

# Product data sheet

Specifications



## Discrete output module, Modicon TM3, 16 outputs transistor PNP (screw)

TM3DQ16T

### Main

|                           |  |
|---------------------------|--|
| Range of product          | Modicon TM3  |
| Product or component type | Discrete output module                                       |
| Range compatibility       | Modicon M241<br>Modicon M251<br>Modicon M221<br>Modicon M262 |
| Discrete output type      | Transistor   |
| Discrete output number    | 16   |
| Discrete output logic     | Positive logic (source)                                      |
| Discrete output voltage   | 24 V DC for transistor output                                |
| Discrete output current   | 500 mA for transistor output                                 |

### Complementary

|  |  |
|--|--|
| Discrete I/O number                    | 16   |
| Current consumption                    | 5 mA at 5 V DC via bus connector (at state off)<br>0 mA at 24 V DC via bus connector (at state off)<br>15 mA at 5 V DC via bus connector (at state on)<br>20 mA at 24 V DC via bus connector (at state on) |
| Response time                          | 450 µs (turn-on)<br>450 µs (turn-off)  |
| Maximum leakage current                | 0.1 mA for transistor output   |
| Maximum voltage drop                   | <0.4 V   |
| Maximum tungsten load                  | <3 W for transistor output   |
| Local signalling                       | 1 LED per channel (green) for output status  |
| Electrical connection                  | 10 x 1.5 mm² removable screw terminal block with pitch 3.81 mm adjustment for outputs  |
| Maximum cable distance between devices | Unshielded cable: <30 m for transistor output  |
| Insulation                             | Non-insulated between outputs<br>Between output and internal logic AC  |
| 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<br>plate or panel with fixing kit  |
| Height                                 | 90 mm  |
| Depth                                  | 84.6 mm  |

|                                       |  |
|---------------------------------------|--|
| Width                                 | 27.4 mm  |
| Net weight                            | 0.11 kg  |
| <b>Environment</b>                    |  |
| Standards                             | EN/IEC 61010-2-201<br>EN/IEC 61131-2   |
| Product certifications                | cULus<br>C-Tick  |
| Resistance to electrostatic discharge | 8 kV in air conforming to EN/IEC 61000-4-2<br>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<br>3 V/m 1.4 GHz...2 GHz conforming to EN/IEC 61000-4-3<br>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         | 1 kV for I/O conforming to EN/IEC 61000-4-4  |
| Surge withstand                       | 1 kV I/O common mode conforming to EN/IEC 61000-4-5 DC   |
| Resistance to conducted disturbances  | 10 V 0.15...80 MHz conforming to EN/IEC 61000-4-6<br>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 dBµV/m QP class A ( 10 m) at 30...230 MHz conforming to EN/IEC 55011<br>Radiated emissions - test level: 47 dBµV/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<br>-10...55 °C horizontal 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 at 5...8.4 Hz on DIN rail<br>3 gn at 8.4...150 Hz on DIN rail<br>3.5 mm at 5...8.4 Hz on panel<br>3 gn at 8.4...150 Hz on panel   |
| Shock resistance                      | 15 gn for 11 ms  |

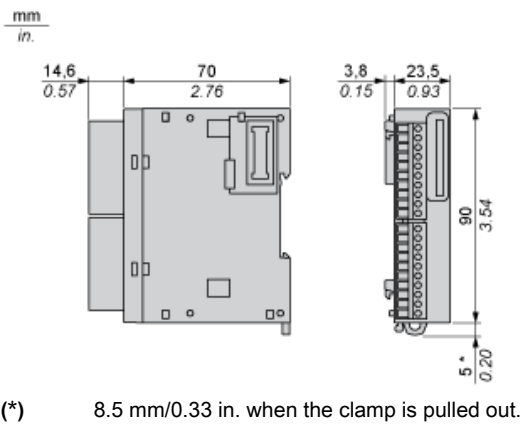
### Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 7.561 cm  |
| Package 1 Width              | 10.624 cm |
| Package 1 Length             | 12.982 cm |
| Package 1 Weight             | 220.0 g   |
| Unit Type of Package 2       | CAR       |
| Number of Units in Package 2 | 42        |
| Package 2 Height             | 29.4 cm   |
| Package 2 Width              | 40.0 cm   |
| Package 2 Length             | 56.8 cm   |
| Package 2 Weight             | 10.301 kg |

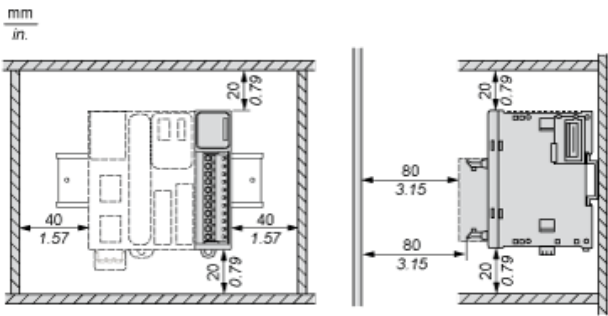
Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>   |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>  |
| RoHS exemption information | <a href="#">Yes</a>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| PVC free                   | Yes   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

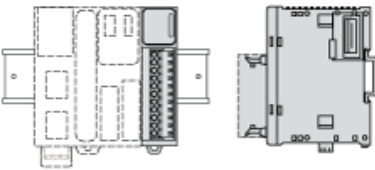
Dimensions



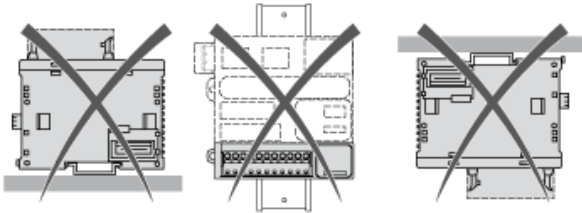
Spacing Requirements



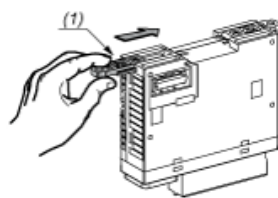
Mounting on a Rail



Incorrect Mounting

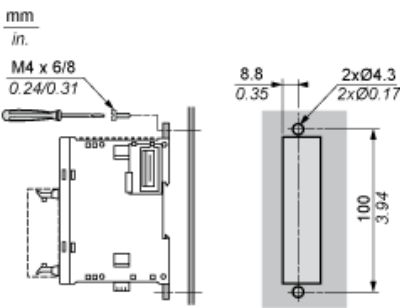


Mounting on a Panel Surface



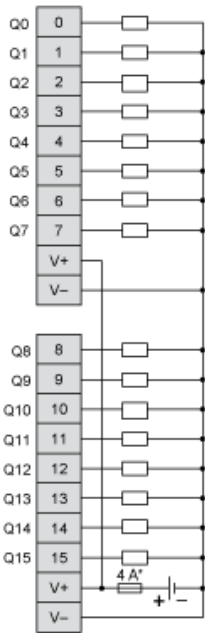
(1) Install a mounting strip

Mounting Hole Layout



Digital Transistor Output Module (16-Channel, Source)

Wiring Diagram



(\*) Type T fuse

Recommended replacement(s)