# Product datasheet

Specifications

Green Premium™

## digital output module - 2O - 24V DC - 0,5A - 3 wires

TM5SDO2T

⚠ Discontinued on: 21 Jun 2022

⚠ To be end-of-service on: 1 Sept 2024

⚠ **Discontinued - Service only**

## Main

| | |
|---|---|
| **Range of product** | Modicon TM5 |
| **Product or component type** | Discrete output module |
| **Discrete output number** | 2 |
| **Discrete output type** | Transistor |

## Complementary

| | |
|---|---|
| **Range compatibility** | PacDrive LMC motion controller<br>Modicon LMC058<br>Modicon M258 |
| **Product compatibility** | PacDrive LMC Pro 2<br>PacDrive LMC Eco<br>Logic controller<br>PacDrive LMC Pro<br>Motion controller |
| **Output voltage** | 24 V DC |
| **Output voltage limits** | 20.4...28.8 V |
| **Discrete output logic** | Source |
| **Current per channel** | 0.5 A |
| **Maximum current per output common** | 1 A |
| **Colour** | White |
| **Peak output current** | 12 A |
| **Switching frequency** | <= 500 Hz resistive load |
| **Response time** | <= 300 µs from state 0 to state 1 for output<br><= 300 µs from state 1 to state 0 for output |
| **Maximum leakage current** | 5 µA when switched off |
| **Protection type** | Short-circuit protection<br>Reverse polarity protection<br>Overload protection |
| **Isolation** | 500 Vrms AC insulation between channel and bus<br>No insulation between channels |
| **Maximum voltage drop** | <0.3 V at 500 mA for output<br><2 V at 500 mA for sensor supply |
| **Maximum supply current for sensors** | 500 mA |
| **Current consumption** | 14 mA at 24 V DC input/output<br>26 mA at 5 V DC bus |
| **Maximum power dissipation in W** | 0.57 W |

| | |
|---|---|
| **Local signalling** | 1 LED green for power supply<br>1 LED red for power supply<br>2 LEDs yellow for output status |
| **Electrical connection** | 3 wires |
| **Marking** | CE |
| **Net weight** | 0.025 kg |

# Environment

| | |
|---|---|
| **Standards** | IEC 61131-2<br>CSA C22.2 No 142<br>CSA C22.2 No 213<br>UL 508 |
| **Product certifications** | C-Tick<br>CSA<br>cULus<br>GOST-R |
| **Ambient air temperature for operation** | -10…55 °C without derating (horizontal installation)<br>-10…60 °C with derating factor (horizontal installation)<br>-10…50 °C (vertical installation) |
| **Ambient air temperature for storage** | -40…70 °C |
| **Relative humidity** | 5…95 % without condensation |
| **IP degree of protection** | IP20 conforming to IEC 61131-2 |
| **Pollution degree** | 2 conforming to IEC 60664 |
| **Operating altitude** | 0...2000 m |
| **Storage altitude** | 0…3000 m |
| **Vibration resistance** | 1 gn at 8.4…150 Hz on DIN rail<br>3.5 mm at 5…8.4 Hz on DIN rail |
| **Shock resistance** | 15 gn for 11 ms |
| **Electromagnetic compatibility** | Electrostatic discharge immunity test, 4 kV on contact conforming to EN/IEC 61000-4-2<br>Electrostatic discharge immunity test, 8 kV in air conforming to EN/IEC 61000-4-2<br>Susceptibility to electromagnetic fields, 1 V/m 2...2.7 GHz conforming to EN/IEC 61000-4-3<br>Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz conforming to EN/IEC 61000-4-3<br>Electrical fast transient/burst immunity test, 1 kV I/O conforming to EN/IEC 61000-4-4<br>Electrical fast transient/burst immunity test, 1 kV shielded cable conforming to EN/IEC 61000-4-4<br>Electrical fast transient/burst immunity test, 2 kV power lines conforming to EN/IEC 61000-4-4<br>1.2/50 μs shock waves immunity test, 0.5 kV differential mode conforming to EN/IEC 61000-4-5<br>1.2/50 μs shock waves immunity test, 1 kV common mode conforming to EN/IEC 61000-4-5<br>Conducted RF disturbances conforming to EN/IEC 61000-4-6<br>Conducted and radiated emissions conforming to CISPR 11 |

# Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 2.000 cm |
| **Package 1 Width** | 6.000 cm |
| **Package 1 Length** | 11.000 cm |
| **Package 1 Weight** | 38.0 g |

# Contractual warranty

**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

✅ 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) |
| **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 |

# TM5SDO2T

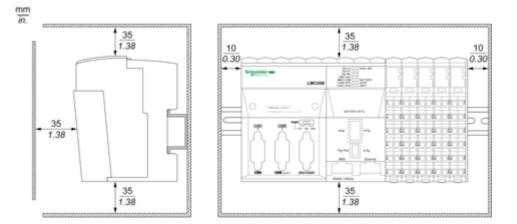Dimensions Drawings

**TM5 Slice**

**Dimensions**

Mounting and Clearance
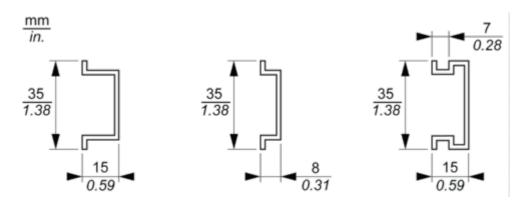
**TM5 System**

**Spacing Requirements**



**Mounting on a DIN Rail**

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Connections and Schema
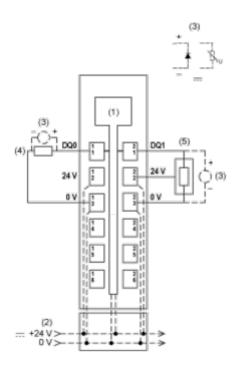
**TM5 System Wiring Recommendations**

**Wire Sizes to Use with the Removable Spring Terminal Blocks**

| mm / in. | 9 / 0.35 | | | | |
|---|---|---|---|---|---|
| mm² | 0,08…2,5 | 0,25…2,5 | 0,25…1,5 | 2 x 0,25…2 x 0,75 |
| AWG | 28…14 | 24…14 | 24…16 | 2 x 24…2 x 18 |

Electronic Module 2DO 24 Vdc Tr 0.5 A 3 Wires

**Wiring Diagram**



**(1)** Internal electronics
**(2)** 24 Vdc I/O power segment integrated into the bus bases
**(3)** Inductive load protection
**(4)** 2-wire load
**(5)** 3-wire load