Product data sheet

Specifications



Safety discrete I/O module, Modicon TM5, digital 2I, 2O, 24V DC, 6 A, relay n/o

TM5SDM4DTRFS

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Modicon TM5
Product or Component Type	Safety discrete I/O module
Product Compatibility	PacDrive LMC Pro PacDrive LMC Pro 2 PacDrive LMC Eco
Range Compatibility	PacDrive LMC motion controller
Discrete input number	2
Discrete input voltage	24 V DC 20.4...28.8 V)
Discrete input logic	Sink
Discrete output number	2
Discrete output logic	Source
Discrete output voltage	24 V DC 20.4...28.8 V)relay

Complementary

Discrete input compatibility	2 at 24 V DC
Discrete input current	3.3 mA at 24 V DC
Voltage state 1 guaranteed	>= 15 V
Voltage state 0 guaranteed	<= 5 V
Input impedance	7.3 kOhm
Input filtering	<= 500 ms configurable by software <= 150 ms hardware
Discrete output number	2 relay at 24 V DC
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
Electrical Connection	2 wires
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
Height	3.9 in (99 mm)
Width	1.0 in (25 mm)
Depth	3.0 in (75 mm)

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

Product Weight	0.055 lb(US) (0.025 kg)
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

Environment

IP Degree of Protection	IP20
Marking	CE
Product certifications	CSA CULus GOST-R
Standards	CSA C22.2 No 142 IEC 62061 IEC 61131-2 IEC 61508 UL 508 EN 13849-1
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
Operating altitude	0...6561.68 ft (0...2000 m)
Pollution degree	2
Vibration resistance	1 gn 8.4…150 Hz) on DIN rail 3.5 mm 5…8.4 Hz) on DIN rail
Shock resistance	15 gn 11 ms

Ordering and shipping details

Category	US1PC5218360
Discount Schedule	PC52
GTIN	3595864128146
Returnability	No
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.260 in (3.200 cm)
Package 1 Width	2.362 in (6.000 cm)
Package 1 Length	4.252 in (10.800 cm)
Package weight(Lbs)	0.353 oz (10.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	50

Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	11.894 lb(US) (5.395 kg)

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**47 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**0.3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**46 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**
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	**Compliant By Exemption**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**
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 Longer

Lifetime extension

Repair	**No**

Use Again

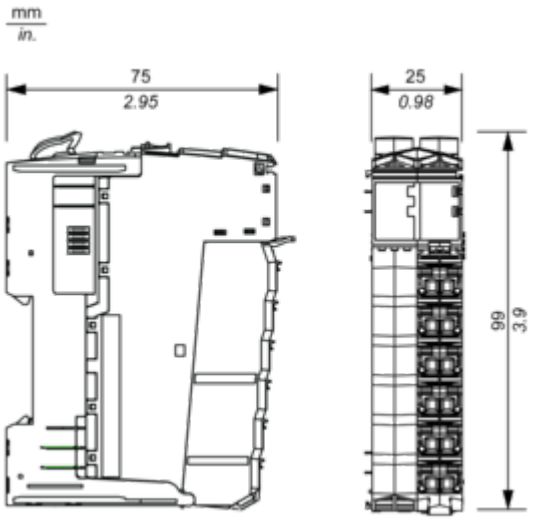
Repack and remanufacture

Recyclability potential, in %	**0**
Circularity Profile	**End of Life Information**
Take-back	**No**

Dimensions Drawings

TM5 Slice

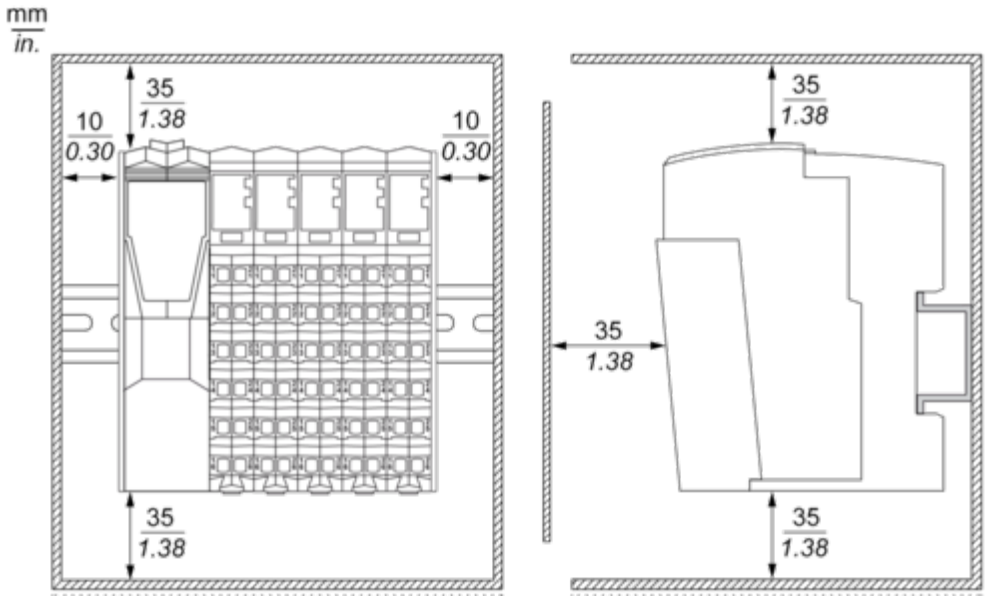
Dimensions



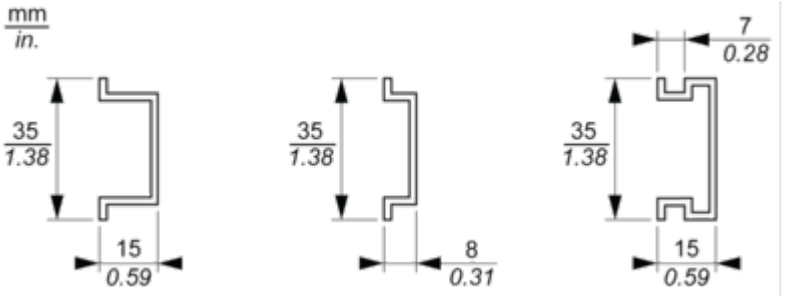
Mounting and Clearance

TM5 Safety System

Spacing Requirements



Mounting on a DIN Rail



Connections and Schema

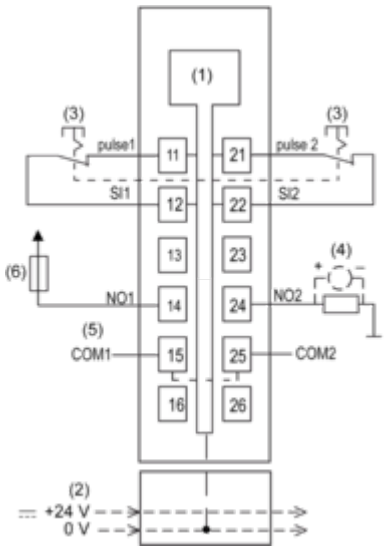
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm / 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: N01, COM1 and N02, 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