

# Product datasheet

Specifications



## Discrete output module. Modicon TM3. 16 outputs transistor NPN (spring)

TM3DQ16UG

Price: 5,179.71 ZAR

### 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     | Negative logic (sink)                                        |
| Discrete Output Voltage   | 24 V DC for transistor output                                |
| Discrete Output Current   | 300 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                                                                                                                                                                                                     |
| Local Signalling                       | 1 LED per channel (green) for output status                                                                                                                                                                |
| Electrical Connection                  | 10 x 1.5 mm <sup>2</sup> removable screw terminal block with pitch 3.81 mm adjustment for outputs<br>10 x 1.5 mm <sup>2</sup> removable spring terminal block with pitch 3.81 mm adjustment for outputs    |
| Maximum Cable Distance Between Devices | Unshielded cable: <30 m for transistor output                                                                                                                                                              |
| Insulation                             | Between output and internal logic at 500 V AC<br>Non-insulated between outputs                                                                                                                             |
| 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                                  | 81.3 mm                                                                                                                                                                                                    |
| Width                                  | 21.4 mm                                                                                                                                                                                                    |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|            |         |
|------------|---------|
| Net Weight | 0.76 kg |
|------------|---------|

## Environment

|                                       |                                                                                                                                                                                                                  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | IEC 61131-2                                                                                                                                                                                                      |
| Product Certifications                | cULus<br>CE<br>UKCA<br>RCM<br>EAC<br>cULus HazLoc                                                                                                                                                                |
| Resistance To Electrostatic Discharge | 8 kV in air conforming to IEC 61000-4-2<br>4 kV on contact conforming to IEC 61000-4-2                                                                                                                           |
| Resistance To Electromagnetic Fields  | 10 V/m 80 MHz...1 GHz conforming to IEC 61000-4-3<br>3 V/m 1.4 GHz...2 GHz conforming to IEC 61000-4-3<br>1 V/m 2 GHz...3 GHz conforming to IEC 61000-4-3                                                        |
| Resistance To Magnetic Fields         | 30 A/m 50/60 Hz conforming to IEC 61000-4-8                                                                                                                                                                      |
| Resistance To Fast Transients         | 1 kV for I/O conforming to IEC 61000-4-4                                                                                                                                                                         |
| Surge Withstand                       | 1 kV I/O common mode conforming to IEC 61000-4-5 DC                                                                                                                                                              |
| Resistance To Conducted Disturbances  | 10 V 0.15...80 MHz conforming to 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 IEC 55011<br>Radiated emissions - test level: 47 dBµV/m QP class A ( 10 m) at 230...1000 MHz conforming to 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             | 7.5 cm  |
| Package 1 Width              | 10.5 cm |
| Package 1 Length             | 12.5 cm |
| Package 1 Weight             | 245.0 g |
| Unit Type Of Package 2       | S02     |
| Number Of Units In Package 2 | 9       |
| Package 2 Height             | 15 cm   |

|                              |          |
|------------------------------|----------|
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 2.244 kg |
| Unit Type Of Package 3       | P12      |
| Number Of Units In Package 3 | 288      |
| Package 3 Height             | 80 cm    |
| Package 3 Width              | 105 cm   |
| Package 3 Length             | 125 cm   |
| Package 3 Weight             | 85.48 kg |

Sustainability



**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

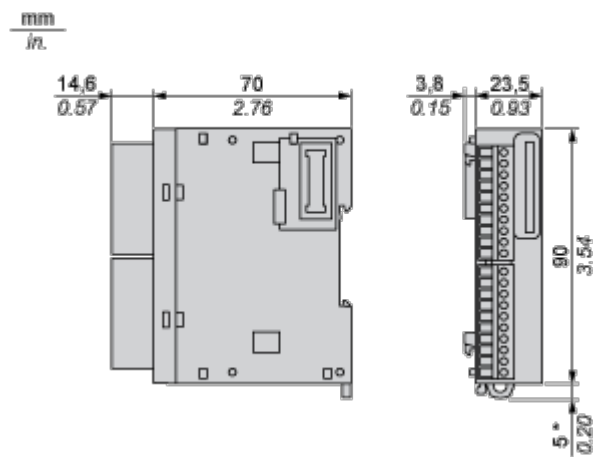
|   |                            |     |
|---|----------------------------|-----|
| ✓ | Reach Free Of Svhc         |     |
| ✓ | Toxic Heavy Metal Free     |     |
| ✓ | Mercury Free               |     |
| ✓ | Rohs Exemption Information | Yes |
| ✓ | Pvc Free                   |     |

## Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 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>                           |
| China Rohs Regulation    | <a href="#">China RoHS declaration</a>                                                                                      |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>                                                                               |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | <a href="#">End of Life Information</a>                                                                                     |

Dimensions Drawings

Dimensions

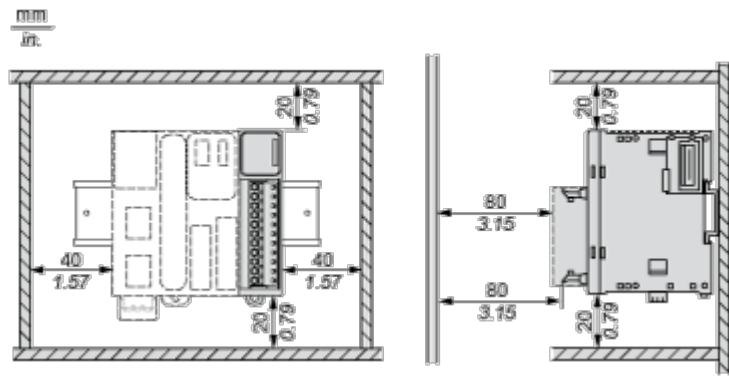


(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

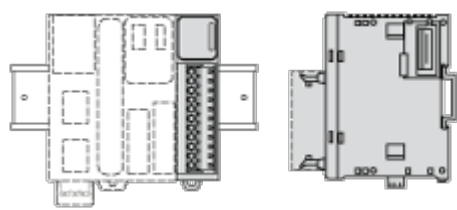
Spacing Requirements

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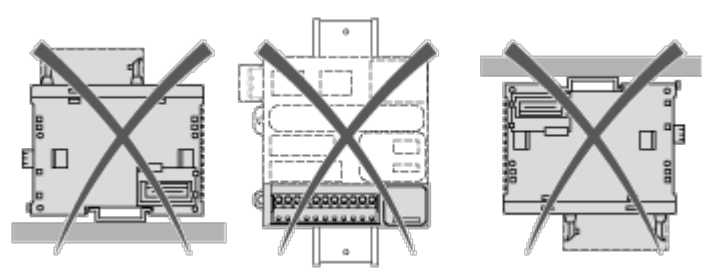


Mounting on a Rail

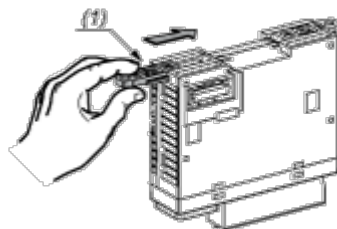
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Incorrect Mounting

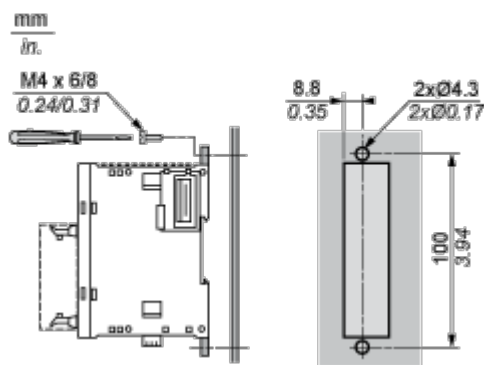


Mounting on a Panel Surface



- (1) Install a mounting strip

Mounting Hole Layout

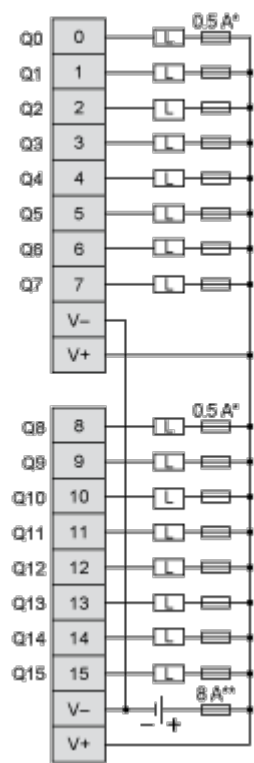




Connections and Schema

Digital Transistor Output Module (16-channel, Sink)

Wiring Diagram



(\*) Type T Fuse

(\*\*) Type F Fuse