

# Product data sheet

Specifications



## Discrete output module, Modicon TM5, digital 8O, 24 V DC, 2 A, 1 wire

TM5SDO8TA

### Main

**Range of product** Modicon TM5

**Product or component type** Discrete output module

**Discrete output number** 8

**Discrete output type** Transistor

### Complementary

**Range compatibility** Modicon M258  
PacDrive LMC motion controller  
Modicon LMC058

**Product compatibility** Motion controller  
PacDrive LMC Pro  
PacDrive LMC Pro 2  
Logic controller  
PacDrive LMC Eco

**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** 8 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  
<= 300 µs from state 1 to state 0 for output

**Maximum leakage current** 5 µA when switched off

**Protection type** Short-circuit protection  
Reverse polarity protection  
Overload protection

**Isolation** No insulation between channels  
500 Vrms AC insulation between channel and bus

**Current consumption** 0 mA at 24 V DC input/output  
44 mA at 5 V DC bus

**Maximum power dissipation in W** 1.5 W

**Local signalling** 1 LED green for power supply  
1 LED red for power supply

8 LEDs yellow for output status

<b>Electrical connection</b>	1 wire
<b>Marking</b>	CE
<b>Net weight</b>	0.025 kg

## Environment

<b>Standards</b>	IEC 61131-2 CSA C22.2 No 142 CSA C22.2 No 213 UL 508
<b>Product certifications</b>	cULus CSA C-Tick GOST-R
<b>Ambient air temperature for operation</b>	-10...55 °C without derating (horizontal installation) -10...60 °C with derating factor (horizontal installation) -10...50 °C (vertical installation)
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Relative humidity</b>	5...95 % without condensation
<b>IP degree of protection</b>	IP20 conforming to IEC 61131-2
<b>Pollution degree</b>	2 conforming to IEC 60664
<b>Operating altitude</b>	0...2000 m
<b>Storage altitude</b>	0...3000 m
<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
<b>Shock resistance</b>	15 gn for 11 ms
<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, 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 Conducted RF disturbances conforming to EN/IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	0.6 cm
<b>Package 1 Width</b>	2.0 cm
<b>Package 1 Length</b>	11.0 cm
<b>Package 1 Weight</b>	40.0 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	97
<b>Package 2 Height</b>	15.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	4.18 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
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<b>REACh Regulation</b>	<a href="#">REACh Declaration</a>
<b>REACh free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</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="#">www.P65Warnings.ca.gov</a>

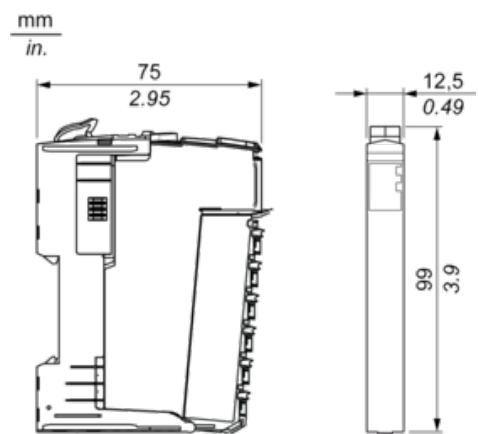
## Contractual warranty

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

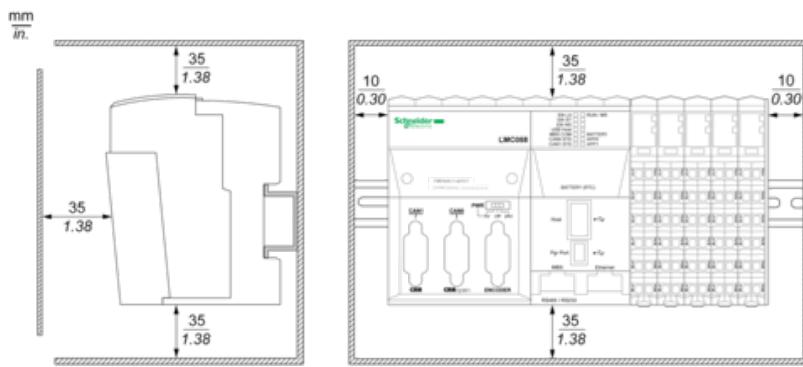
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#### Dimensions

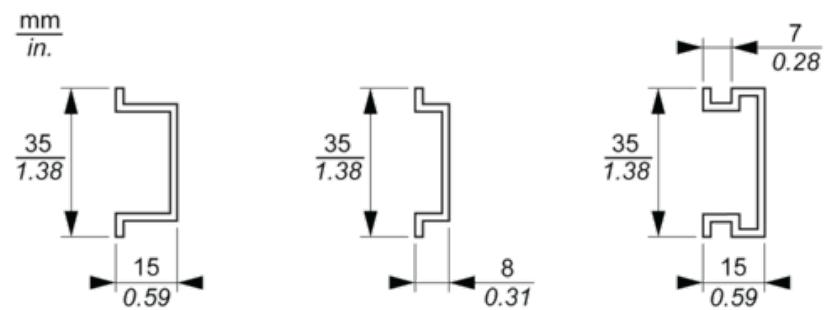


### TM5 System

#### Spacing Requirements



#### Mounting on a DIN Rail

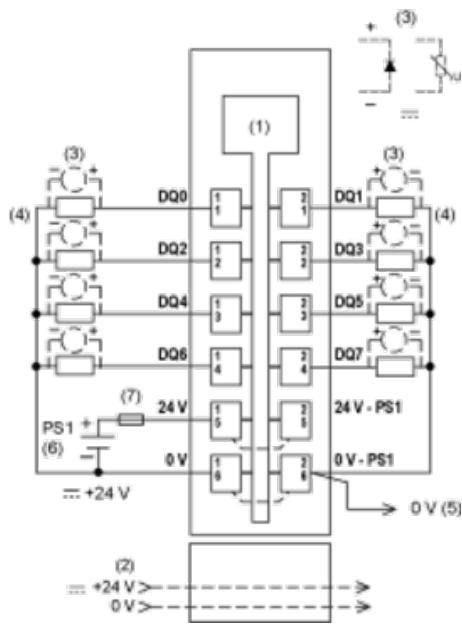


**TM5 System Wiring Recommendations****Wire Sizes to Use with the Removable Spring Terminal Blocks**

mm in.	9 0,35				
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 8DO 24 Vdc Tr 2 A 1 Wire

## 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) 0 Vdc I/O power segment by external connection
- (6) PS1: External isolated SELV power supply 24 Vdc limited to 200 VA for UL 508 conformance, or limited to 150 VA for CSA 22.2, N° 142 conformance
- (7) External fuse, Type T slow-blow 8 A max., 250 V

## Recommended replacement(s)