# Product datasheet

Specifications

**Green Premium™**

## discrete output module, Modicon TM3, 32 outputs transistor NPN, HE10

TM3DQ32UK

## 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** | 32 |
| **Discrete Output Logic** | Negative logic (sink) |
| **Discrete Output Voltage** | 24 V DC for transistor output |
| **Discrete Output Current** | 100 mA for transistor output |

## Complementary

| | |
|---|---|
| **Discrete I/O Number** | 32 |
| **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>25 mA at 5 V DC via bus connector (at state on)<br>40 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** | <1.2 W for transistor output |
| **Local Signalling** | 1 LED per channel (green) for output status |
| **Electrical Connection** | HE-10 connectorfor outputs |
| **Maximum Cable Distance Between Devices** | Unshielded cable: <5 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** | 33.5 mm |
| **Net Weight** | 0.112 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 | 7.594 cm |
| Package 1 Width | 10.647 cm |
| Package 1 Length | 12.775 cm |
| Package 1 Weight | 220.0 g |
| Unit Type Of Package 2 | CAR |
| Number Of Units In Package 2 | 9 |
| Package 2 Height | 15.5 cm |
| Package 2 Width | 29.7 cm |
| Package 2 Length | 40.2 cm |

| | |
|---|---|
| **Package 2 Weight** | 2.411 kg |
| **Unit Type Of Package 3** | P12 |
| **Number Of Units In Package 3** | 288 |
| **Package 3 Height** | 75 cm |
| **Package 3 Width** | 120 cm |
| **Package 3 Length** | 80 cm |
| **Package 3 Weight** | 85 kg |

# Sustainability

**Green Premium^{TM} 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-$CO_2$ 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**                    REACh Declaration

**Eu Rohs Directive**                   Pro-active compliance (Product out of EU RoHS legal scope)

                                        EU RoHS Declaration

**China Rohs Regulation**               China RoHS declaration

**Environmental Disclosure**            Product Environmental Profile

**Weee**                                The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

**Circularity Profile**                 End of Life Information

# Product datasheet
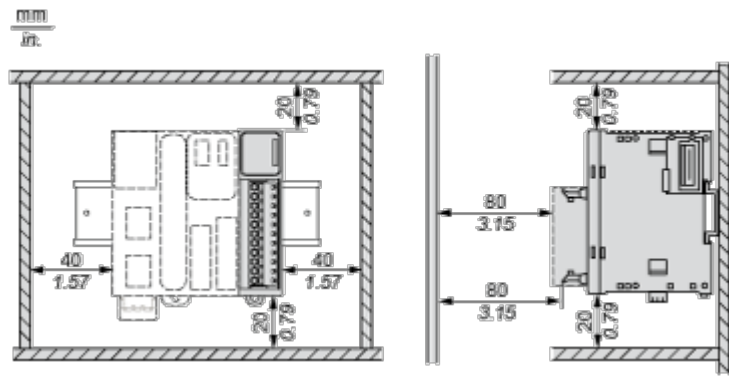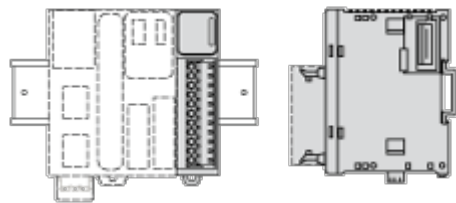
## TM3DQ32UK

Dimensions Drawings

**Dimensions**
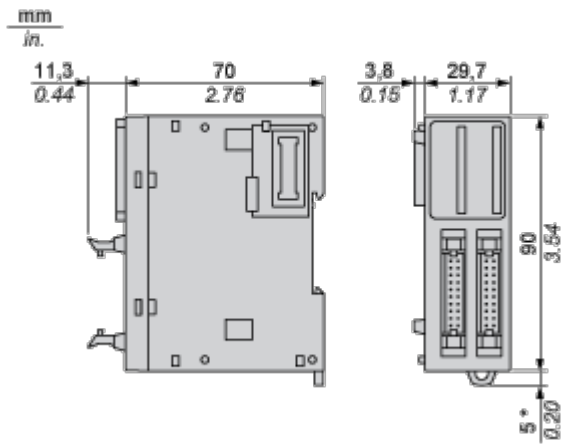


(*)    8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance
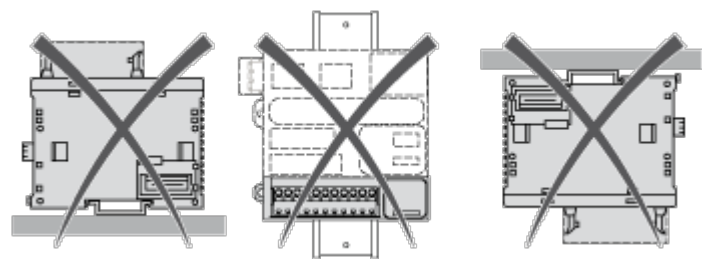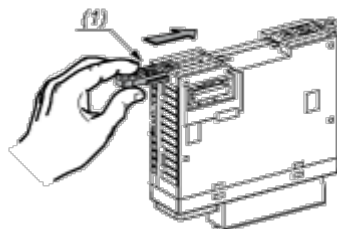
**Spacing Requirements**

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## Mounting on a Rail

## Incorrect Mounting

## Mounting on a Panel Surface



(1)     Install a mounting strip

## Mounting Hole Layout

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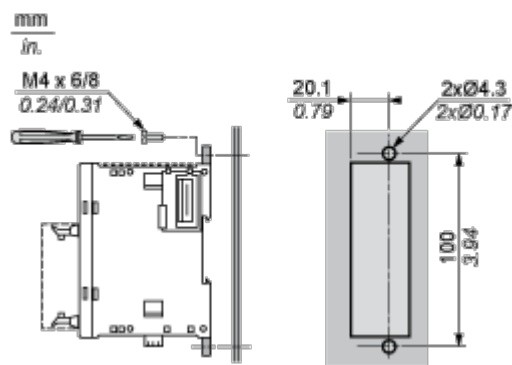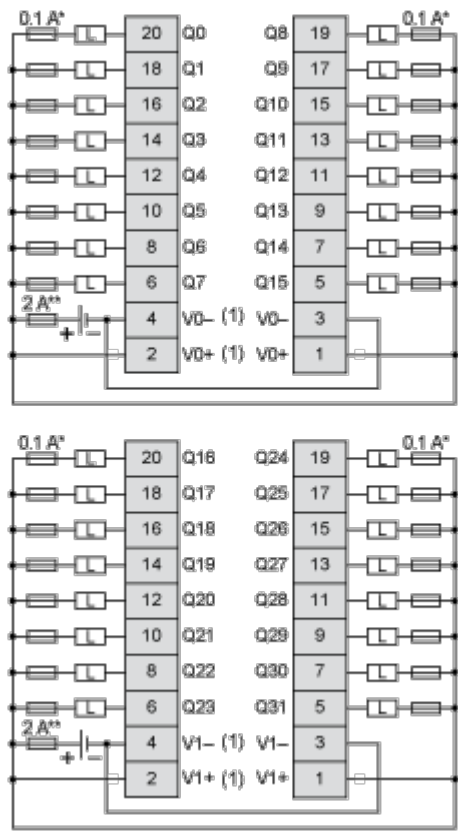
## Connections and Schema

**Digital Transistor Output Module (32-channel, Sink)**

**Wiring Diagram**



(\*)     Type T Fuse

(\*\*)     Type F Fuse

(1)     The V0+ terminals are connected internally.

The V0- terminals are connected internally.

The V1+ terminals are connected internally.

The V1- terminals are connected internally.

The V0+ and V1+ terminals are not connected internally.

The V0- and V1- terminals are not connected internally.