Product datasheet
Characteristics

TM3DQ16R
module TM3 - 16 outputs relays

Main

Range of product	Modicon TM3
Product or component type	Discrete output module
Range compatibility	Modicon M221 Modicon M241 Modicon M251
Discrete output type	Relay normally open
Discrete output number	16
Discrete output logic	Positive logic (source)
Discrete output voltage	240 V AC for relay output 30 V DC for relay output
Discrete output current	2000 mA for relay output

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 for turn-on 5 ms for turn-off
Mechanical durability	20000000 cycles
Minimum load	10 mA at 5 V DC for relay output
Local signalling	Green for output status
Electrical connection	Removable screw terminal block pitch 3.81 mm with 10 terminal(s) of 1.5 mm² connection capacity for outputs
Cable length	<= 30 m unshielded cable for relay output
Insulation	2300 V AC between output and internal logic 750 V AC between outputs 1500 V AC between output groups
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

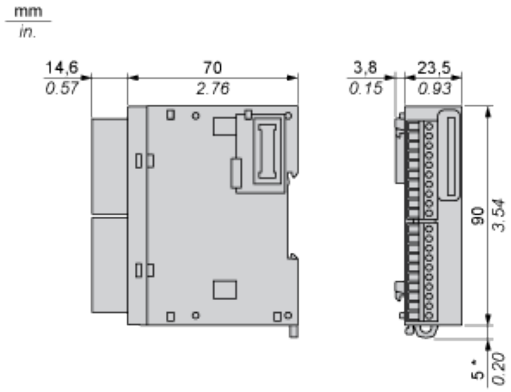
standards	EN/IEC 61131-2 EN/IEC 61010-2-201
product certifications	C-Tick CULus
resistance to electrostatic discharge	4 kV (on contact) conforming to EN/IEC 61000-4-2 8 kV (in air) conforming to EN/IEC 61000-4-2
resistance to electromagnetic fields	10 V/m at 80 MHz...1 GHz conforming to EN/IEC 61000-4-3 3 V/m at 1.4 GHz...2 GHz conforming to EN/IEC 61000-4-3 1 V/m at 2 GHz...3 GHz conforming to EN/IEC 61000-4-3
resistance to magnetic fields	30 A/m at 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 for I/O (DC) in common mode conforming to EN/IEC 61000-4-5
resistance to conducted disturbances, induced by radio frequency fields	10 Vrms at 0.15...80 MHz conforming to EN/IEC 61000-4-6 3 Vrms at 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 dBµV/m QP with class A, condition of test: 10 m (radio frequency: 30...230 MHz) conforming to EN/IEC 55011 Radiated emissions, test level: 47 dBµV/m QP with class A, condition of test: 10 m (radio frequency: 230 MHz...1 GHz) conforming to EN/IEC 55011
ambient air temperature for operation	-10...55 °C for horizontal installation -10...35 °C for vertical installation
ambient air temperature for storage	-25...70 °C
relative humidity	10...95 % without condensation in operation 10...95 % without condensation in storage
IP degree of protection	IP20 with protective cover in place
pollution degree	2
operating altitude	0...2000 m
storage altitude	0...3000 m
vibration resistance	3.5 mm (vibration frequency: 5...8.4 Hz) on DIN rail 3 gn (vibration frequency: 8.4...150 Hz) on DIN rail 3.5 mm (vibration frequency: 5...8.4 Hz) on panel 3 gn (vibration frequency: 8.4...150 Hz) on panel
shock resistance	15 gn (test wave duration:11 ms)

Offer Sustainability

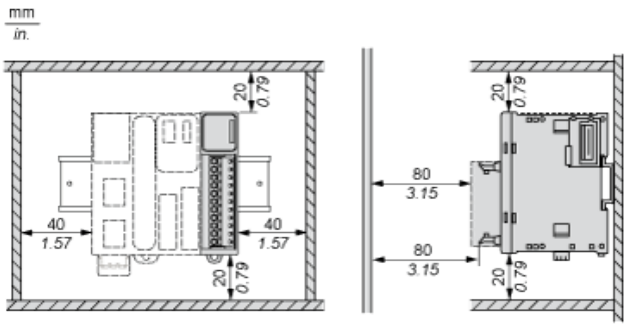
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1348 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Dimensions

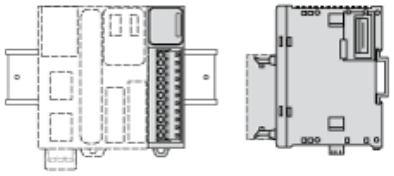


(*) 8.5 mm/0.33 in. when the clamp is pulled out.

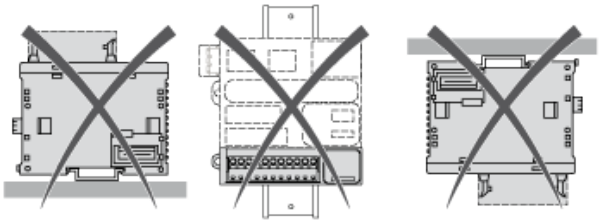
Spacing Requirements



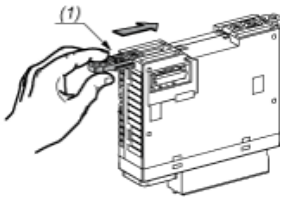
Mounting on a Rail



Incorrect Mounting

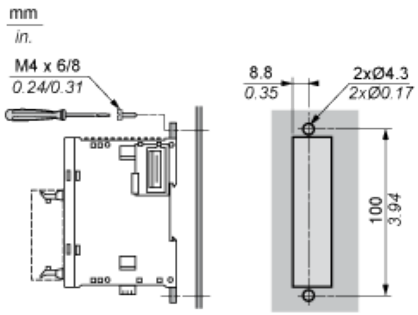


Mounting on a Panel Surface



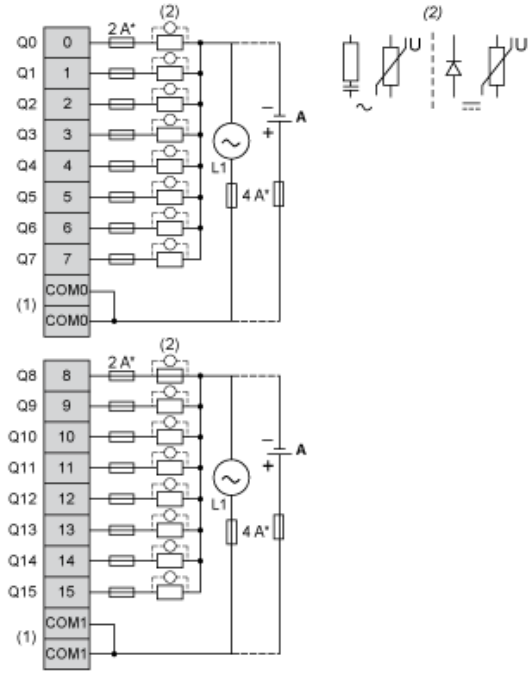
(1) Install a mounting strip

Mounting Hole Layout



Digital Relay Output Module (16-channel)

Wiring Diagram (Positive Logic)



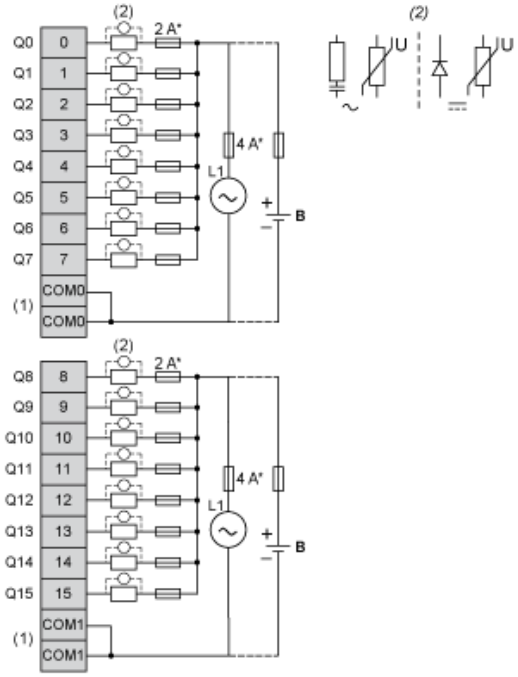
(*) Type T fuse

(1) The COM0 and COM1 terminals are **not** connected internally.

(2) 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 parallel to each inductive DC load or an RC snubber in parallel of each inductive AC load.

(A) Source wiring (positive logic).

Wiring Diagram (Negative Logic)



(*) Type T fuse

(1) The COM0 and COM1 terminals are **not** connected internally.

(2) 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 parallel to each inductive DC load or an RC snubber in parallel of each inductive AC load.

(B) Sink wiring (negative logic)