



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 Modicon M262 |
| 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

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| 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 (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) for output status |
| Electrical connection | 11 x 2.5 mm ² removable spring terminal block with pitch 5.08 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 |
| Net weight | 0.11 kg |

Environment

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| Standards | EN/IEC 61131-2 EN/IEC 61010-2-201 |
| Product certifications | C-Tick CULus |
| 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 MHz...1 GHz conforming to EN/IEC 61000-4-3 3 V/m 1.4 GHz...2 GHz conforming to EN/IEC 61000-4-3 1 V/m 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 I/O common mode conforming to EN/IEC 61000-4-5 DC |

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| Resistance to conducted disturbances | 10 V 0.15...80 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 μ V/m QP class A (10 m) at 30...230 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 47 dB μ V/m QP class A (10 m) at 230...1000 MHz conforming to EN/IEC 55011 |
| Ambient air temperature for operation | -10...35 °C vertical installation -10...55 °C horizontal 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 at 5...8.4 Hz on DIN rail 3 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on panel 3 gn at 8.4...150 Hz on panel |
| Shock resistance | 15 gn for 11 ms |

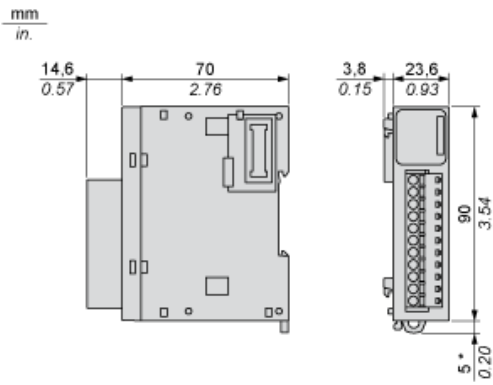
Packing Units

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| Package 1 Weight | 230.000 g |
| Package 1 Height | 75.000 mm |
| Package 1 width | 105.000 mm |
| Package 1 Length | 125.000 mm |

Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| 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 |
| PVC free | Yes |

Dimensions



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

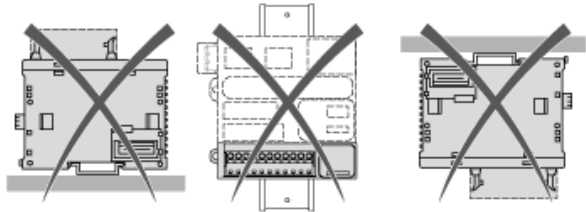
Spacing Requirements



Mounting on a Rail



Incorrect Mounting



Mounting on a Panel Surface



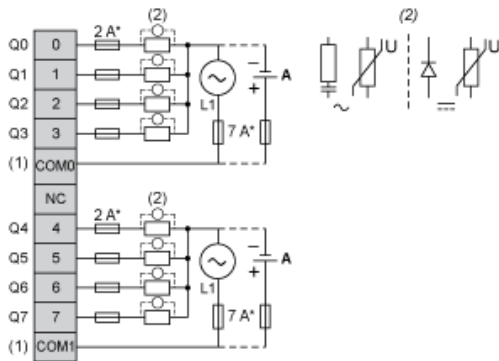
(1) Install a mounting strip

Mounting Hole Layout



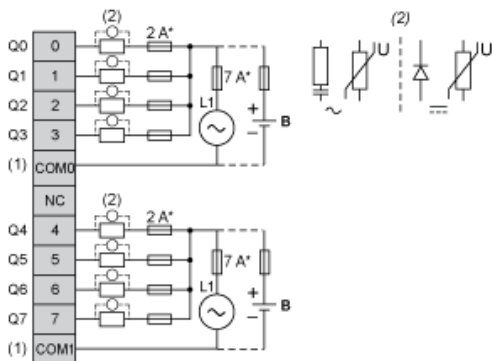
Digital Relay Output Module (8-channel)

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)