

TM5SDO12TK

Composition kit of I/O(TM5SDO12T) + term.
block(TM5ACTB12) + bus base(TM5ACBM11)



Main

Range of product	Modicon TM5
Product or component type	Discrete output module
Discrete output number	12
Discrete output type	Transistor
Output voltage	24 V DC

Complementary

Device composition	Bus sub-base TM5ACBM11 Terminal block TM5ACTB12 I/O module TM5SDO12T
Range compatibility	Modicon M258 Modicon LMC058
Product compatibility	Logic controller Motion controller
Output voltage limits	20.4...28.8 V
Discrete output logic	Source
Current per channel	0.5 A
Maximum current per output common	6 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
Short-circuit protection	With
Overload protection	With
Reverse polarity protection	With
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Maximum voltage drop	<0.3 V at 500 mA for output <2 V at 500 mA for sensor supply
Maximum supply current for sensors	500 mA
Current consumption	48 mA at 5 V DC bus 52 mA at 24 V DC input/output
Maximum power dissipation in W	2.04 W
Local signalling	1 LED green for power supply 1 LED red for power supply 12 LEDs yellow for output status
Electrical connection	1 wire
Marking	CE
Net weight	0.065 kg

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Environment

Standards	CSA C22.2 No 213 UL 508 CSA C22.2 No 142 IEC 61131-2
Product certifications	CULus C-Tick CSA GOST-R
Ambient air temperature for operation	0...55 °C without derating (horizontal installation) 0...60 °C with derating factor (horizontal installation) 0...50 °C (vertical installation)
Ambient air temperature for storage	-25...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
Resistance to electrostatic discharge	4 kV on contact conforming to EN/IEC 61000-4-2 8 kV in air conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	1 V/M 2...2.7 GHz conforming to EN/IEC 61000-4-3 10 V/m 80...2000 MHz conforming to EN/IEC 61000-4-3
Resistance to fast transients	1 kV (I/O) conforming to EN/IEC 61000-4-4 1 kV (shielded cable) conforming to EN/IEC 61000-4-4 2 kV (power lines) conforming to EN/IEC 61000-4-4
Surge withstand	0.5 kV differential mode conforming to EN/IEC 61000-4-5 1 kV common mode conforming to EN/IEC 61000-4-5
Electromagnetic compatibility	EN/IEC 61000-4-6
Disturbance radiated/conducted	CISPR 11

Packing Units

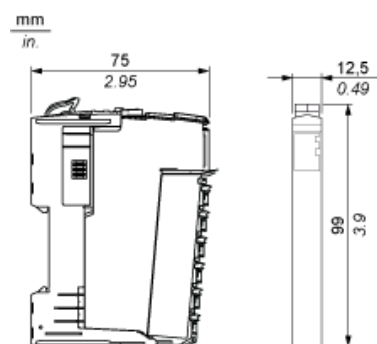
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	117 g
Package 1 Height	7 cm
Package 1 width	9 cm
Package 1 Length	11 cm
Unit Type of Package 2	S03
Number of Units in Package 2	36
Package 2 Weight	4.612 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Contractual warranty

Warranty	18 months
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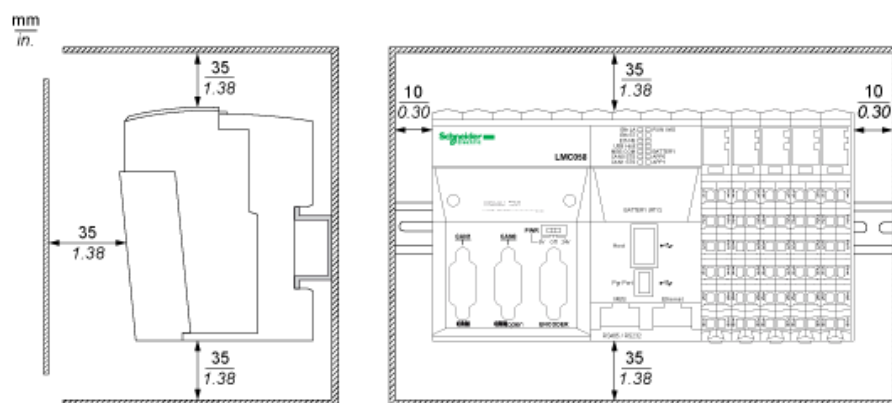
TM5 Slice

Dimensions

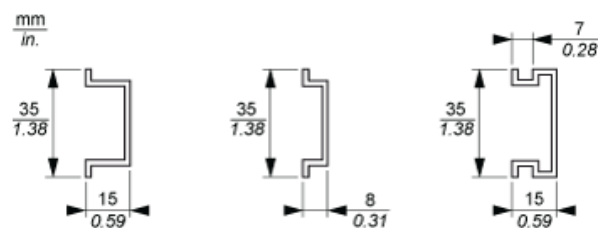


TM5 System

Spacing Requirements







Mounting on a DIN Rail



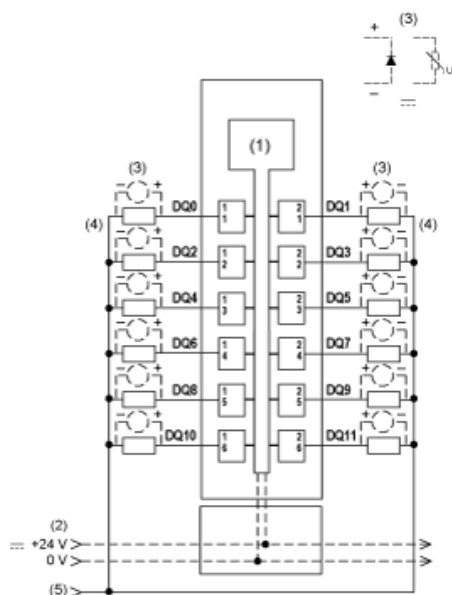
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.				
mm ²	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

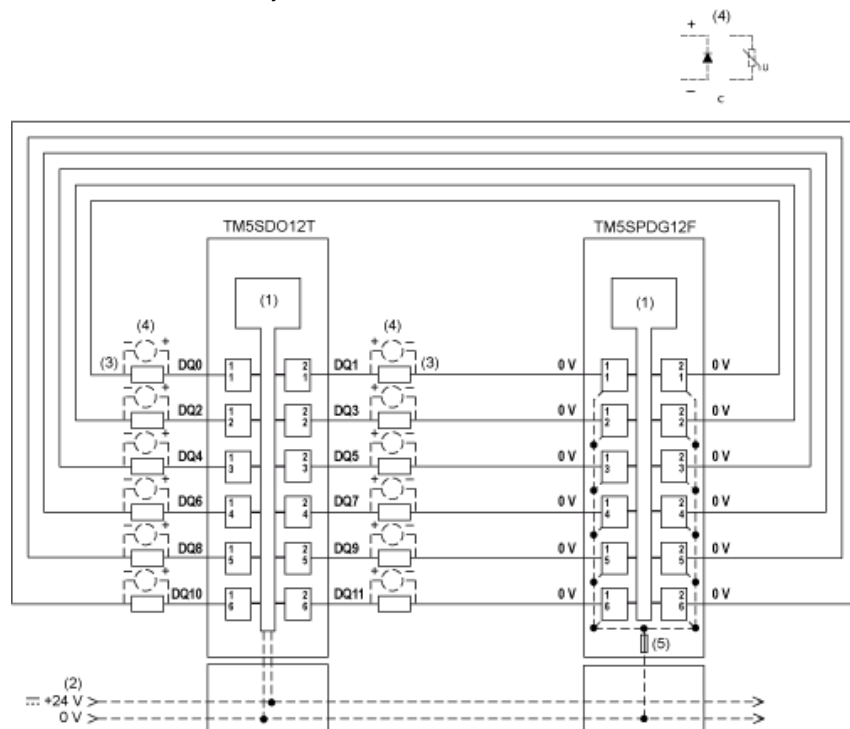
Electronic Module 12DO 24 Vdc Tr 0.5 A 1 Wire

Wiring Diagrams



- (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