



### Main

|                           |  |
|---------------------------|--|
| Range of product          | Modicon TM3                                  |
| Product or component type | Discrete input module                        |
| Range compatibility       | Modicon M221<br>Modicon M251<br>Modicon M241 |
| Discrete input number     | 8 input conforming to IEC 61131-2 Type 1     |
| Discrete input voltage    | 120 V  |
| Discrete input current    | 7.5 mA for input                             |

### Complementary

|                             |  |
|-----------------------------|--|
| Discrete I/O number         | 8  |
| Current consumption         | 0 mA at 24 V DC via bus connector at state on<br>0 mA at 24 V DC via bus connector at state off<br>70 mA at 5 V DC via bus connector at state on<br>25 mA at 5 V DC via bus connector at state off |
| Discrete input voltage type | AC   |
| Voltage state 1 guaranteed  | 79...132 V for input   |
| Current state 1 guaranteed  | 2...15 mA for input  |
| Voltage state 0 guaranteed  | 0...20 V for input   |
| Current state 0 guaranteed  | 0...15 mA for input  |
| Input impedance             | 11 kOhm  |
| Response time               | 25 ms for turn-on<br>30 ms for turn-off  |
| Local signalling            | Green for input 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 inputs   |
| Insulation                  | Non-insulated between inputs<br>1500 V AC between input and internal logic<br>1500 V AC between input groups   |
| Marking                     | CE   |
| Mounting support            | Top hat type TH35-15 rail conforming to IEC 60715<br>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 |

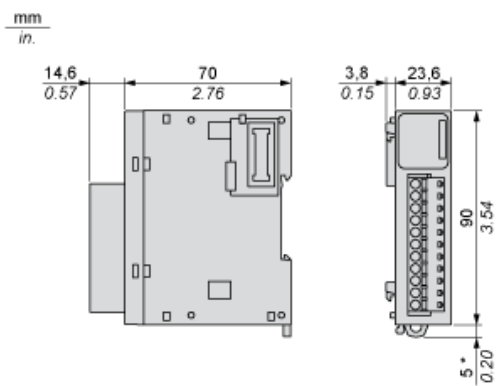
## Environment

|   |   |
|---|---|
| Standards   | EN/IEC 61131-2<br>EN/IEC 61010-2-201  |
| Product certifications  | CULus<br>C-Tick   |
| Resistance to electrostatic discharge                                   | 4 kV (on contact) conforming to EN/IEC 61000-4-2<br>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<br>3 V/m at 1.4 GHz...2 GHz conforming to EN/IEC 61000-4-3<br>1 V/m at 2 GHz...3 GHz conforming to EN/IEC 61000-4-3   |
| Resistance to magnetic fields   | 30 A/m at 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   | 2 kV for I/O (AC) in common mode conforming to EN/IEC 61000-4-5   |
| Resistance to conducted disturbances, induced by radio frequency fields | 10 Vrms at 0.15...80 MHz conforming to EN/IEC 61000-4-6<br>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 dBµV/m QP with class A, condition of test: 10 m (radio frequency: 30...230 MHz) conforming to EN/IEC 55011<br>Radiated emissions, test level: 47 dBµV/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<br>-10...35 °C for vertical installation  |
| Ambient air temperature for storage                                     | -25...70 °C   |
| Relative humidity   | 10...95 % without condensation in operation<br>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<br>3 gn (vibration frequency: 8.4...150 Hz) on DIN rail<br>3.5 mm (vibration frequency: 5...8.4 Hz) on panel<br>3 gn (vibration frequency: 8.4...150 Hz) on panel  |
| Shock resistance  | 15 gn (test wave duration:11 ms)  |

## Offer Sustainability

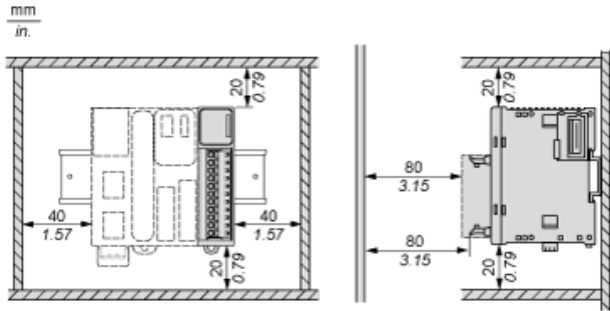
|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 1348 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of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

Dimensions



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

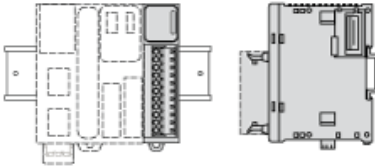
Spacing Requirements



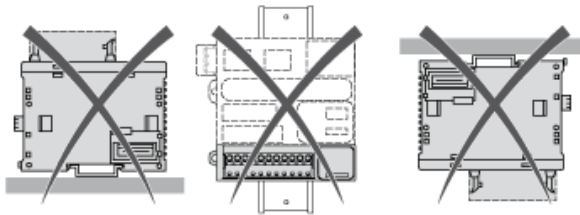
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Mounting on a Rail

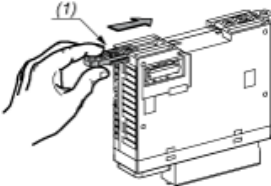
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Incorrect Mounting

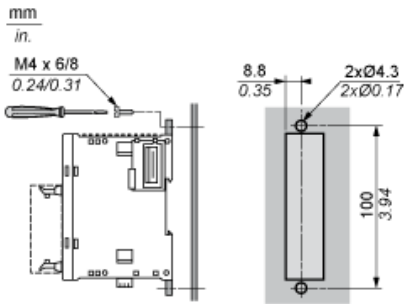


Mounting on a Panel Surface



(1) Install a mounting strip

Mounting Hole Layout

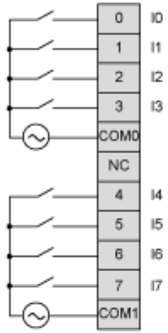


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## Digital Input Module (8-channel, 120 Vac)

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### Wiring Diagram



The COM0 and COM1 terminal are not connected internally.