



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
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
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 for power supply 1 LED red for power supply 12 LEDs yellow for output status
Electrical connection	1 wire
Marking	CE
Product weight	0.025 kg

Environment

standards	CSA C22.2 No 142 IEC 61131-2
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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.

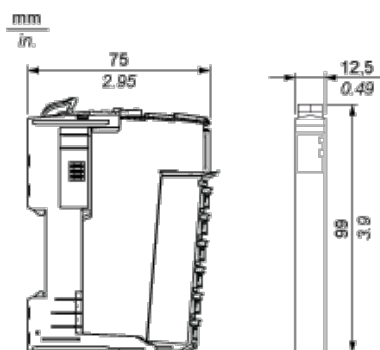
product certifications	CSA C-Tick CULus GOST-R
ambient air temperature for operation	-10...50 °C vertical installation -10...60 °C with derating factor horizontal installation -10...55 °C without derating factor horizontal installation
ambient air temperature for storage	-40...70 °C
relative humidity	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 (f = 8.4...150 Hz) DIN rail 3.5 mm (f = 5...8.4 Hz) DIN rail
shock resistance	15 gn for 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

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1039 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

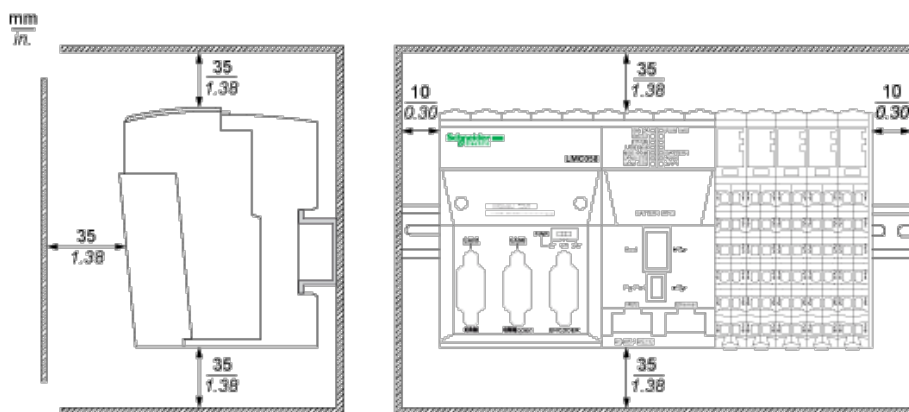
TM5 Slice

Dimensions

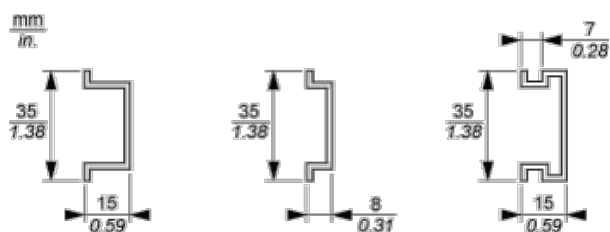


TM5 System

Spacing Requirements



Mounting on a DIN Rail



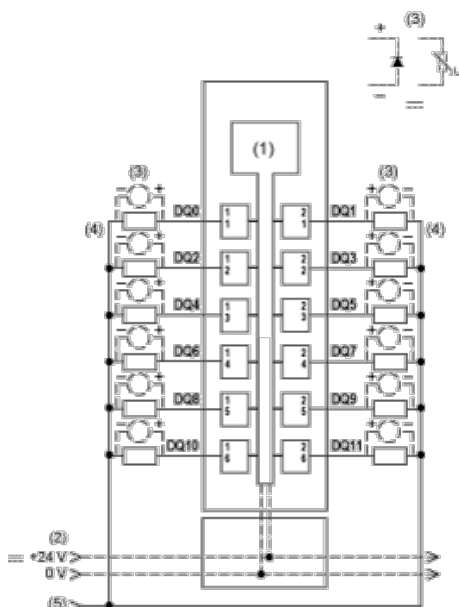
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.	9 0.35				
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

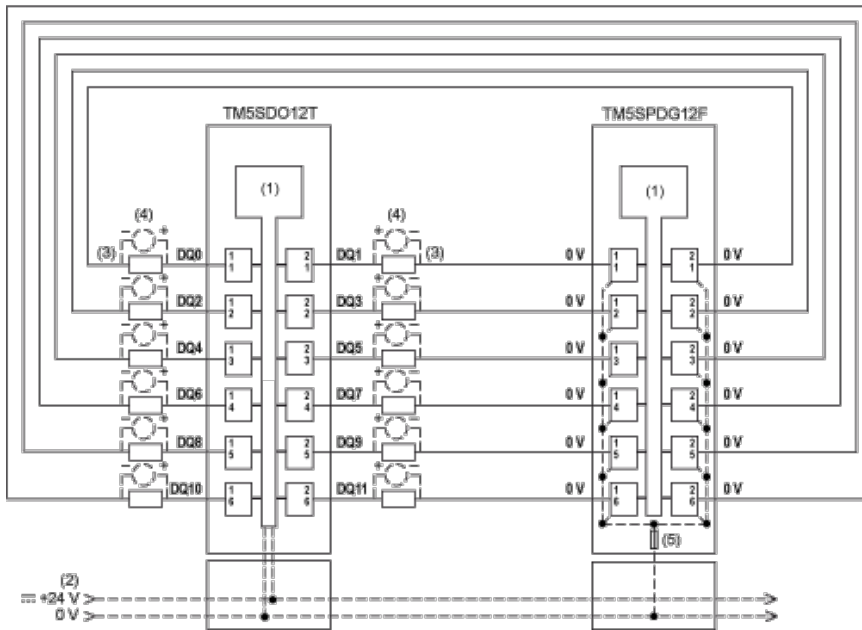
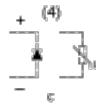
Electronic Module 12DO 24 Vdc Tr 0.5 A 1 Wire

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