



Main

Range of product	Modicon TM5
Product or component type	Discrete I/O module
Discrete input number	8
Discrete input voltage	24 V
Discrete output number	4
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
Discrete input voltage type	DC
Input voltage limits	20.4...28.8 V
Discrete input logic	Sink
Discrete input current	3.75 mA
Input impedance	6.4 kOhm
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	<= 2 A
Colour	White
Peak output current	<= 12 A
Switching frequency	<= 500 Hz resistive load
Voltage state 0 guaranteed	<= 5 V
Voltage state 1 guaranteed	>= 15 V
Input filtering	<= 100 ms hardware 0...25 ms configurable by software
Response time	<= 300 µs from state 1 to state 0 for output <= 300 µs from state 0 to state 1 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
Current consumption	21 mA 24 V DC all inputs On 42 mA 5 V DC bus
Power dissipation in W	<= 1.52 W

Local signalling	8 LEDs green for input status 4 LEDs yellow for output status 1 LED red for power supply 1 LED green for power supply
Electrical connection	1 wire
Marking	CE
Product weight	0.025 kg

Environment

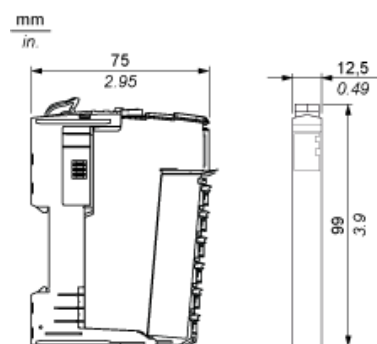
Standards	CSA C22.2 No 142 IEC 61131-2 UL 508 CSA C22.2 No 213
Product certifications	CSA C-Tick CULus GOST-R
Ambient air temperature for operation	-10...50 °C vertical installation -10...60 °C with derating factor horizontal installation -10...55 °C without derating factor horizontal installation
Ambient 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	3.5 mm (f = 5...8.4 Hz) DIN rail 1 gn (f = 8.4...150 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 1.2/50 µs shock waves immunity test (1 kV - common mode) conforming to EN/IEC 61000-4-5 1.2/50 µs shock waves immunity test (0.5 kV - differential mode) conforming to EN/IEC 61000-4-5 Electrical fast transient/burst immunity test (2 kV - power lines) 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 (1 kV - I/O) conforming to EN/IEC 61000-4-4 Susceptibility to electromagnetic fields (10 V/m - 80...2000 MHz) conforming to EN/IEC 61000-4-3 Susceptibility to electromagnetic fields (1 V/m - 2...2.7 GHz) conforming to EN/IEC 61000-4-3 Electrostatic discharge immunity test (8 kV - in air) conforming to EN/IEC 61000-4-2 Electrostatic discharge immunity test (4 kV - on contact) conforming to EN/IEC 61000-4-2

Offer Sustainability

Sustainable offer status	Not 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

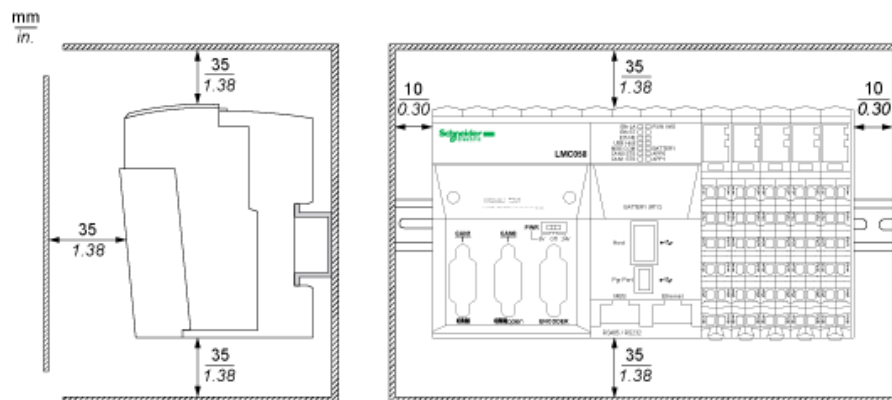
TM5 Slice

Dimensions

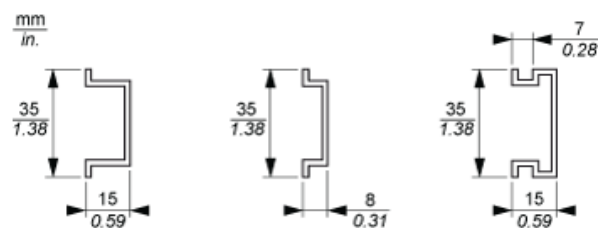


TM5 System

Spacing Requirements



Mounting on a DIN Rail



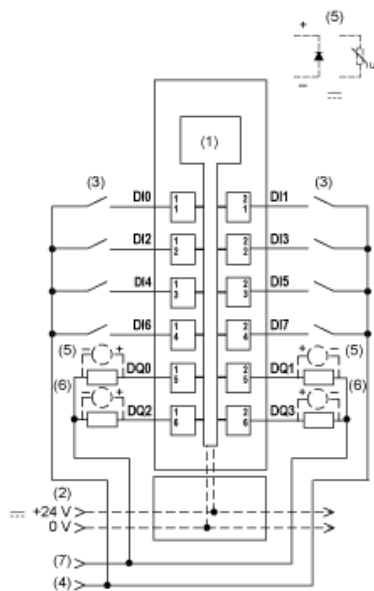
TM5 System Wiring Recommendations

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

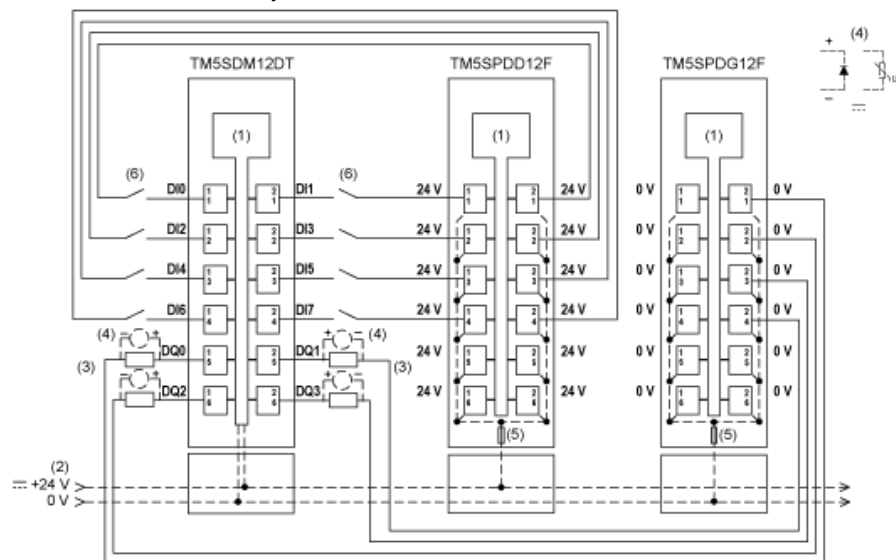
Electronic Module 8DI/4DO Tr 1 Wire

Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 2-wire sensor
- (4) 24 Vdc I/O power segment by external connection
- (5) Inductive load protection
- (6) 2-wire load
- (7) 0 Vdc I/O power segment by external connection

To connect 2-wire devices, you can add TM5SPDD12F and TM5SPDG12F Common Distribution modules:



- (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
- (6) 2-wire sensor