



### 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	8
Discrete output logic	Positive or negative
Discrete output voltage	240 V AC 24 V DC for relay output
Discrete output current	2000 mA for relay output

### Complementary

Discrete I/O number	8
Current consumption	5 mA at 5 V DC via bus connector at state off 0 mA at 24 V DC via bus connector at state off 40 mA at 24 V DC via bus connector at state on 30 mA at 5 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	1 LED per channel green for output status
Electrical connection	Removable screw terminal block pitch 5.08 mm with 11 terminal(s) of 2.5 mm <sup>2</sup> connection capacity for outputs
Cable distance between devices	Unshielded cable: 30 m 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	0.11 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 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

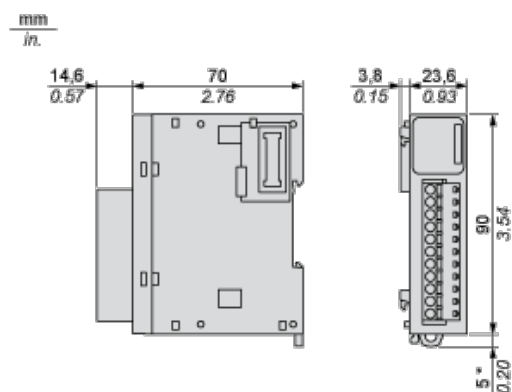
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resistance to conducted disturbances	10 Vrms at 0.15...80 MHz conforming to EN/IEC 61000-4-6 3 Vrms at spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)
electromagnetic emission	Radiated emissions, test level: 40 dB $\mu$ V/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 dB $\mu$ V/m QP with class A, condition of test: 10 m (radio frequency: 230...1000 MHz) 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

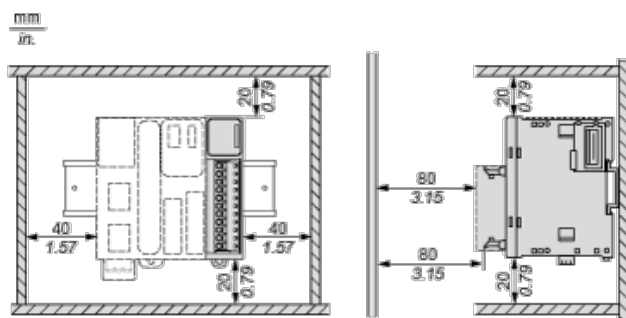
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1348 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

## Dimensions

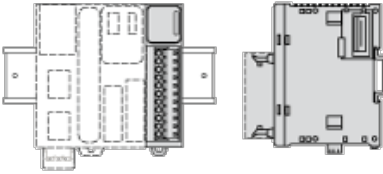


(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

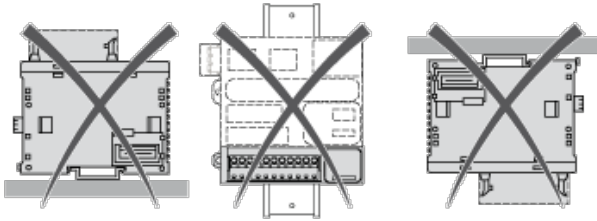
## Spacing Requirements



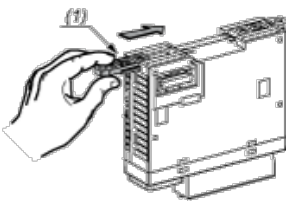
## Mounting on a Rail



## Incorrect Mounting

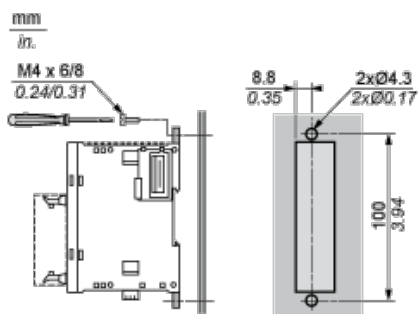


## Mounting on a Panel Surface



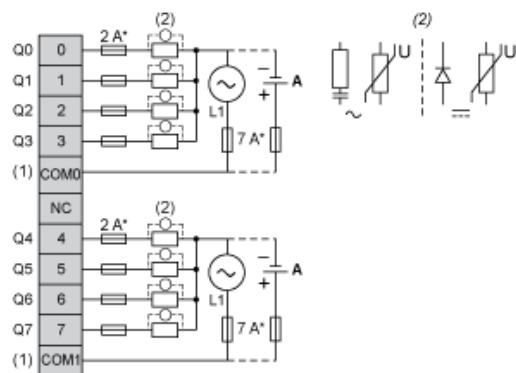
- (1) Install a mounting strip

## Mounting Hole Layout



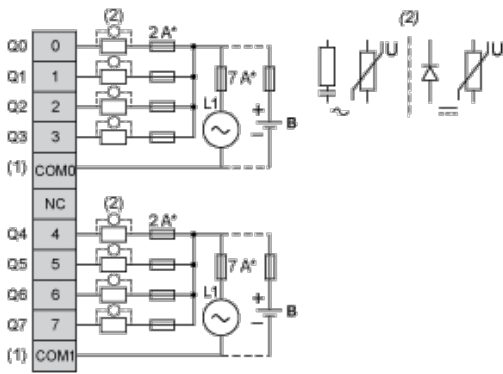
## Digital Relay Output Module (8-channel)

### 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)