Product datasheet
Characteristics

TM5SDI12D

Main

Range of product	Modicon TM5
Product or component type	Discrete input module
Discrete input number	12
Discrete input voltage	24 V

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
Color	White
Voltage state 0 guaranteed	<= 5 V
Voltage state 1 guaranteed	>= 15 V
Input filtering	<= 25 ms configurable by software <= 100 ms hardware
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Current consumption	36 mA 5 V DC bus 73 mA 24 V DC all inputs On
Power dissipation in W	<= 1.93 W
Local signalling	1 LED green power supply 1 LED red power supply 12 LEDs green input 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 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

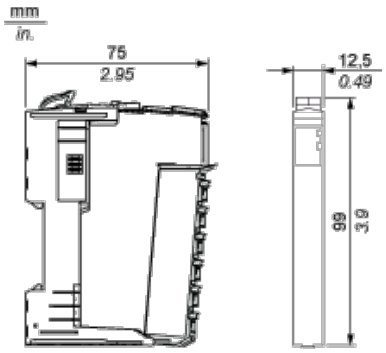
Green Premium product	Green Premium product
Compliant - since 1039 - Schneider Electric declaration of conformity	Compliant - since 1039 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Contractual warranty

Warranty period	18 months

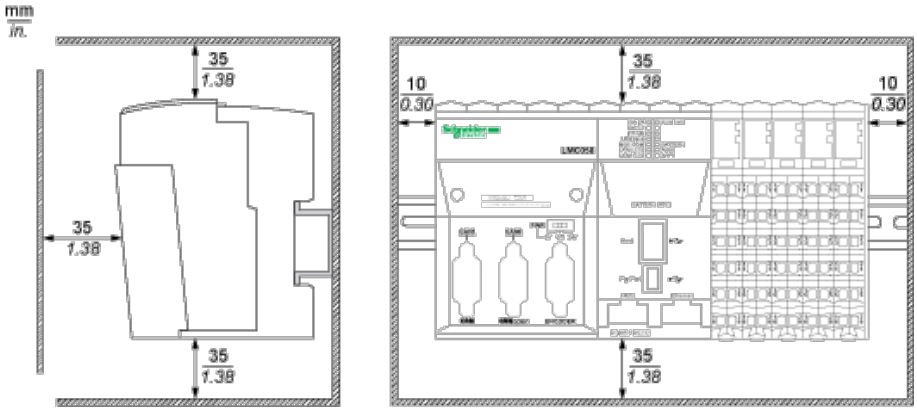
TM5 Slice

Dimensions

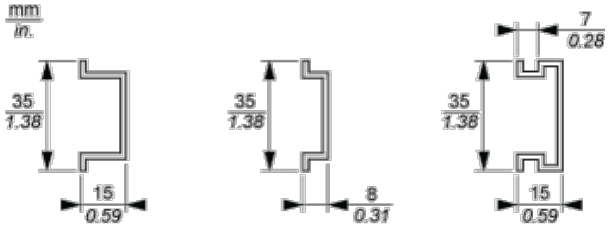


TM5 System

Spacing Requirements



Mounting on a DIN Rail



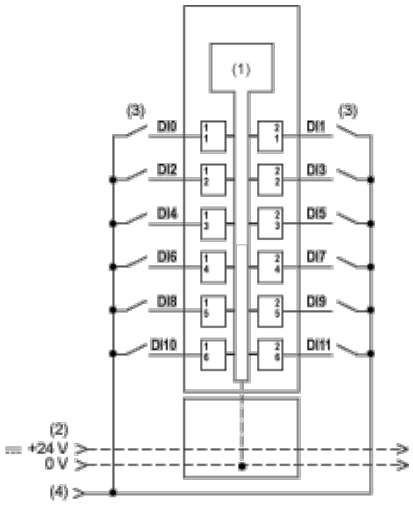
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm / in.				
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 12DI 24 Vdc Sink 1 Wire

Wiring Diagrams



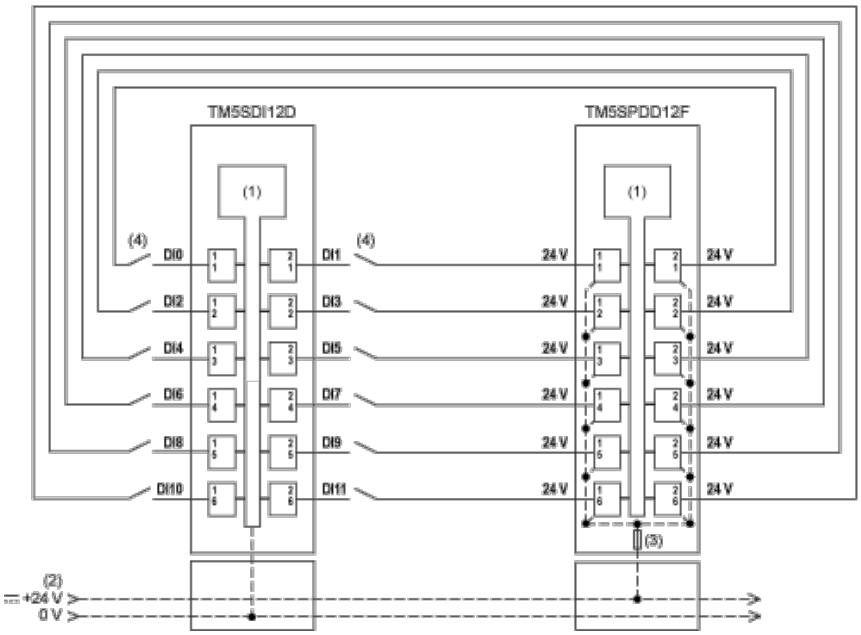
(1) Internal electronics

(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

To connect 2-wire devices, you can add a TM5SPDD12F Common Distribution module:



(1) Internal electronics

(2) 24 Vdc I/O power segment integrated into the bus bases

(3) Integrated fuse type T slow-blow 6.3 A 250 V exchangeable

(4) 2 wire-sensor