

# Product data sheet

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
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	Input status 1 LED per channel green)
Electrical Connection	10 x 1.5 mm <sup>2</sup> removable spring 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 plate or panel with fixing kit
Height	3.54 in (90 mm)
Depth	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>	IEC 61131-2
<b>Product Certifications</b>	CE cULus UKCA RCM EAC cULus HazLoc
<b>Resistance To Electrostatic Discharge</b>	8 kV in air IEC 61000-4-2 4 kV on contact IEC 61000-4-2
<b>Resistance To Electromagnetic Fields</b>	9.14 V/yd (10 V/m) 80 MHz...1 GHz IEC 61000-4-3 2.74 V/yd (3 V/m) 1.4 GHz...2 GHz IEC 61000-4-3 0.91 V/yd (1 V/m) 2 GHz...3 GHz IEC 61000-4-3
<b>Resistance To Magnetic Fields</b>	98.43 A/ft (30 A/m) 50/60 Hz IEC 61000-4-8
<b>Resistance To Fast Transients</b>	1 kV I/OIEC 61000-4-4
<b>Surge Withstand</b>	1 kV I/O common mode IEC 61000-4-5 DC
<b>Resistance To Conducted Disturbances</b>	10 V 0.15...80 MHz 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 IEC 55011 Radiated emissions 47 dB $\mu$ V/m QP class A 10 m)230...1000 MHz 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...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

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	3.15 in (8.0 cm)
<b>Package 1 Width</b>	5.12 in (13.0 cm)
<b>Package 1 Length</b>	4.33 in (11.0 cm)
<b>Package 1 Weight</b>	7.02 oz (199.0 g)
<b>Unit Type Of Package 2</b>	S04
<b>Number Of Units In Package 2</b>	42
<b>Package 2 Height</b>	11.81 in (30 cm)

<b>Package 2 Width</b>	15.75 in (40 cm)
<b>Package 2 Length</b>	23.62 in (60 cm)
<b>Package 2 Weight</b>	20.11 lb(US) (9.124 kg)
<b>Unit Type Of Package 3</b>	P12
<b>Number Of Units In Package 3</b>	504
<b>Package 3 Height</b>	41.34 in (105 cm)
<b>Package 3 Width</b>	47.24 in (120 cm)
<b>Package 3 Length</b>	31.50 in (80 cm)
<b>Package 3 Weight</b>	275.58 lb(US) (125 kg)

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

## Certifications & Standards

**Reach Regulation**

[REACH Declaration](#)

**Eu Rohs Directive**

Pro-active compliance (Product out of EU RoHS legal scope)

[EU RoHS Declaration](#)

**China Rohs Regulation**

[China RoHS declaration](#)

**Environmental Disclosure**

[Product Environmental Profile](#)

**Weee**

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

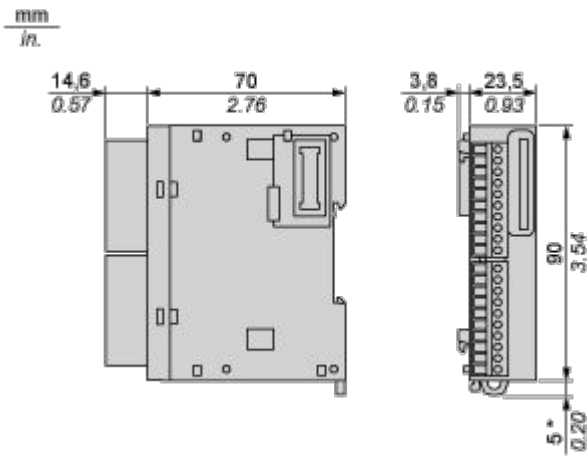
**Circularity Profile**

[End of Life Information](#)

Dimensions Drawings

Dimensions

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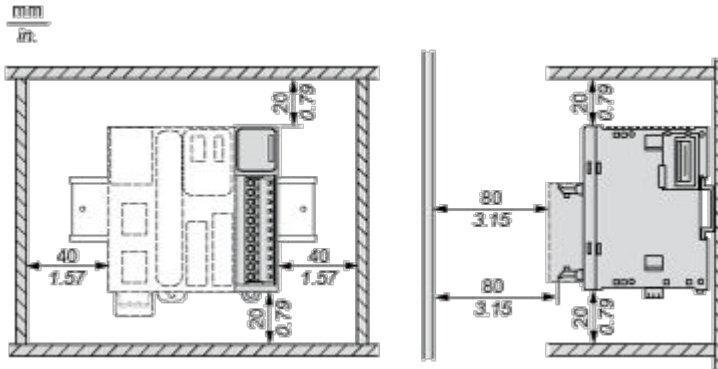


(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

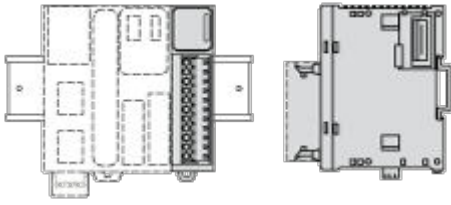
Spacing Requirements

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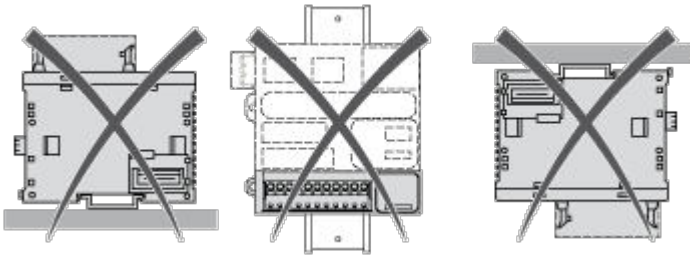


Mounting on a Rail

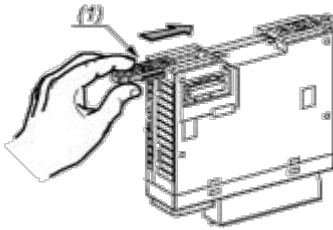
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**Incorrect Mounting**

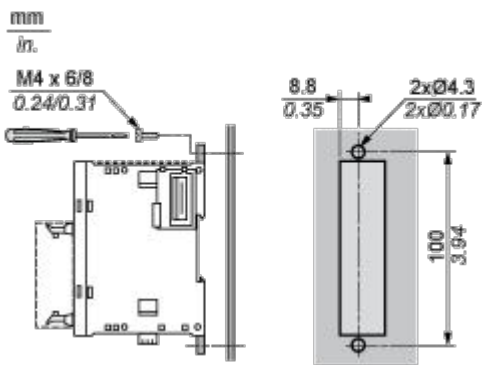


Mounting on a Panel Surface



- (1) Install a mounting strip

**Mounting Hole Layout**

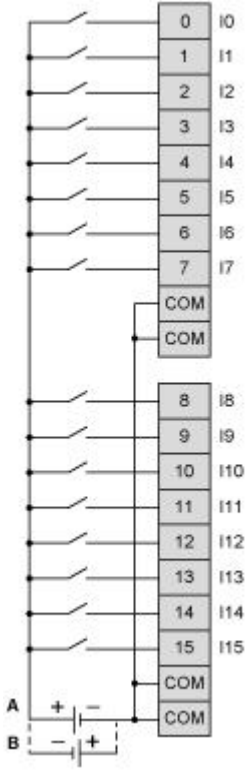


Connections and Schema

Digital Input Module (16-channel, 24 Vdc)

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Wiring Diagrams



The 4 COM terminals are connected internally

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