

# 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
Electrical connection	1 wire
Marking	CE
Net weight	0.025 kg

## Environment

Standards	IEC 61131-2 CSA C22.2 No 142 CSA C22.2 No 213 UL 508
Product certifications	cULus CSA C-Tick GOST-R
Ambient air temperature for operation	-10...55 °C without derating (horizontal installation) -10...60 °C with derating factor (horizontal installation) -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 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 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

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

## Offer Sustainability

Sustainable offer status	Green Premium product
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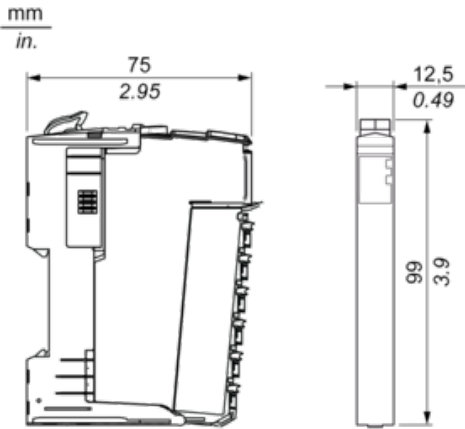
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	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

Warranty	18 months
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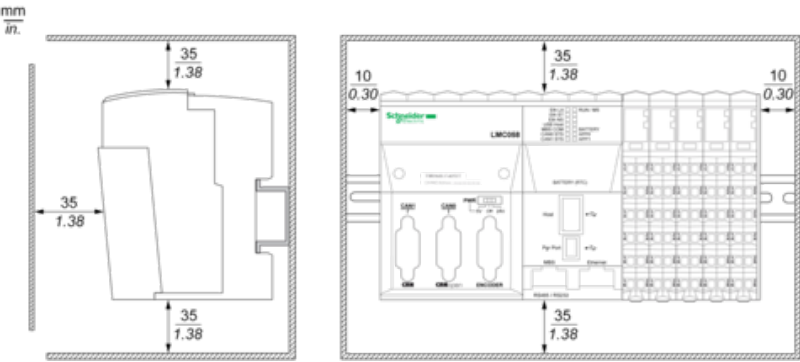
TM5 Slice

Dimensions

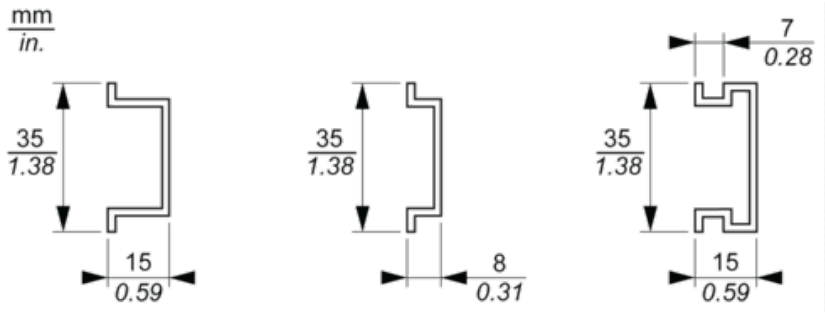


TM5 System

Spacing Requirements



Mounting on a DIN Rail



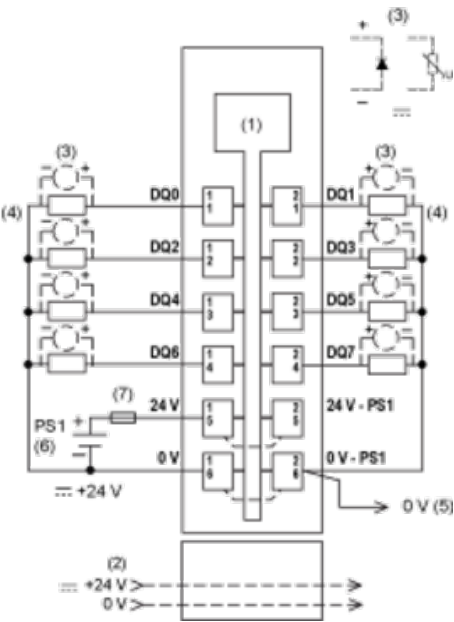
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

<div><div>mm</div><div>in.</div></div> <div><div>9</div><div>0.35</div></div> <div></div>				
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)