# Product datasheet

Specifications

Green Premium™

## Discrete I/O module, Modicon TM3, 32 IO (16 digital inputs, 16 digital outputs, screw)

TM3RDM32R

**EAN Code: 3606480696350**

Discontinued

## Main

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|---|---|
| **Range Of Product** | Modicon TM3 |
| **Product Or Component Type** | Discrete I/O module |
| **Range Compatibility** | Modicon Easy M200 |
| **Discrete Input Number** | 16 for input conforming to IEC 61131-2 Type 1 |
| **Discrete Input Logic** | Sink or source (positive/negative) |
| **Discrete Input Voltage** | 24 V |
| **Discrete Input Current** | 5 mA for input |
| **Discrete Output Type** | Relay normally open |
| **Discrete Output Number** | 16 |
| **Discrete Output Logic** | Positive or negative |
| **Discrete Output Voltage** | 24 V DC for relay output<br>240 V AC for relay output |
| **Discrete Output Current** | 2000 mA for relay output |

## Complementary

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|---|---|
| **Discrete I/O Number** | 32 |
| **Current Consumption** | 80 mA at 24 V DC via bus connector (at state on)<br>95 mA at 5 V DC via bus connector (at state on) |
| **Discrete Input Voltage Type** | DC |
| **Voltage State 1 Guaranteed** | 15...28.8 V for input |
| **Current State 1 Guaranteed** | >= 2.5 mA (input) |
| **Voltage State 0 Guaranteed** | 0...5 V for input |
| **Current State 0 Guaranteed** | <= 1 mA (input) |
| **Input Impedance** | 4.7 kOhm |
| **Response Time** | 4 ms (turn-on)<br>4 ms (turn-off) |
| **Maximum Current Per Output Common** | 4 A |
| **Mechanical Durability** | 20000000 cycles |
| **Minimum Load** | 10 mA at 5 V DC for relay output |
| **Local Signalling** | 1 LED per channel (green) for I/O state |

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

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|---|---|
| **Electrical Connection** | 11 x 1.5 mm² removable screw terminal block with pitch 3.81 mm adjustment for outputs<br>9 x 1.5 mm² removable screw terminal block with pitch 3.81 mm adjustment for inputs |
| **Maximum Cable Distance Between Devices** | Unshielded cable: <50 m for input<br>Unshielded cable: <150 m for output |
| **Insulation** | Between input and internal logic at 500 V AC<br>Non-insulated between inputs<br>Between input groups and output groups at 1500 V AC<br>Between open contact at 750 V AC<br>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** | 84.6 mm |
| **Width** | 51 mm |
| **Net Weight** | 0.208 kg |

# Environment

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|---|---|
| **Resistance To Electrostatic Discharge** | 8 kV in air conforming to IEC 61000-4-2<br>6 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 |
| **Resistance To Magnetic Fields** | 30 A/m 50/60 Hz conforming to IEC 61000-4-8 |
| **Resistance To Fast Transients** | 2 kV for relay output conforming to IEC 61000-4-4<br>1 kV for input conforming to IEC 61000-4-4 |
| **Surge Withstand** | 2 kV output common mode conforming to IEC 61000-4-5<br>1 kV input common mode conforming to IEC 61000-4-5 |
| **Resistance To Conducted Disturbances** | 10 V 0.15...80 MHz conforming to IEC 61000-4-6 |
| **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** | 0…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>1 gn at 8.4…150 Hz on DIN rail<br>3.5 mm at 5…8.7 Hz on panel<br>2 gn at 8.7…150 Hz on panel |
| **Shock Resistance** | 15 gn for 11 ms |

# Packing Units

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| **Unit Type Of Package 1** | PCE |

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| **Number Of Units In Package 1** | 1 |
| **Package 1 Height** | 12.4 cm |
| **Package 1 Width** | 7.2 cm |
| **Package 1 Length** | 10.3 cm |
| **Package 1 Weight** | 292 g |
| **Unit Type Of Package 2** | S03 |
| **Number Of Units In Package 2** | 26 |
| **Package 2 Height** | 30 cm |
| **Package 2 Width** | 30 cm |
| **Package 2 Length** | 40 cm |
| **Package 2 Weight** | 8092 g |
| **Unit Type Of Package 3** | P12 |
| **Number Of Units In Package 3** | 624 |
| **Package 3 Height** | 80 cm |
| **Package 3 Width** | 120 cm |
| **Package 3 Length** | 105 cm |
| **Package 3 Weight** | 203208 g |

## Contractual warranty

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| **Warranty** | 18 months |

## 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-$CO_2$ 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

Mercury Free

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| Rohs Exemption Information | Yes |

## Certifications & Standards

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| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Pro-active compliance (Product out of EU RoHS legal scope) |
| **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 |