



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

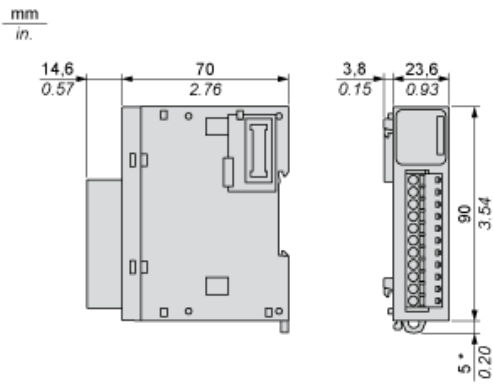
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|-----------------------|--|
| Discrete I/O number | 8 |
| Current consumption | 10 mA at 5 V DC via bus connector at state on 20 mA at 24 V DC via bus connector at state on 0 mA at 24 V DC via bus connector at state off 5 mA at 5 V DC via bus connector at state off |
| Response time | 450 µs for turn-off 450 µs for turn-on |
| 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 length | <= 30 m unshielded cable cable for transistor output |
| Insulation | Non-insulated between outputs 500 V AC between output and internal logic |
| Marking | CE |
| Mounting support | Plate or panel with fixing kit Top hat type TH35-7.5 rail conforming to IEC 60715 Top hat type TH35-15 rail conforming to IEC 60715 |
| Height | 70 mm |
| Depth | 84.6 mm |
| Width | 27.3 mm |
| Product weight | 0.76 kg |

Environment

| | |
|---------------------------------------|--|
| Standards | EN/IEC 61131-2 EN/IEC 61010-2-201 |
| Product certifications | C-Tick CULus |
| Resistance to electrostatic discharge | On contact - EN/IEC 61000-4-2 In air - EN/IEC 61000-4-2 |
| Resistance to electromagnetic fields | 1 V/m (2 GHz...3 GHz) - EN/IEC 61000-4-3 3 V/m (1.4 GHz...2 GHz) - EN/IEC 61000-4-3 10 V/m (80 MHz...1 GHz) - EN/IEC 61000-4-3 |
| Resistance to magnetic fields | 30 A/m (50...60 Hz) - EN/IEC 61000-4-8 |
| Resistance to fast transients | 1 kV for I/O - EN/IEC 61000-4-4 |
| Surge withstand | 1 kV for I/O (DC) in common mode - EN/IEC 61000-4-5 |

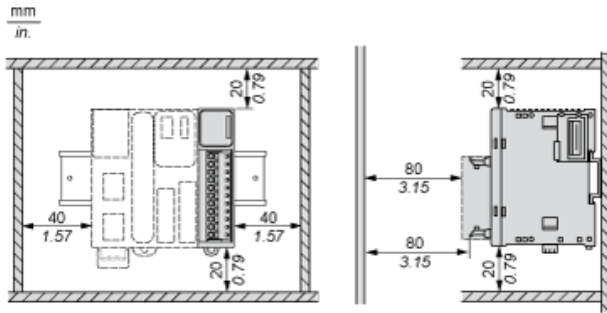
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|---|--|
| Resistance to conducted disturbances, induced by radio frequency fields | 3 Vrms (spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz)) - Marine specification (LR, ABS, DNV, GL) 10 Vrms (0.15...80 MHz) - EN/IEC 61000-4-6 |
| Electromagnetic emission | Radiated emissions - EN/IEC 55011 class A 10 m, 230 MHz...1 GHz : 47 dB μ V/m QP Radiated emissions - EN/IEC 55011 class A 10 m, 30...230 MHz : 40 dB μ V/m QP |
| 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 storage 10...95 % without condensation in operation |
| 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 gn (vibration frequency: 8.4...150 Hz) on panel 3.5 mm (vibration frequency: 5...8.4 Hz) on panel 3 gn (vibration frequency: 8.4...150 Hz) on DIN rail 3.5 mm (vibration frequency: 5...8.4 Hz) on DIN rail |
| Shock resistance | 15 gn (test wave duration:11 ms) |

Dimensions

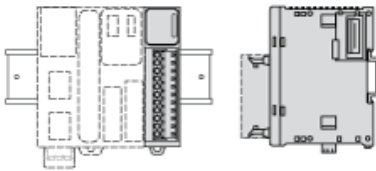


(*) 8.5 mm/0.33 in. when the clamp is pulled out.

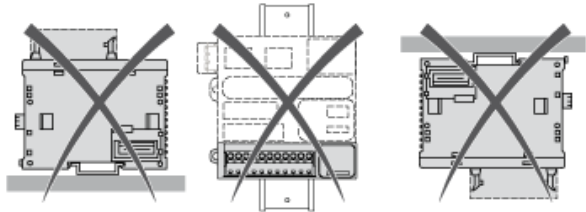
Spacing Requirements



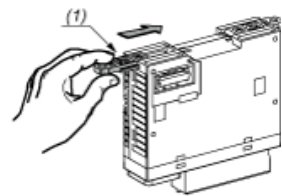
Mounting on a Rail



Incorrect Mounting

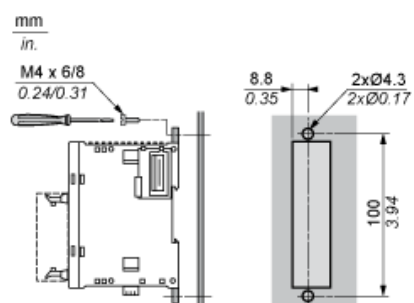


Mounting on a Panel Surface



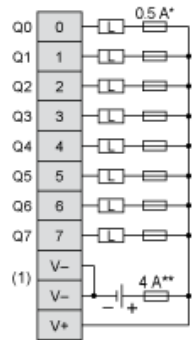
(1) Install a mounting strip

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.