Product data sheet
Characteristics

TM5SDI12D
Discrete input module, Modicon TM5, digital 12I, 24 V DC sink, 1 wire



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	PacDrive LMC motion controller Modicon M258 Modicon LMC058
Product Compatibility	Motion controller PacDrive LMC Pro PacDrive LMC Pro 2 Logic controller PacDrive LMC Eco
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	500 Vrms AC insulation between channel and bus No insulation between channels
Current consumption	36 mA 5 V DC bus 73 mA 24 V DC all inputs On
Maximum 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
Net Weight	0.06 lb(US) (0.025 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.
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Environment

Standards	CSA C22.2 No 213 IEC 61131-2 UL 508 CSA C22.2 No 142
Product Certifications	CULus C-tick GOST-R CSA
Ambient air temperature for operation	14…131 °F (-10…55 °C) without derating horizontal installation) 14…140 °F (-10…60 °C) with derating factor horizontal installation) 14…122 °F (-10…50 °C) vertical installation)
Ambient Air Temperature for Storage	-40…158 °F (-40…70 °C)
Relative Humidity	5…95 % without condensation
IP degree of protection	IP20IEC 61131-2
Pollution degree	2 IEC 60664
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0.00…9842.52 ft (0…3000 m)
Vibration resistance	1 gn 8.4…150 Hz DIN rail 3.5 mm 5…8.4 Hz DIN rail
Shock resistance	15 gn 11 ms
Electromagnetic compatibility	Electrostatic discharge immunity test, 4 kV on contact EN/IEC 61000-4-2 Electrostatic discharge immunity test, 8 kV in air EN/IEC 61000-4-2 Susceptibility to electromagnetic fields, 1 V/m 2...2.7 GHz EN/IEC 61000-4-3 Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz EN/IEC 61000-4-3 Electrical fast transient/burst immunity test, 1 kV I/O EN/IEC 61000-4-4 Electrical fast transient/burst immunity test, 1 kV shielded cable EN/IEC 61000-4-4 Electrical fast transient/burst immunity test, 2 kV power lines EN/IEC 61000-4-4 1.2/50 µs shock waves immunity test, 0.5 kV differential mode EN/IEC 61000-4-5 1.2/50 µs shock waves immunity test, 1 kV common mode EN/IEC 61000-4-5 Conducted RF disturbances EN/IEC 61000-4-6 Conducted and radiated emissions CISPR 11

Ordering and shipping details

Category	22532-M258 PLC
Discount Schedule	PC12
GTIN	3595864074450
Returnability	Yes
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.79 in (2.000 cm)
Package 1 Width	2.36 in (6.000 cm)
Package 1 Length	4.13 in (10.500 cm)
Package 1 Weight	1.27 oz (36.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	97
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	8.52 lb(US) (3.866 kg)

Offer Sustainability

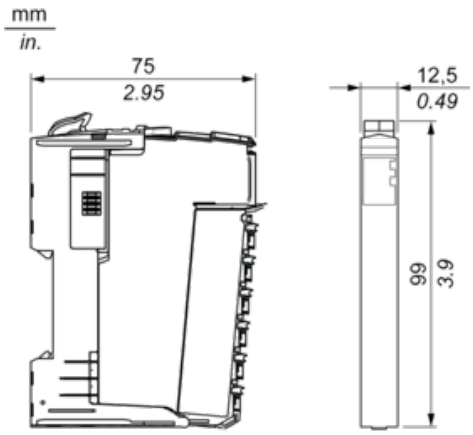
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
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

Contractual warranty

Warranty	18 months

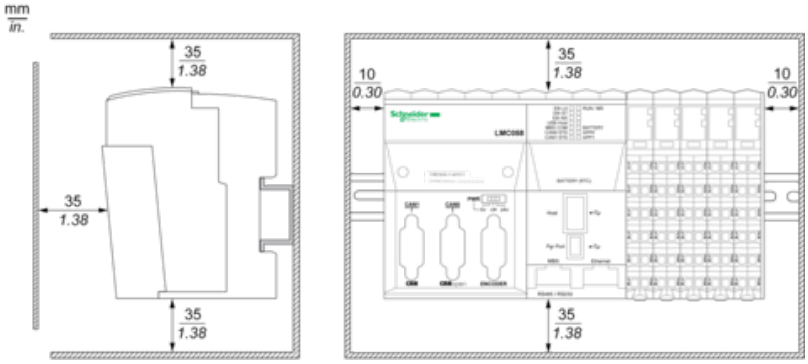
TM5 Slice

Dimensions

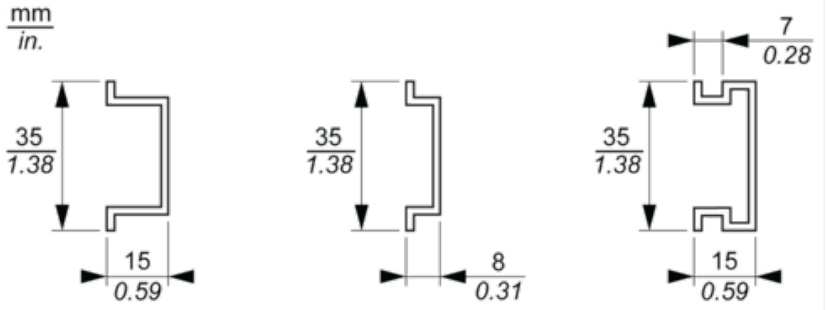


TM5 System

Spacing Requirements



Mounting on a DIN Rail



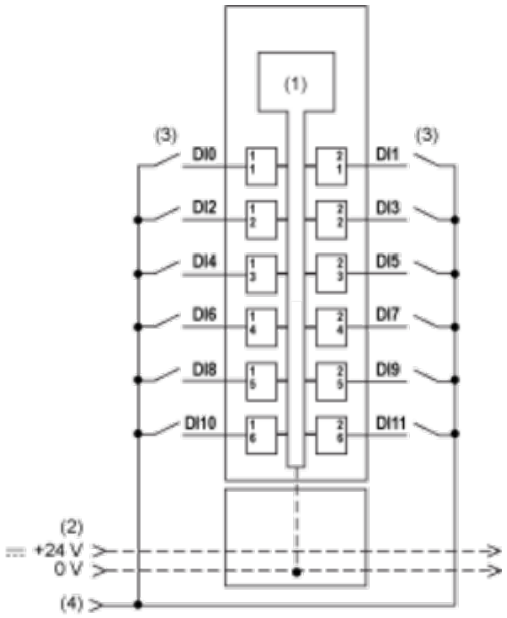
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

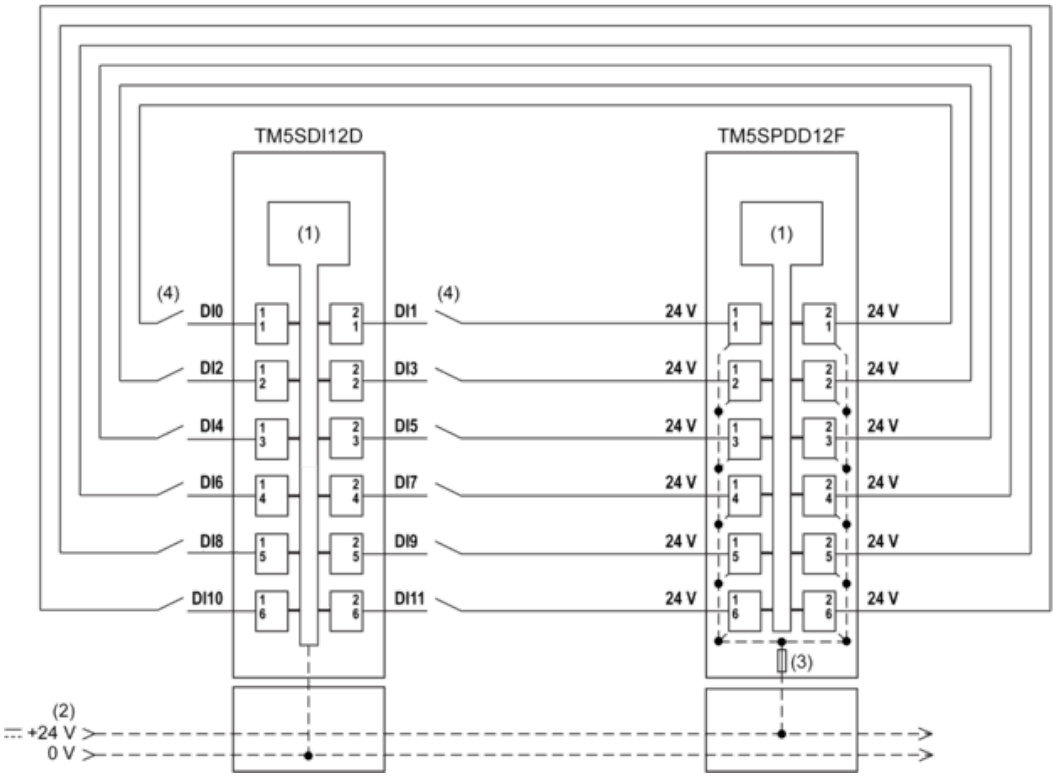
mm / in. 9 / 0.35				
mm^2	0,08…2,5	0,25…2,5	0,25…1,5	2 x 0,25...2 x 0,75
AWG	28…14	24…14	24…16	2 x 24…2 x 18

Electronic Module 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

Mouser Electronics

Authorized Distributor

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