relay output	il de li il a
Discrete output current	2000 mA for relay output	u E

### Complementary

Discrete I/O number	16	
Current consumption	0 mA at 24 V DC via bus connector (at state off) 75 mA at 24 V DC via bus connector (at state on)	
Response time	10 ms (turn-on) 5 ms (turn-off)	
Mechanical durability	20000000 cycles	
Minimum load	10 mA at 5 V DC for relay output	
Local signalling	1 LED per channel (green)output status:	
Electrical connection	10 x 1.5 mm² removable spring terminal block with pitch 3.81 mm adjustment for outputs	
Maximum cable distance between devices	Unshielded cable: <30 m for relay output	
Insulation	Between output and internal logic at 2300 V AC Between outputs at 750 V AC Between output groups at 1500 V AC	
Marking	CE	
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 plate or panel with fixing kit	

Height	90 mm
Depth	84.6 mm
Width	27.4 mm
Product weight	0.145 kg

#### Environment

Standards	EN/IEC 61131-2 EN/IEC 61010-2-201
Product certifications	CULus C-Tick
Resistance to electrostatic discharge	8 kV in air conforming to EN/IEC 61000-4-2 4 kV on contact conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m 80 MHz1 GHz conforming to EN/IEC 61000-4-3 3 V/m 1.4 GHz2 GHz conforming to EN/IEC 61000-4-3 1 V/m 2 GHz3 GHz conforming to EN/IEC 61000-4-3
Resistance to magnetic fields	30 A/m 50/60 Hz conforming to EN/IEC 61000-4-8
Resistance to fast transients	2 kV for relay output conforming to EN/IEC 61000-4-4
Surge withstand	1 kV I/O common mode conforming to EN/IEC 61000-4-5 DC
Resistance to conducted disturbances	10 V 0.1580 MHz conforming to EN/IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)
Electromagnetic emission	Radiated emissions - test level: 40 dB $\mu$ V/m QP class A ( 10 m) at 30230 MHz conforming to EN/ IEC 55011 Radiated emissions - test level: 47 dB $\mu$ V/m QP class A ( 10 m) at 2301000 MHz conforming to EN/ IEC 55011
Ambient air temperature for operation	-1035 °C vertical installation -1055 °C horizontal installation
Ambient air temperature for storage	-2570 °C
Relative humidity	1095 %, without condensation (in operation) 1095 %, without condensation (in storage)
IP degree of protection	IP20 with protective cover in place
Pollution degree	2
Operating altitude	02000 m
Storage altitude	03000 m
Vibration resistance	3.5 mm at 58.4 Hz on DIN rail 3 gn at 8.4150 Hz on DIN rail 3.5 mm at 58.4 Hz on panel 3 gn at 8.4150 Hz on panel
Shock resistance	15 gn for 11 ms

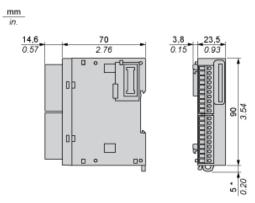
#### Offer Sustainability

Sustainable offer status	Green Premium product	
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Toxic heavy metal free	Yes	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

#### Contractual warranty

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Warranty		18 months		

#### **Dimensions**

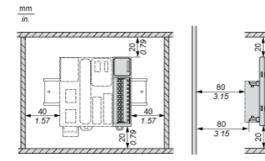


(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

# Product datasheet Mounting and Clearance

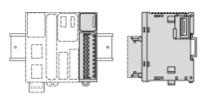
# TM3DQ16RG

## **Spacing Requirements**

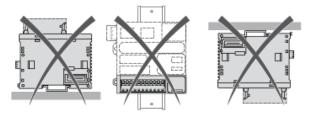


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## Mounting on a Rail



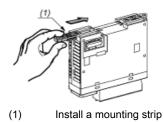
## Incorrect Mounting



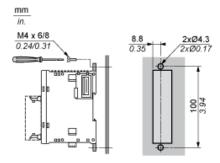
# Product datasheet Mounting and Clearance

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## Mounting on a Panel Surface



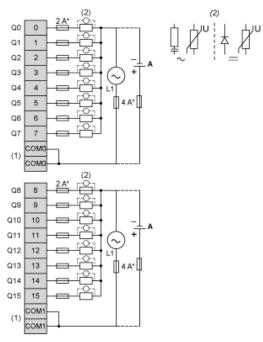
### Mounting Hole Layout



### Connections and Schema

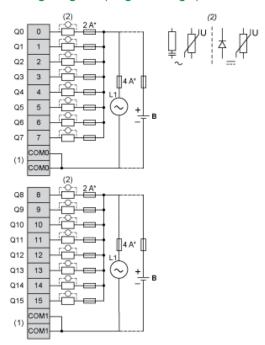
### Digital Relay Output Module (16-channel)

#### Wiring Diagram (Positive Logic)



- (\*) Type T fuse
- (1) The COM0 and COM1 terminals are not connected internally.
- To improve the life time of the contacts, and to protect from potential inductive load damage, it is recommended to connect a free wheeling diode in
- (A) Source wiring (positive logic).

#### Wiring Diagram (Negative Logic)



- (\*) (1) (2) (B) Type T fuse
- The COM0 and COM1 terminals are not connected internally.

  To improve the life time of the contacts, and to protect from potential inductive load damage, it is recommended to connect a free wheeling diode in para
- Sink wiring (negative logic)