TM5SDO12T

Green Premium™ Product

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 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

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|	UL 508
	CSA C22.2 No 213
product certifications	CSA
	C-Tick
	CULus
	GOST-R
ambient air temperature for operation	14...122 °F (-10...50 °C) vertical installation
	14...140 °F (-10...60 °C) with derating factor horizontal installation
	14...131 °F (-10...55 °C) without derating factor horizontal 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

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 1039 - Schneider Electric declaration of conformity	Compliant - since 1039 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available
WARNING: This product can expose you to chemicals including:	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.	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 www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

Contractual warranty

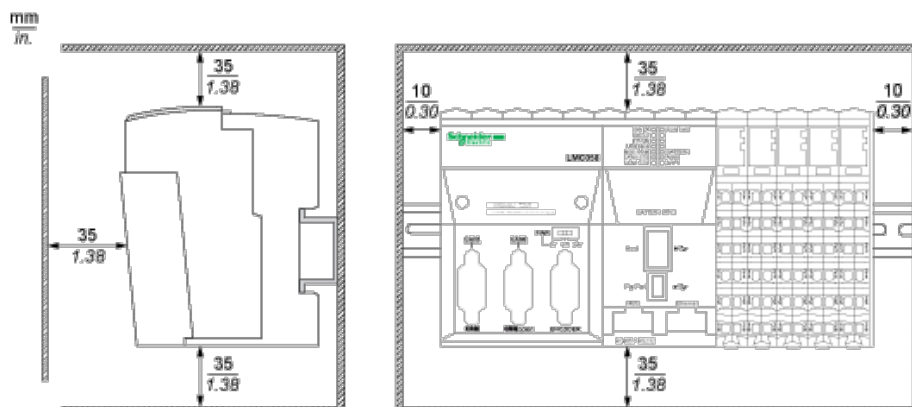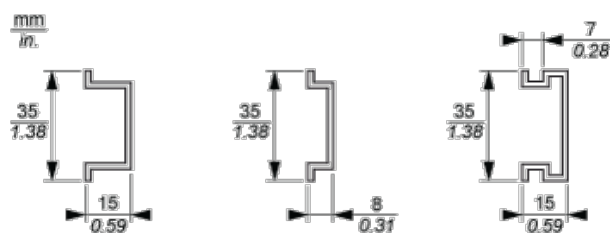| Warranty period	18 months

TM5 Slice

Dimensions
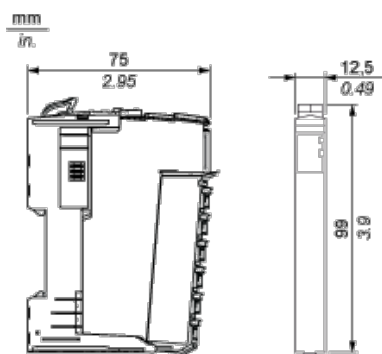
TM5 System

Spacing Requirements

Mounting on a DIN Rail

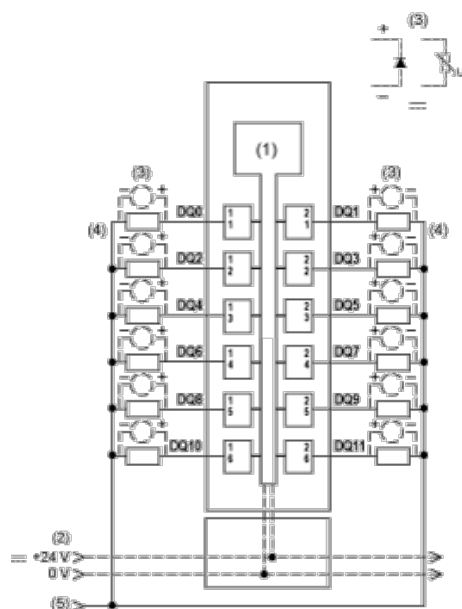## TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm/in.				
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 12DO 24 Vdc Tr 0.5 A 1 Wire

Wiring Diagrams

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(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:
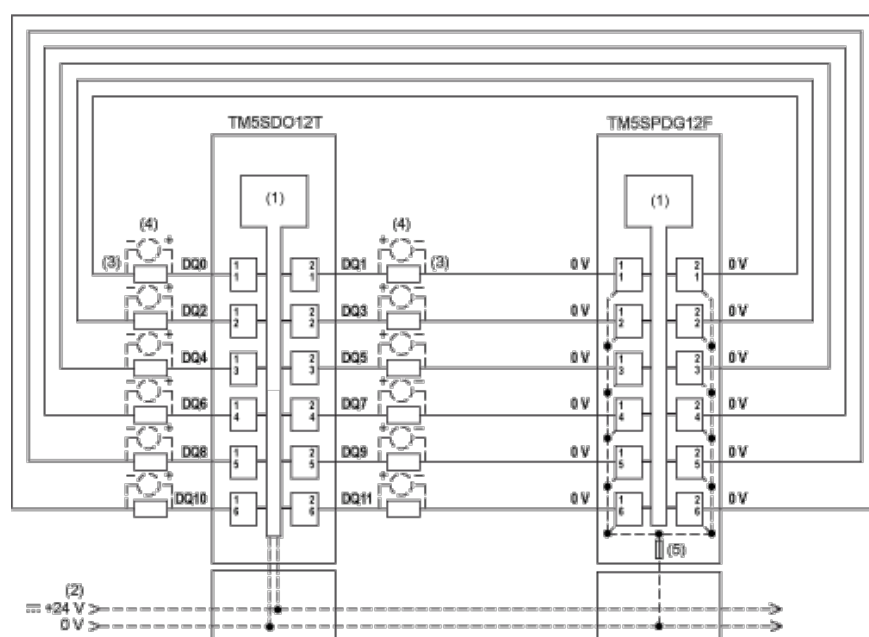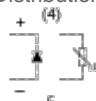
(1) Internal electronics

(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