

Product datasheet

Specifications



discrete input module, Modicon TM3, 16 inputs, spring, 24V DC

TM3DI16G

Main

Range of product	Modicon TM3
Product or component type	Discrete input module
Range compatibility	Modicon M241 Modicon M251 Modicon M221 Modicon M262
Device application	Industrial application
Discrete input number	16
Discrete input voltage	24 V DC
Discrete input logic	Sink or source (positive/negative)

Complementary

Discrete input compatibility	16 conforming to IEC 61131-2 type 3
Discrete input current	7 mA
Voltage state 1 guaranteed	15...28.8 V DC
Voltage state 0 guaranteed	0...5 V DC
Current state 1 guaranteed	≥ 2.5 mA
Current state 0 guaranteed	≤ 1 mA
Input impedance	3.4 kOhm
Response time on input	4 ms (maximum (turn on)) 4 ms (maximum (turn off))
Safety reliability data	MTBF = 250 years 40 °C
Sensor power supply	19.2...28.8 V
Power supply type	Electronic powered by internal bus
Typical current consumption	34 mA at 5 V DC 5 mA
Electrical connection	10 x 1.5 mm ² removable spring terminal block with pitch 3.81 mm adjustment for inputs
Maximum cable distance between devices	Unshielded cable: <50 m for regular input
Isolation between channels and bus	500 V AC
Local signalling	1 LED per channel (green) for input status
Housing colour	Grey
AWG gauge	0.14...1.5 mm ² / AWG 26...AWG 16 with solid cable

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

Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 plate or panel with fixing kit
Height	90 mm
Width	27.4 mm
Depth	84.6 mm
Product weight	0.1 kg

Environment

IP degree of protection	IP20
Protective treatment	None
Marking	CE
Product certifications	CE CULus UKCA RCM EAC CULus HazLoc
Standards	IEC 61131-2
Ambient air temperature for operation	-10...35 °C (vertical installation) -10...55 °C (horizontal installation)
Ambient air temperature for storage	-25...70 °C
Relative humidity	10...95 % without condensation for operation 10...95 % without condensation for storage
Operating altitude	0...2000 m
Pollution degree	2
Vibration resistance	3.5 mm (f = 5...8.4 Hz) on DIN rail 3 gn (f = 8.4...150 Hz) on DIN rail 3.5 mm (f = 5...8.4 Hz) on panel mounting 3 gn (f = 8.4...150 Hz) on panel mounting
Shock resistance	15 gn for 11 ms

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	13.0 cm
Package 1 Length	11.0 cm
Package 1 Weight	199.0 g
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	9.124 kg
Unit Type of Package 3	P12
Number of Units in Package 3	504

Package 3 Height	105 cm
Package 3 Width	120 cm
Package 3 Length	80 cm
Package 3 Weight	125 kg

Contractual warranty

Warranty (in months)	18
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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	20 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	13 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]	6 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again

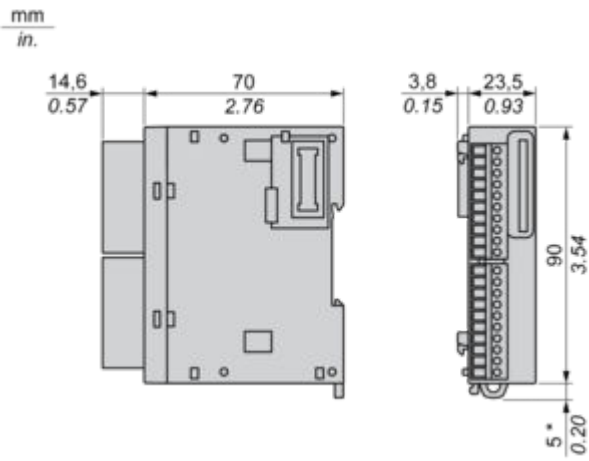


Repack and remanufacture

Recyclability potential, in %	3
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

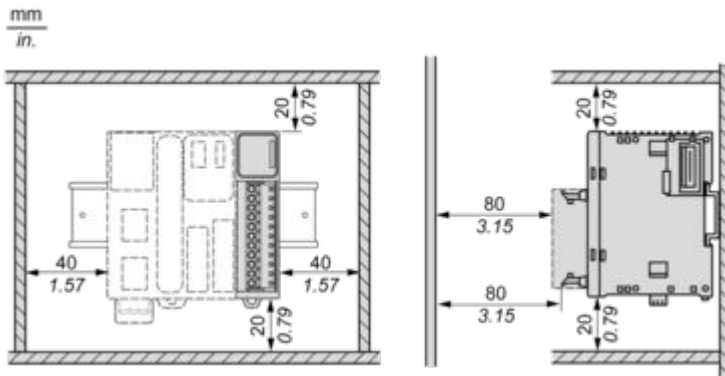
Dimensions



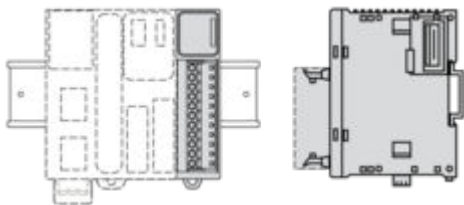
(*) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

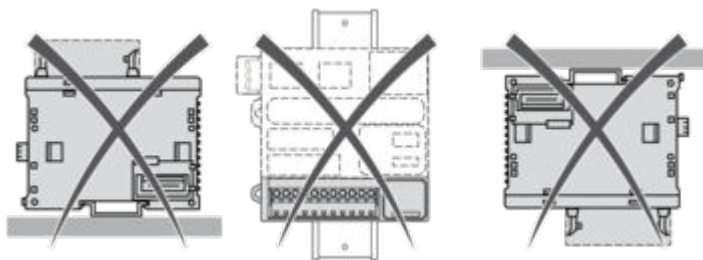
Spacing Requirements



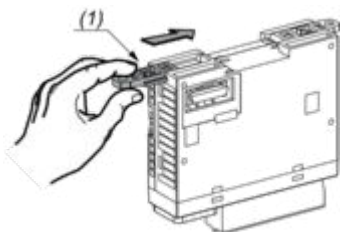
Mounting on a Rail



Incorrect Mounting

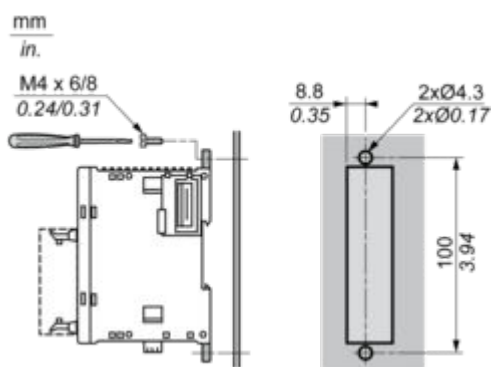


Mounting on a Panel Surface



(1) Install a mounting strip

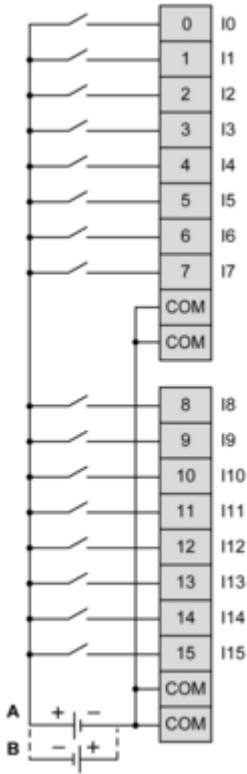
Mounting Hole Layout



Connections and Schema

Digital Input Module (16-channel, 24 Vdc)

Wiring Diagrams



The 4 COM terminals are connected internally
(A) Sink wiring (positive logic)
(B) Source wiring (negative logic)