Product data sheet

Characteristics

TM5SDO12T
digital output module - 12O - 24V DC - 0,5A - 1 wire

Product availability: Stock - Normally stocked in distribution facility

Price*: 275.00 USD

Main
Range of product Modicon TM5
Product or component type Discrete output module
Discrete output number 12
Discrete output type Transistor

Complementary
Range compatibility Modicon LMC058
Modicon M258
PacDrive LMC motion controller
Product compatibility Motion controller
Logic controller
PacDrive LMC Pro
PacDrive LMC Eco
PacDrive LMC Pro 2
Output voltage 24 V DC
Output voltage limits 20.4...28.8 V
Discrete output logic Source
Current per channel 0.5 A
Current per output common <= 6 A
Color White
Peak output current <= 12 A
Switching frequency <= 500 Hz resistive load
Response time <= 300 µs from state 0 to state 1 output
<= 300 µs from state 1 to state 0 output
Leakage current 5 µA when switched off
Protection type Overload protection
Reverse polarity protection
Short-circuit protection
Isolation No insulation between channels

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.
500 Vrms AC insulation between channel and bus

Voltage drop
<= 0.3 V at 500 mA for output
<= 2 V at 500 mA for sensor supply

Supply current for sensors 500 mA

Current consumption
52 mA 5 V DC bus
48 mA 24 V DC input/output

Power dissipation in W <= 2.04 W

Local signalling
1 LED green power supply
1 LED red power supply
12 LEDs yellow output status

Electrical connection 1 wire

Marking CE

Product weight 0.06 lb(US) (0.025 kg)

Environment

Standards
CSA C22.2 No 142
IEC 61131-2
UL 508
CSA C22.2 No 213

Product certifications
CSA
C-Tick
cULus
GOST-R

Ambient air temperature for operation
14...140 °F (-10...60 °C) with derating factor horizontal installation
14...131 °F (-10...55 °C) without derating factor horizontal installation
14...122 °F (-10...50 °C) vertical installation

Ambient air temperature for storage
-40...158 °F (-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...6561.68 ft (0...2000 m)

Storage altitude
0...9842.52 ft (0...3000 m)

Vibration resistance
1 gn (f = 8.4...150 Hz) DIN rail
3.5 mm (f = 5...8.4 Hz) DIN rail

Shock resistance
15 gn 11 ms

Electromagnetic compatibility
Conducted and radiated emissions conforming to CISPR 11
Conducted RF disturbances conforming to EN/IEC 61000-4-6
Electrostatic discharge immunity test (4 kV - on contact) conforming to EN/IEC 61000-4-2
Electrostatic discharge immunity test (8 kV - in air) conforming to EN/IEC 61000-4-2
Susceptibility to electromagnetic fields (1 V/m - 2...2.7 GHz) conforming to EN/IEC 61000-4-3
Susceptibility to electromagnetic fields (10 V/m - 80...2000 MHz) conforming to EN/IEC 61000-4-3
Electrical fast transient/burst immunity test (1 kV - I/O) conforming to EN/IEC 61000-4-4
Electrical fast transient/burst immunity test (1 kV - shielded cable) conforming to EN/IEC 61000-4-4
Electrical fast transient/burst immunity test (2 kV - power lines) conforming to EN/IEC 61000-4-4
1.2/50 µs shock waves immunity test (0.5 kV - differential mode) conforming to EN/IEC 61000-4-5
1.2/50 µs shock waves immunity test (1 kV - common mode) conforming to EN/IEC 61000-4-5

Ordering and shipping details

Category 22532 - M258 PLC
Discount Schedule PC12
GTIN 00785901821939
Nbr. of units in pkg. 1
Package weight(Lbs) 8.99999999999997E-2
Returnability Y
Country of origin AT

Offer Sustainability

Sustainable offer status Green Premium product
RoHS (date code: YYWW) Compliant - since 1039 - Schneider Electric declaration of conformity
### REACh
Reference not containing SVHC above the threshold
Reference not containing SVHC above the threshold

### Product environmental profile
Available

### Product end of life instructions
Available

### California proposition 65
WARNING: This product can expose you to chemicals including:
- Substance 1
  Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
- More information
  For more information go to www.p65warnings.ca.gov

### Contractual warranty

<table>
<thead>
<tr>
<th>Warranty period</th>
<th>18 months</th>
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TM5 Slice

Dimensions

[Diagram showing dimensions in millimeters]
TM5 System

Spacing Requirements

Mounting on a DIN Rail
### TM5 System Wiring Recommendations

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

<table>
<thead>
<tr>
<th>mm²</th>
<th>0.05...2.5</th>
<th>0.25...2.5</th>
<th>0.25...1.5</th>
<th>2 x 0.25...2 x 0.75</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWC</td>
<td>26...14</td>
<td>24...14</td>
<td>24...13</td>
<td>2 x 24...2 x 10</td>
</tr>
</tbody>
</table>
Electronic Module 12DO 24 Vdc Tr 0.5 A 1 Wire

Wiring Diagrams

(1) Internal electronics
(2) 24 Vdc I/O power segment integrated into the bus bases
(3) Inductive load protection
(4) 2-wire load
(5) 0 Vdc I/O power segment by external connection
To connect 2-wire devices, you can add a TM5SPDG12F Common Distribution module:

(1) Internal electronics
(2) 24 Vdc I/O power segment integrated into the bus bases
(3) 2-wire load
(4) Inductive load protection
(5) Integrated fuse type T slow-blow 6.3 A 250 V exchangeable