

Product data sheet

Specifications



Discrete input module, Modicon TM5, digital 16I, 24 V DC sink, 1 wire

TM5SDI16D

Main

Range of product	Modicon TM5
Product or component type	Discrete input module
Discrete input number	16
Discrete input voltage	24 V

Complementary

Range compatibility	PacDrive LMC motion controller Modicon M258 Modicon LMC058
Product compatibility	Motion controller PacDrive LMC Pro PacDrive LMC Pro 2 PacDrive LMC Eco Logic controller
Discrete input voltage type	DC
Input voltage limits	20.4...28.8 V
Discrete input logic	Sink
Discrete input current	2.68 mA
Input impedance	8.9 kOhm
Colour	White
Voltage state 0 guaranteed	<= 5 V
Voltage state 1 guaranteed	>= 15 V
Input filtering	<= 25 ms configurable by software <= 100 ms hardware
Isolation	500 Vrms AC insulation between channel and bus No insulation between channels
Current consumption	36 mA at 5 V DC bus 61 mA at 24 V DC all inputs On
Maximum power dissipation in W	1.65 W
Local signalling	1 LED green/red for power supply 16 LEDs green for input status
Electrical connection	1 wire
Marking	CE
Net weight	0.025 kg

Environment

Standards	IEC 61131-2 UL 508 CSA C22.2 No 142 CSA C22.2 No 213
Product certifications	C-Tick cULus CSA GOST-R
Ambient air temperature for operation	-10...55 °C without derating (horizontal installation) -10...60 °C with derating factor (horizontal installation) -10...50 °C (vertical 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 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
Electromagnetic compatibility	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 Conducted RF disturbances conforming to EN/IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.0 cm
Package 1 Width	6.0 cm
Package 1 Length	10.5 cm
Package 1 Weight	39.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	97
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.783 kg

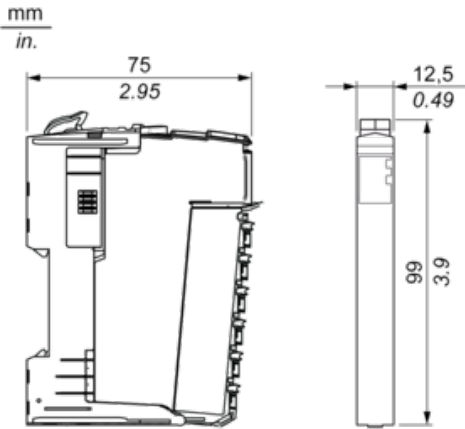
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes

Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	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. For more information go to www.P65Warnings.ca.gov

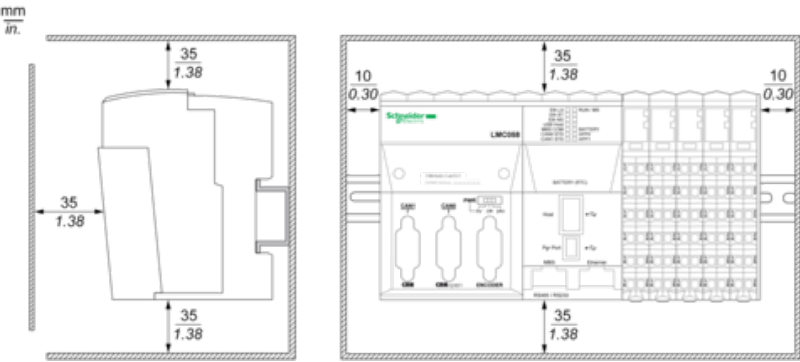
TM5 Slice

Dimensions

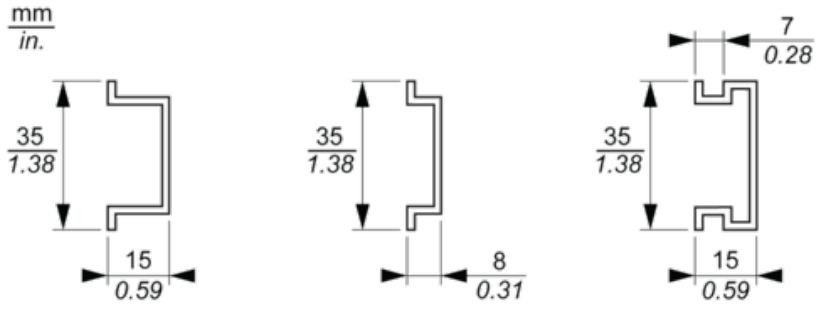


TM5 System

Spacing Requirements



Mounting on a DIN Rail



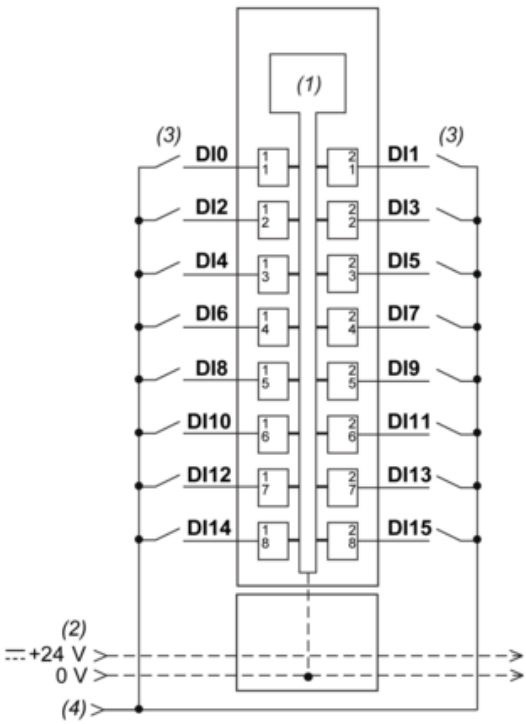
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in. 9 0.35			
mm ²	0,08...1,5	0,25...1,5	0,25...0,75
AWG	28...16	24...16	24...20

Electronic Module 16DI 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 by external connection

Recommended replacement(s)