Product data sheet

Specifications



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

TM3DI16

Product availability: Stock - Normally stocked in distribution facility

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 5 V DC
Electrical connection	10 x 1...2.5 mm² removable screw terminal block with pitch 3.81 mm adjustment for inputs
Maximum cable distance between devices	Unshielded cable <164.04 ft (50 m) 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	0.0002…0.002 in² (0.14…1.5 mm²) / 26 AWG...16 AWG with solid cable
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 plate or panel with fixing kit

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

Height	3.5 in (90 mm)
Width	1.08 in (27.4 mm)
Depth	3.3 in (84.6 mm)
Net Weight	0.2 lb(US) (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	14…95 °F (-10…35 °C) vertical installation) 14…131 °F (-10…55 °C) horizontal installation)
Ambient air temperature for storage	-13…158 °F (-25…70 °C)
Relative humidity	10…95 % without condensation for operation 10…95 % without condensation for storage
Operating altitude	0...6561.68 ft (0...2000 m)
Pollution degree	2
Vibration resistance	3.5 mm 5…8.4 Hz) on DIN rail 3 gn 8.4…150 Hz) on DIN rail 3.5 mm 5…8.4 Hz) on panel mounting 3 gn 8.4…150 Hz) on panel mounting
Shock resistance	15 gn 11 ms

Ordering and shipping details

Category	US10MSX22533
Discount Schedule	0MSX
GTIN	3606480611384
Returnability	Yes
Country of origin	TW

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.892 in (7.345 cm)
Package 1 Width	4.133 in (10.498 cm)
Package 1 Length	4.910 in (12.471 cm)
Package weight(Lbs)	7.4 oz (210.8 g)
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	11.8 in (30 cm)

Package 2 Width	15.7 in (40 cm)
Package 2 Length	23.6 in (60 cm)
Package 2 Weight	23.1 lb(US) (10.5 kg)
Unit Type of Package 3	P12
Number of Units in Package 3	504
Package 3 Height	41.3 in (105 cm)
Package 3 Width	47.2 in (120 cm)
Package 3 Length	31.5 in (80 cm)
Package 3 Weight	291.01 lb(US) (132 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	**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**
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**

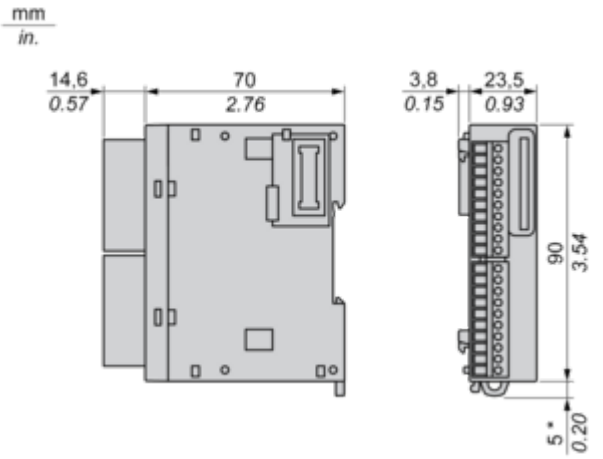
Use Again

Repack and remanufacture

Recyclability potential, in %	**3**
Circularity Profile	**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

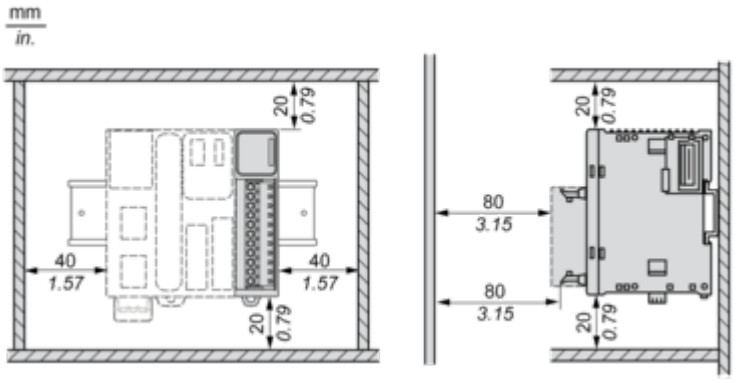
Dimensions



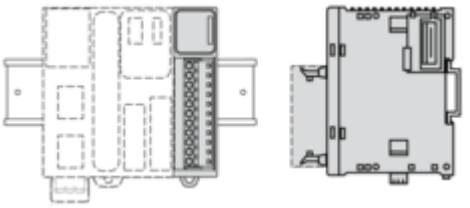
(*) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

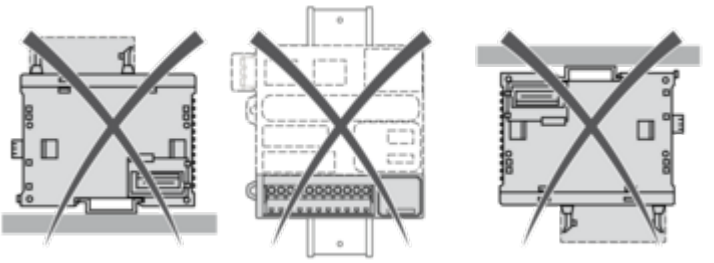
Spacing Requirements



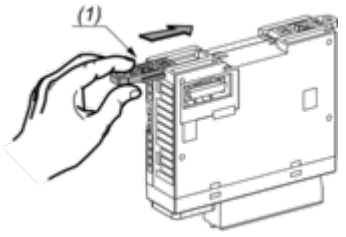
Mounting on a Rail



Incorrect Mounting

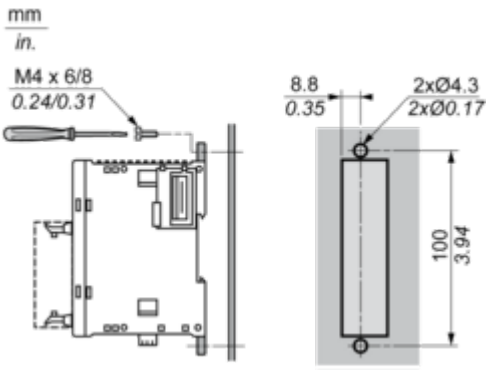


Mounting on a Panel Surface



(1) Install a mounting strip

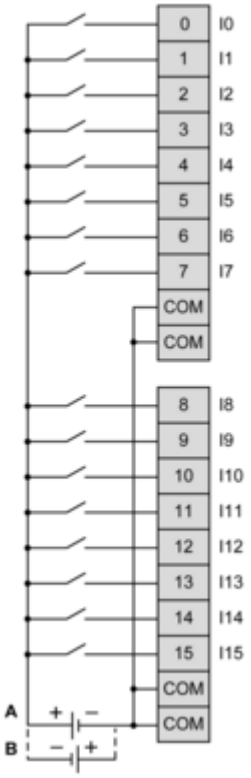
Mounting Hole Layout



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)