

# Product data sheet

Specifications



## Discrete input module, Modicon TM3, 16 inputs (screw) 24 VDC

TM3DI16

**Product availability : Stock - Normally stocked in distribution facility**

**Price\* : 149.00 USD**

### Main

Range of Product	Modicon TM3
Product or Component Type	Discrete input module
Range Compatibility	Modicon M241 Modicon M251 Modicon M221 Modicon M262
Discrete input number	16 input IEC 61131-2 type 3
Discrete input logic	Sink or source (positive/negative)
Discrete input voltage	24 V
Discrete input current	7 mA input

### Complementary

Discrete I/O number	16
Current consumption	40 mA 5 V DC via bus connector at state on) 5 mA 5 V DC via bus connector at state off) 0 mA 24 V DC via bus connector at state on) 0 mA 24 V DC via bus connector at state off)
Discrete input voltage type	DC
Voltage state 1 guaranteed	15...28.8 V input
Current state 1 guaranteed	>= 2.5 mA input)
Voltage state 0 guaranteed	0...5 V input
Current state 0 guaranteed	<= 1 mA input)
Input impedance	3.4 kOhm
Response time	4 ms (turn-on) 4 ms (turn-off)
Local signalling	for input status 1 LED per channel (green)
Electrical connection	10 x 1.5 mm <sup>2</sup> removable screw terminal block pitch 3.81 mm for inputs
Maximum cable distance between devices	Unshielded cable <164.04 ft (50 m) regular input
Insulation	Between input and internal logic 500 V AC Non-insulated between inputs
Marking	CE
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715

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

plate or panel with fixing kit

<b>Height</b>	3.54 in (90 mm)
<b>Depth</b>	3.33 in (84.6 mm)
<b>Width</b>	1.08 in (27.4 mm)
<b>Net Weight</b>	0.22 lb(US) (0.1 kg)

## Environment

<b>Standards</b>	EN/IEC 61131-2 EN/IEC 61010-2-201
<b>Product Certifications</b>	CE cULus UKCA RCM EAC
<b>Resistance to electrostatic discharge</b>	8 kV in air EN/IEC 61000-4-2 4 kV on contact EN/IEC 61000-4-2
<b>Resistance to electromagnetic fields</b>	9.14 V/m (10 V/m) 80 MHz...1 GHz EN/IEC 61000-4-3 2.74 V/m (3 V/m) 1.4 GHz...2 GHz EN/IEC 61000-4-3 0.91 V/m (1 V/m) 2 GHz...3 GHz EN/IEC 61000-4-3
<b>Resistance to magnetic fields</b>	98.43 A/m (30 A/m) 50/60 Hz EN/IEC 61000-4-8
<b>Resistance to fast transients</b>	1 kV I/O EN/IEC 61000-4-4
<b>Surge withstand</b>	1 kV I/O common mode EN/IEC 61000-4-5 DC
<b>Resistance to conducted disturbances</b>	10 V 0.15...80 MHz EN/IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) Marine specification (LR, ABS, DNV, GL)
<b>Electromagnetic emission</b>	Radiated emissions 40 dB $\mu$ V/m QP class A 10 m)30...230 MHz EN/IEC 55011 Radiated emissions 47 dB $\mu$ V/m QP class A 10 m)230...1000 MHz EN/IEC 55011
<b>Ambient Air Temperature for Operation</b>	14...95 °F (-10...35 °C) vertical installation 14...131 °F (-10...55 °C) horizontal installation
<b>Ambient Air Temperature for Storage</b>	-13...158 °F (-25...70 °C)
<b>Relative humidity</b>	10...95 %, without condensation in operation) 10...95 %, without condensation in storage)
<b>IP degree of protection</b>	IP20 with protective cover in place
<b>Pollution degree</b>	2
<b>Operating altitude</b>	0...6561.68 ft (0...2000 m)
<b>Storage altitude</b>	0.00...9842.52 ft (0...3000 m)
<b>Vibration resistance</b>	3.5 mm 5...8.4 Hz DIN rail 3 gn 8.4...150 Hz DIN rail 3.5 mm 5...8.4 Hz panel 3 gn 8.4...150 Hz panel
<b>Shock resistance</b>	15 gn 11 ms

## Ordering and shipping details

<b>Category</b>	22533-M2XX PLC & ACCESSORIES
<b>Discount Schedule</b>	MSX
<b>GTIN</b>	3606480611384
<b>Returnability</b>	Yes
<b>Country of origin</b>	TW

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1

Package 1 Height	2.89 in (7.345 cm)
Package 1 Width	4.13 in (10.498 cm)
Package 1 Length	4.91 in (12.471 cm)
Package 1 Weight	7.44 oz (210.8 g)
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	11.81 in (30 cm)
Package 2 Width	15.75 in (40 cm)
Package 2 Length	23.62 in (60 cm)
Package 2 Weight	23.15 lb(US) (10.5 kg)
Unit Type of Package 3	P12
Number of Units in Package 3	504
Package 3 Height	41.34 in (105 cm)
Package 3 Width	47.24 in (120 cm)
Package 3 Length	31.50 in (80 cm)
Package 3 Weight	291.01 lb(US) (132 kg)

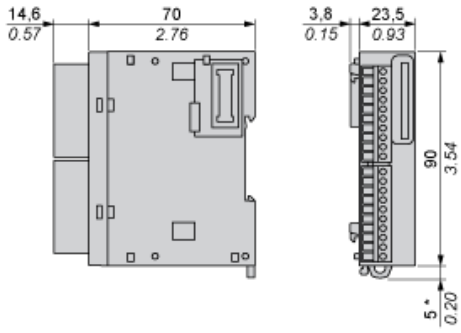
## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	Yes
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Dimensions

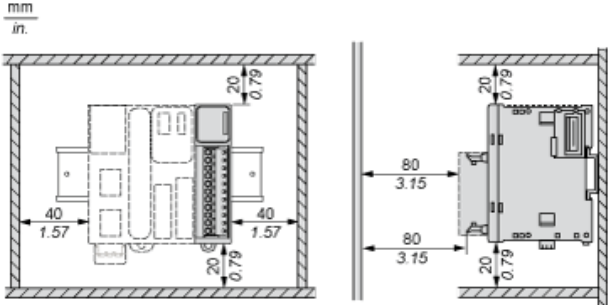
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mm  
in.



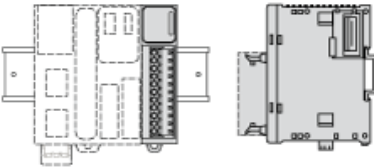
(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

Spacing Requirements

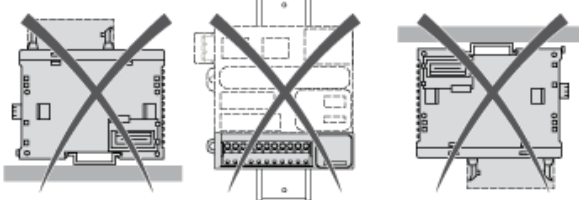


**Mounting on a Rail**

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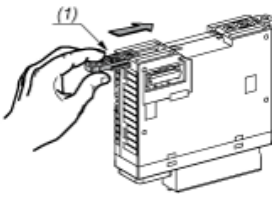


**Incorrect Mounting**



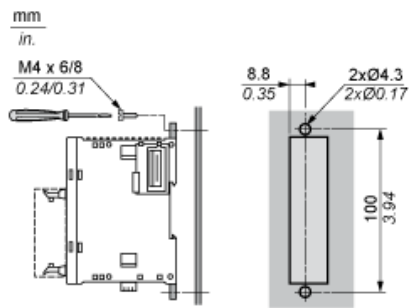
**Mounting on a Panel Surface**

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(1) Install a mounting strip

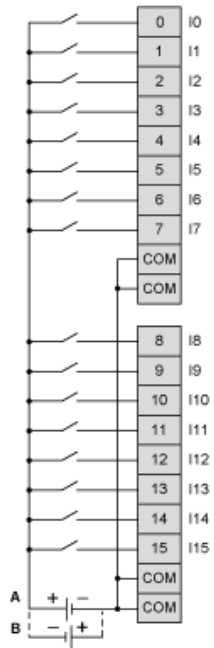
**Mounting Hole Layout**



## Digital Input Module (16-channel, 24 Vdc)

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### Wiring Diagrams



The 4 COM terminals are connected internally

- (A) Sink wiring (positive logic)
- (B) Source wiring (negative logic)

### Recommended replacement(s)