

Product data sheet

Specifications



Safety dc discrete input module, Modicon TM5, digital 4I, 24V sink

TM5SDI4DFS

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon TM5
Product or Component Type	Safety dc discrete input module
Discrete input number	4
Discrete input voltage	24 V

Complementary

Range Compatibility	PacDrive LMC motion controller
Product Compatibility	PacDrive LMC Eco PacDrive LMC Pro PacDrive LMC Pro 2
Discrete input voltage type	DC
Input voltage limits	20.4...28.8 V
Discrete input logic	Sink
Discrete input current	3.45 mA
Input impedance	7 kOhm
Color	Red
Voltage state 0 guaranteed	<= 5 V
Voltage state 1 guaranteed	>= 15 V
Input filtering	<= 500 ms configurable by software <= 150 ms hardware
Protection Type	Short-circuit protection Overload protection
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Maximum voltage drop	<0.6 V at 100 mA
Maximum supply current for sensors	300 mA
Maximum power consumption in W	1.25 W internal 0.32 W bus
Local signalling	1 LED green power supply 1 LED red power supply 2 LEDs red safety status 4 LEDs green/red input status
Electrical connection	2 wires
Marking	CE

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Safety level	SIL 3 IEC 61508 SIL 3 IEC 62061 PL = e EN 13849-1
Safety reliability data	MTTFd > 100 years PFD < 1E-5 PFH < 1E-9
Product Weight	0.055 lb(US) (0.025 kg)

Environment

Standards	UL 508 IEC 62061 IEC 61508 EN 13849-1 IEC 61131-2 CSA C22.2 No 142
Product Certifications	GOST-R cULus CSA
Ambient air temperature for operation	14...122 °F (-10...50 °C) vertical installation) 14...131 °F (-10...55 °C) horizontal installation)
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Relative Humidity	5...95 % without condensation
IP degree of protection	IP20IEC 60529
Pollution degree	2 IEC 60664
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0...9842.5 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 IEC 61000-4-2 Electrostatic discharge immunity test, 8 kV in air IEC 61000-4-2 Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz IEC 61000-4-3 Electrical fast transient/burst immunity test, 1 kV I/O IEC 61000-4-4 Electrical fast transient/burst immunity test, 1 kV shielded cable IEC 61000-4-4 Electrical fast transient/burst immunity test, 2 kV power lines IEC 61000-4-4 1.2/50 µs shock waves immunity test, 0.5 kV differential mode IEC 61000-4-5 1.2/50 µs shock waves immunity test, 1 kV common mode IEC 61000-4-5 Conducted RF disturbances IEC 61000-4-6 Conducted and radiated emissions CISPR 11

Ordering and shipping details

Category	US1PC5218360
Discount Schedule	PC52
GTIN	3595864128139
Returnability	Yes
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.18 in (3.000 cm)
Package 1 Width	2.36 in (6.000 cm)

Package 1 Length	4.13 in (10.500 cm)
Package weight(Lbs)	1.728 oz (49.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	50
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	6.312 lb(US) (2.863 kg)

Contractual warranty

Warranty	18 months
----------	-----------

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
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
PVC free	Yes

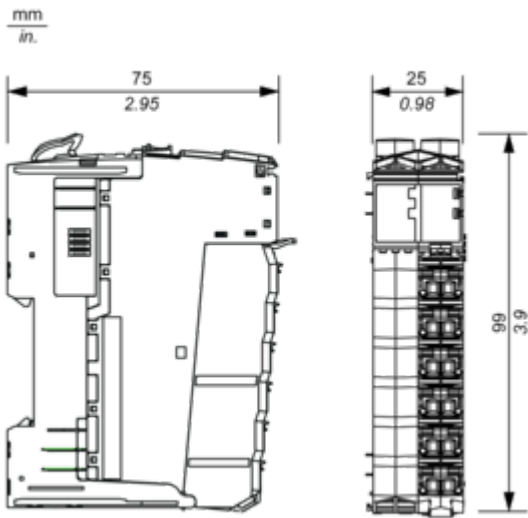
Use Again

Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No

Dimensions Drawings

TM5 Slice

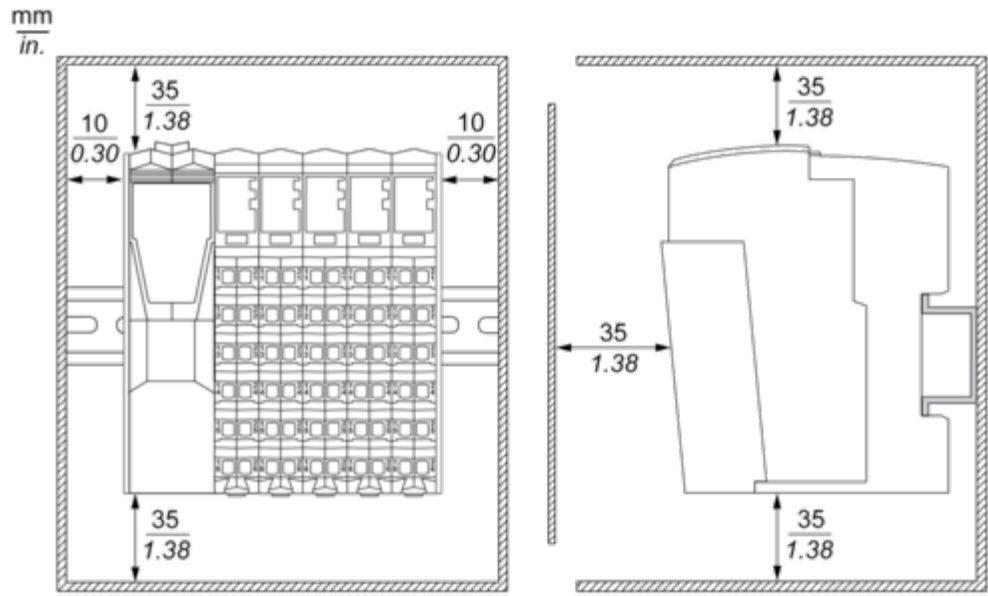
Dimensions



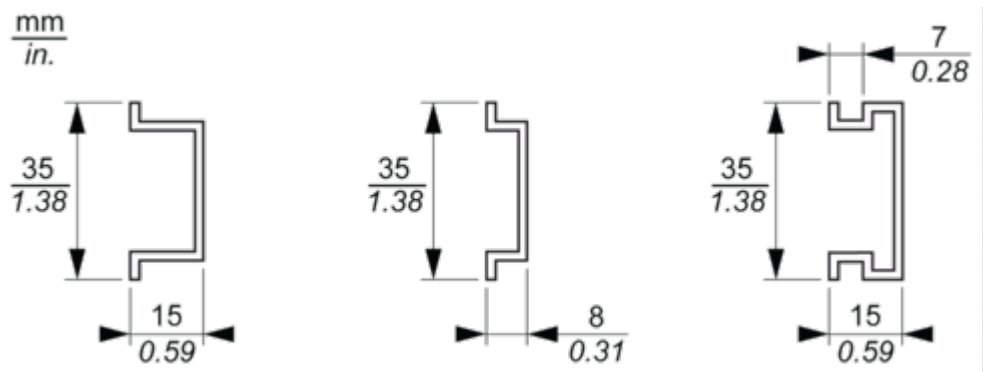
Mounting and Clearance

TM5 Safety System

Spacing Requirements



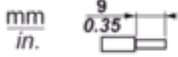
Mounting on a DIN Rail



Connections and Schema

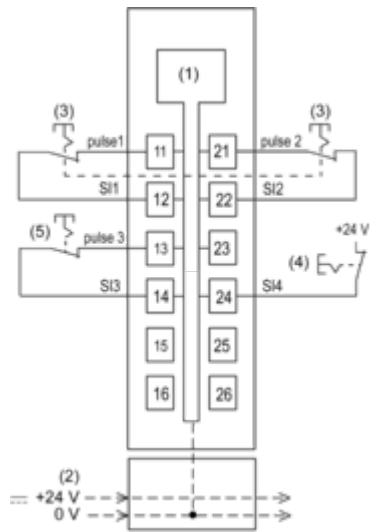
TM5 System Wiring Recommendations

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 4DI 24 Vdc Sink 2 Wires

Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 2-wire sensor
- (4) single wire sensor, external power supply
- (5) single wire sensor, internal power supply