



Main

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| Range of product | Modicon TM3 |
| Product or component type | Discrete output module |
| Range compatibility | Modicon M221 Modicon M241 Modicon M251 |
| Discrete output type | Transistor |
| Discrete output number | 8 |
| Discrete output logic | Negative logic (sink) |
| Discrete output voltage | 24 V DC for transistor output |
| Discrete output current | 50 mA for transistor 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 20 mA at 24 V DC via bus connector at state on 10 mA at 5 V DC via bus connector at state on |
| Response time | 450 µs for turn-on 450 µs for turn-off |
| Leakage current | 0.1 mA for transistor output |
| Voltage drop | 0.4 V |
| 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 |
| Cable distance between devices | Unshielded cable: 30 m for transistor output |
| Insulation | 500 V AC between output and internal logic Non-insulated between outputs |
| 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 | 0.76 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 | 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 | 1 kV for I/O 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 |

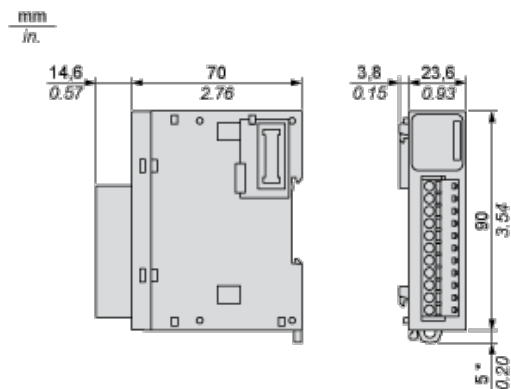
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| electromagnetic emission | Radiated emissions, test level: 40 dB μ V/m QP with class A, condition of test: 10 m (radio frequency: 30...230 MHz) conforming to EN/IEC 55011 Radiated emissions, test level: 47 dB μ V/m QP with class A, condition of test: 10 m (radio frequency: 230...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

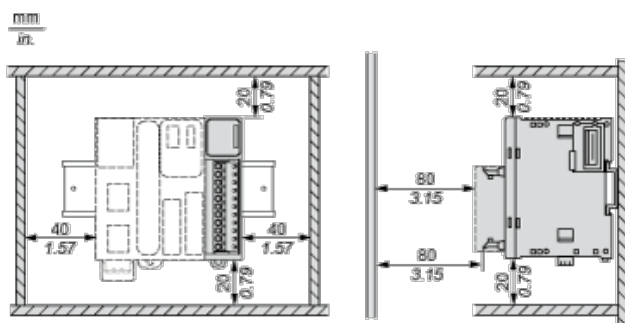
| | |
|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 1348 - Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold |
| Product environmental profile | Available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

Dimensions

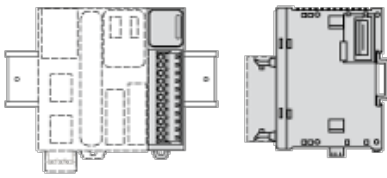


(*) 8.5 mm/0.33 in. when the clamp is pulled out.

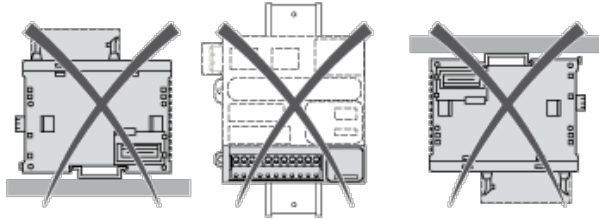
Spacing Requirements



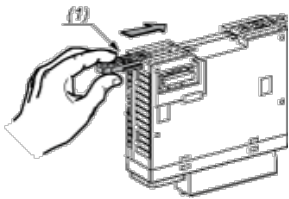
Mounting on a Rail



Incorrect Mounting

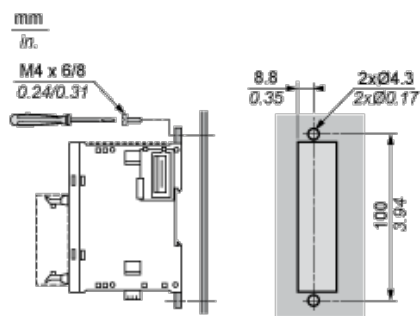


Mounting on a Panel Surface



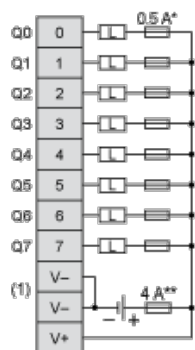
- (1) Install a mounting strip

Mounting Hole Layout



Digital Transistor Output Module (8-channel, Sink)

Wiring Diagram



- (*) Type T Fuse
- (**) Type F fuse
- (1) The V- terminals are connected internally.