

Product datasheet

Specifications



Safety digital I/O module - 2I - 2O - 24V DC - 6A - relay n/o

TM5SDM4DTRFS

EAN Code: 3595864128146

Main

Range of product	Modicon TM5
Product or component type	Safety discrete I/O module
Discrete input number	2
Discrete input voltage	24 V
Discrete output number	2
Discrete output type	Relay

Complementary

Range compatibility	PacDrive LMC motion controller
Product compatibility	PacDrive LMC Pro PacDrive LMC Pro 2 PacDrive LMC Eco
Discrete input voltage type	DC
Input voltage limits	20.4...28.8 V
Discrete input logic	Sink
Discrete input current	3.3 mA
Input impedance	7.3 kOhm
Output voltage	24 V DC
Output voltage limits	20.4...28.8 V
Discrete output logic	Source
Colour	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 power consumption in W	1.15 W for internal 0.26 W for bus
Local signalling	1 LED green for power supply 1 LED red for power supply 2 LEDs green/red for input status 2 LEDs red for safety status 2 LEDs red/orange for output status

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

Electrical connection	2 wires
Marking	CE
Safety level	SIL 3 conforming to IEC 61508 SIL 3 conforming to IEC 62061 PL = e conforming to EN 13849-1
Safety reliability data	MTTFd > 100 years PFD < 1E-5 PFH < 1E-9
Net weight	0.025 kg

Environment

Standards	CSA C22.2 No 142 IEC 62061 IEC 61131-2 IEC 61508 UL 508 EN 13849-1
Product certifications	CSA cULus GOST-R
Ambient air temperature for operation	-10...50 °C (vertical installation) -10...55 °C (horizontal installation)
Ambient air temperature for storage	-40...70 °C
Relative humidity	5...95 % without condensation
IP degree of protection	IP20 conforming to IEC 60529
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 IEC 61000-4-2 Electrostatic discharge immunity test, 8 kV in air conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test, 1 kV I/O conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test, 1 kV shielded cable conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test, 2 kV power lines conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test, 0.5 kV differential mode conforming to IEC 61000-4-5 1.2/50 µs shock waves immunity test, 1 kV common mode conforming to IEC 61000-4-5 Conducted RF disturbances conforming to 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	3.200 cm
Package 1 Width	6.000 cm
Package 1 Length	10.800 cm
Package 1 Weight	10.000 g

Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.395 kg

Logistical informations

Country of origin AT

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](#)

PVC free

Yes

Use Again

Repack and remanufacture

End of life manual availability

[End of Life Information](#)

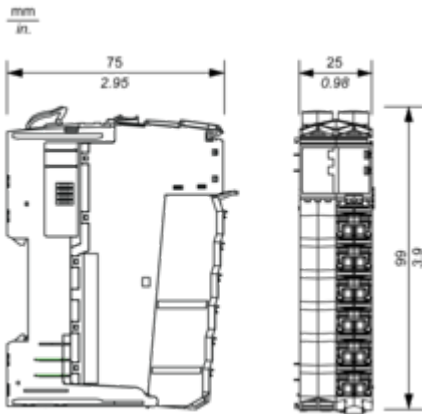
Take-back

No

Dimensions Drawings

TM5 Slice

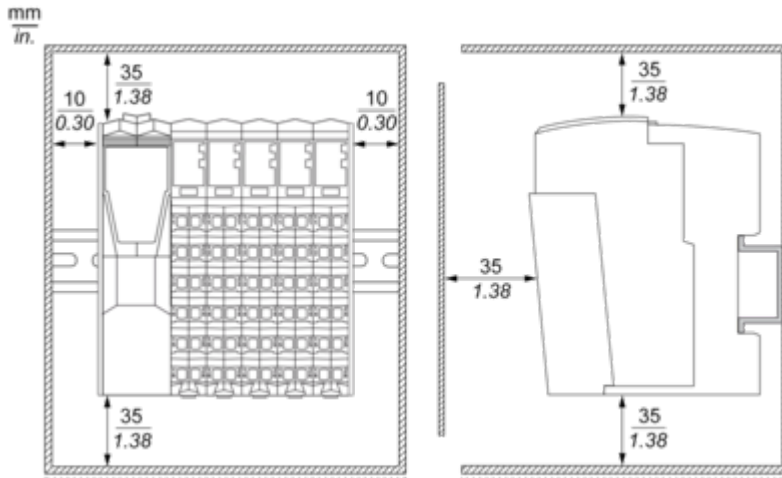
Dimensions



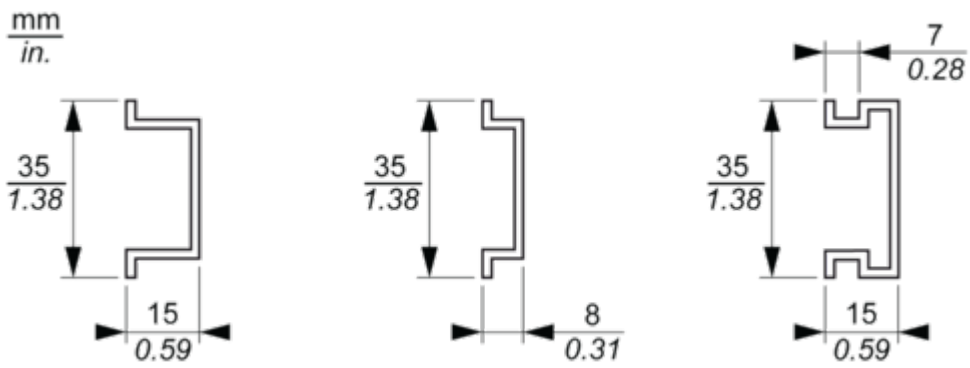
Mounting and Clearance

TM5 Safety System

Spacing Requirements



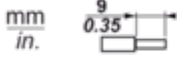




Mounting on a DIN Rail



Connections and Schema

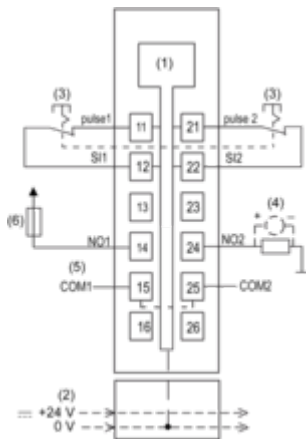
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

 mm 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 2DI/2DO Tr 2 Wires

Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 2-wire sensor
- (4) relay outputs: NO1, COM1 and NO2, COM2; switching voltage range, 5 ... 24 Vdc, 5 ... 48 Vac switching current range, 5 mA ... 6 A
- (5) external bridge, COM1 - COM2
- (6) external fuse, type gL/gG, 6 A