



Main

| | |
|---------------------------|--|
| Range of product | Modicon TM3 |
| Product or component type | Discrete output module |
| Range compatibility | Modicon M251 Modicon M241 Modicon M221 |
| Discrete output type | Relay normally open |
| Discrete output number | 8 |
| Discrete output logic | Positive or negative |
| Discrete output voltage | 24 V DC for relay output 240 V AC |
| 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 ² connection capacity for outputs |
| Max 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 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|----------------|--------------------------------|
| | Plate or panel with fixing kit |
| Height | 90 mm |
| Depth | 84.6 mm |
| Width | 27.4 mm |
| Product weight | 0.11 kg |

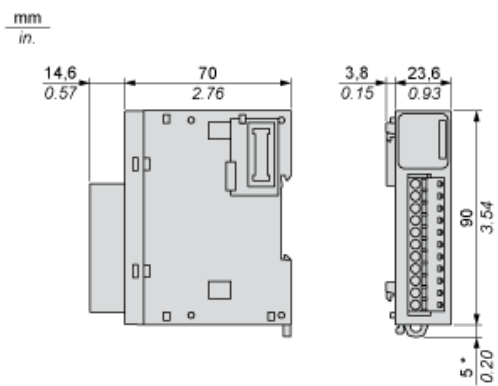
Environment

| | |
|---------------------------------------|---|
| Standards | EN/IEC 61131-2 EN/IEC 61010-2-201 |
| Product certifications | CULus C-Tick |
| 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 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 | 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 μ 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 μ V/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

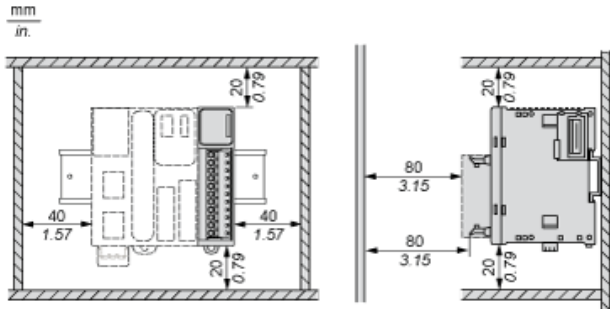
| | |
|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 1348 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold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

Dimensions

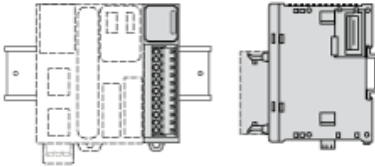


(*) 8.5 mm/0.33 in. when the clamp is pulled out.

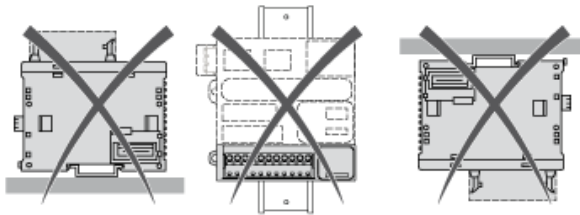
Spacing Requirements



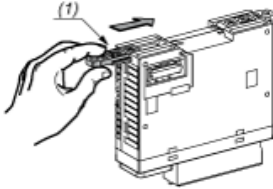
Mounting on a Rail



Incorrect Mounting

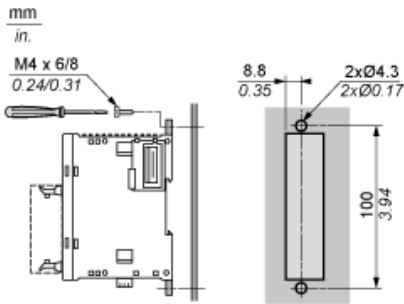


Mounting on a Panel Surface



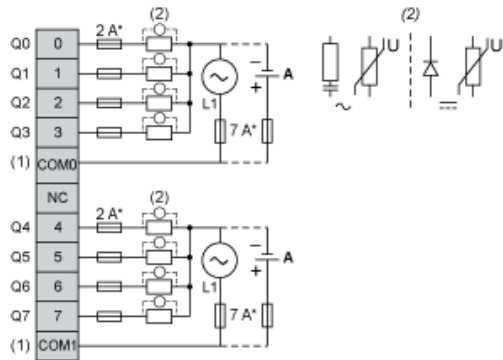
(1) Install a mounting strip

Mounting Hole Layout



Digital Relay Output Module (8-channel)

Wiring Diagram (Positive Logic)



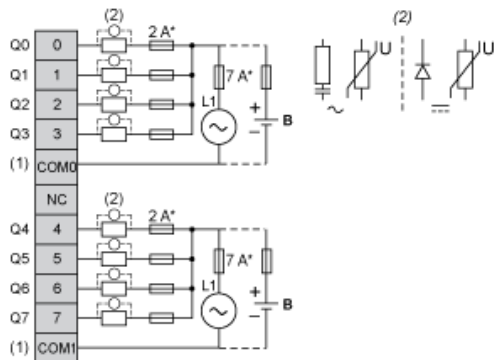
(*) Type T Fuse

(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

(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

(B) Sink wiring (negative logic)