

Product datasheet

Specifications



Composition kit of I/O(TM5SDI12D) + term. block(TM5ACTB12) + bus base(TM5ACBM11)

TM5SDI12DK

EAN Code: 3595864154718

Main

Range Of Product	Modicon TM5
Product Or Component Type	Discrete input module
Discrete Input Number	12
Discrete Input Voltage	24 V

Complementary

Device Composition	Bus sub-base TM5ACBM11 Terminal block TM5ACTB12 I/O module TM5SDI12D
Range Compatibility	Modicon LMC058 Modicon M258
Product Compatibility	Motion controller Logic controller
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
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 73 mA at 24 V DC all inputs On
Maximum Power Dissipation In W	1.93 W
Local Signalling	1 LED green for power supply 1 LED red for power supply 12 LEDs green for input status
Electrical Connection	1 wire
Marking	CE
Net Weight	0.065 kg

Environment

Disclaimer: 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

Standards	CSA C22.2 No 213 UL 508 IEC 61131-2 CSA C22.2 No 142
Product Certifications	CSA C-Tick GOST-R cULus
Ambient Air Temperature For Operation	0...55 °C without derating (horizontal installation) 0...60 °C with derating factor (horizontal installation) 0...50 °C (vertical installation)
Ambient Air Temperature For Storage	-25...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
Resistance To Electrostatic Discharge	4 kV on contact conforming to IEC 61000-4-2 8 kV in air conforming to IEC 61000-4-2
Resistance To Electromagnetic Fields	1 V/m 2...2.7 GHz conforming to IEC 61000-4-3 10 V/m 80...2000 MHz conforming to IEC 61000-4-3
Resistance To Fast Transients	1 kV (I/O) conforming to IEC 61000-4-4 1 kV (shielded cable) conforming to IEC 61000-4-4 2 kV (power lines) conforming to IEC 61000-4-4
Surge Withstand	0.5 kV differential mode conforming to IEC 61000-4-5 1 kV common mode conforming to IEC 61000-4-5
Electromagnetic Compatibility	EN/IEC 61000-4-6
Disturbance Radiated/Conducted	CISPR 11

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	7.100 cm
Package 1 Width	9.100 cm
Package 1 Length	11.000 cm
Package 1 Weight	113.000 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	36
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.532 kg

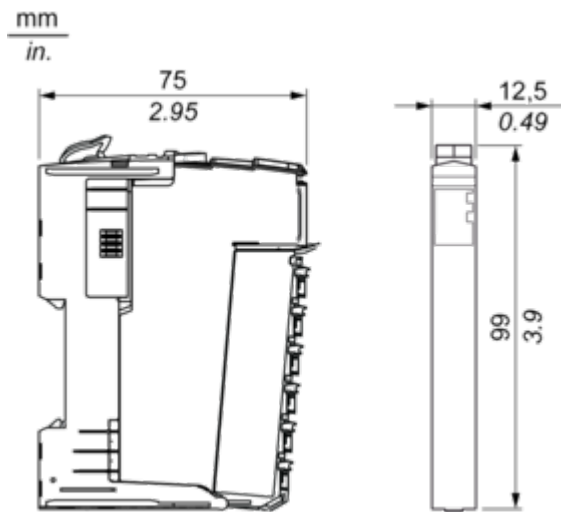
Contractual warranty

Warranty	18 months
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Dimensions Drawings

TM5 Slice

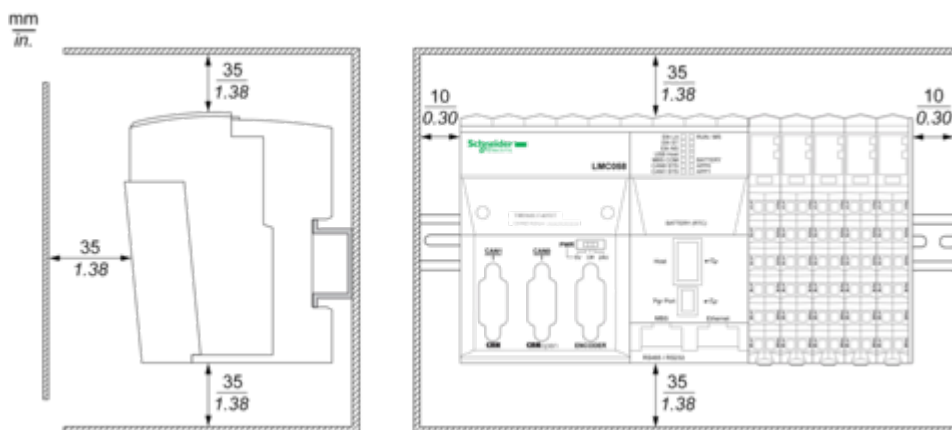
Dimensions



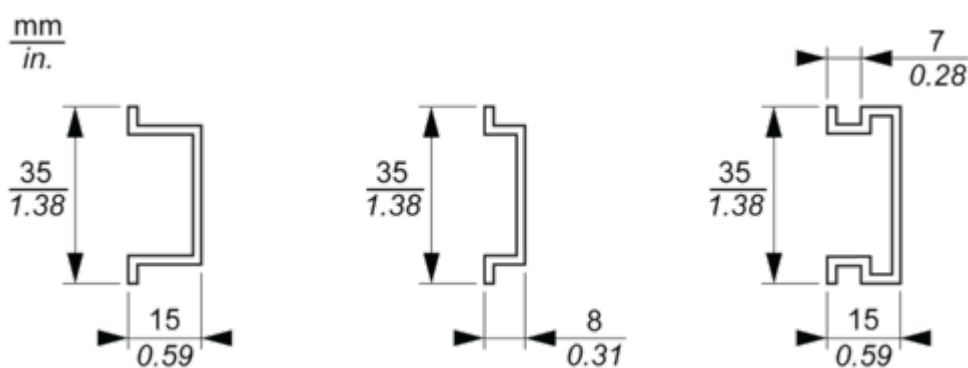
Mounting and Clearance

TM5 System

Spacing Requirements



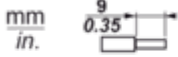
Mounting on a DIN Rail



Connections and Schema

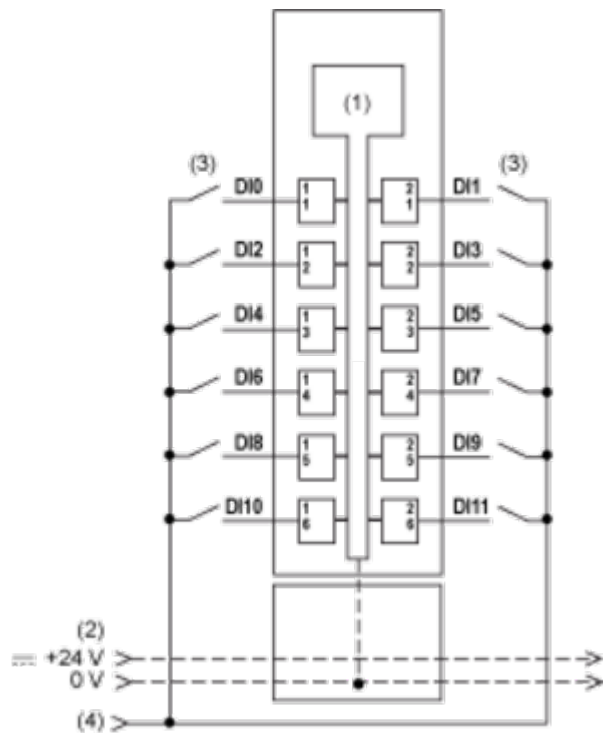
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

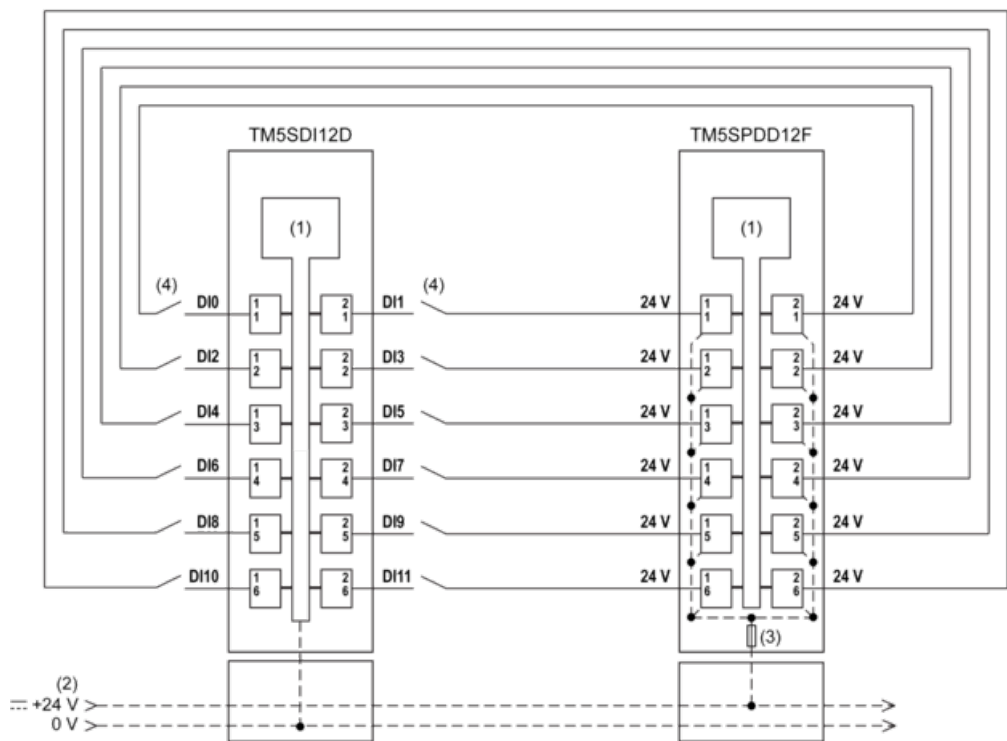
				
mm ²	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75
AWG	28...14	24...14	24...16	2 x 24...2 x 18

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