

# Product data sheet

Specifications



## Safety dc discrete output module, Modicon TM5, digital 4O, 24V 2 A

TM5SDO4TAFS

### Main

Range of product	Modicon TM5
Product or component type	Safety dc discrete output module
Discrete output number	4
Discrete output type	Solid state

### Complementary

Range compatibility	PacDrive LMC motion controller
Product compatibility	PacDrive LMC Eco PacDrive LMC Pro 2 PacDrive LMC Pro
Output voltage	24 V DC
Output voltage limits	20.4...28.8 V
Discrete output logic	Source
Current per channel	2 A
Maximum current per output common	5 A
Colour	Red
Peak output current	12 A
Switching frequency	<= 500 Hz resistive load
Maximum leakage current	10 µA when switched off
Protection type	Short-circuit protection Overload protection
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Maximum power consumption in W	0.25 W for bus 1.3 W for internal
Local signalling	1 LED green for power supply 1 LED red for power supply 2 LEDs red for safety status 4 LEDs red/orange for output status
Electrical connection	2 wires
Marking	CE
Safety level	SIL 3 conforming to IEC 61508 SIL 3 conforming to IEC 62061 PL = e conforming to EN 13849-1

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

<b>Safety reliability data</b>	MTTFd > 100 years PFD < 1E-5 PFH < 1E-9
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<b>Net weight</b>	0.025 kg
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## Environment

<b>Standards</b>	UL 508 IEC 61131-2 IEC 62061 EN 13849-1 CSA C22.2 No 142 IEC 61508
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<b>Product certifications</b>	CSA cULus GOST-R
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<b>Ambient air temperature for operation</b>	-10...50 °C (vertical installation) -10...55 °C (horizontal installation)
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<b>Ambient air temperature for storage</b>	-40...70 °C
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<b>Relative humidity</b>	5...95 % without condensation
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<b>IP degree of protection</b>	IP20 conforming to EN 60529
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<b>Pollution degree</b>	2 conforming to IEC 60664
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<b>Operating altitude</b>	0...2000 m
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<b>Storage altitude</b>	0...3000 m
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<b>Vibration resistance</b>	1 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on DIN rail
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<b>Shock resistance</b>	15 gn for 11 ms
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<b>Electromagnetic compatibility</b>	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, 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 Conducted RF disturbances conforming to EN/IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11
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## Packing Units

<b>Unit Type of Package 1</b>	PCE
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<b>Number of Units in Package 1</b>	1
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<b>Package 1 Weight</b>	74.0 g
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<b>Package 1 Height</b>	3 cm
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<b>Package 1 width</b>	6 cm
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<b>Package 1 Length</b>	10.5 cm
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## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
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<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
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<b>REACH free of SVHC</b>	Yes
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<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
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<b>Toxic heavy metal free</b>	Yes
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<b>Mercury free</b>	Yes
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<b>RoHS exemption information</b>	<a href="#">Yes</a>
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<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

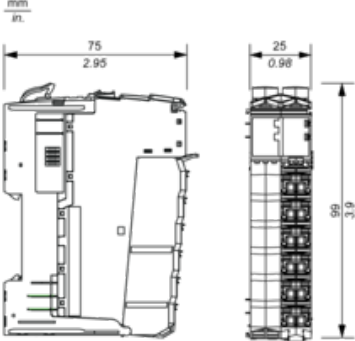
## Contractual warranty

<b>Warranty</b>	18 months
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**TM5 Slice**

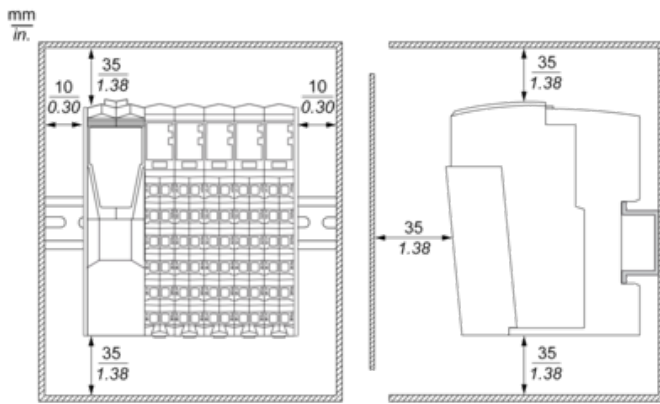
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**Dimensions**

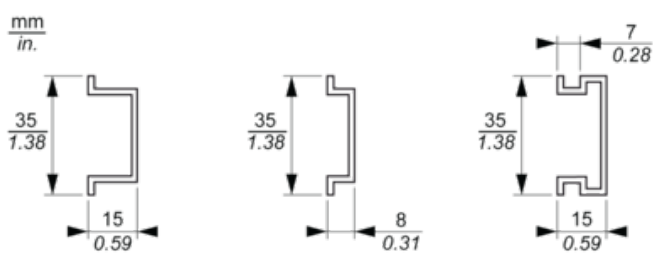


TM5 Safety System

Spacing Requirements



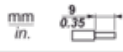




Mounting on a DIN Rail



**TM5 System Wiring Recommendations**

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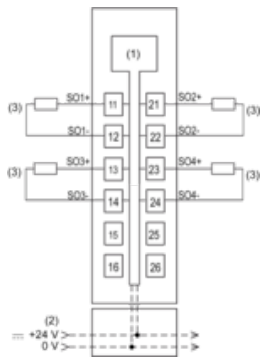
**Wire Sizes to Use with the Removable Spring Terminal Blocks**

				
mm <sup>2</sup>	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 4DO 24 Vdc Tr 2 A 2 Wires

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### Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) Actuator 24 Vdc, max. 2.0A, residual current 5.0A