

Product datasheet

Specifications



discrete input module, Modicon TM3, 8 inputs, screw, 24V DC

TM3DI8

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	8 for input conforming to IEC 61131-2 Type 1
Discrete Input Logic	Sink or source (positive/negative)
Discrete Input Voltage	24 V
Discrete Input Current	7 mA for input

Complementary

Discrete I/O Number	8
Current Consumption	5 mA at 5 V DC via bus connector (at state off) 0 mA at 24 V DC via bus connector (at state on) 0 mA at 24 V DC via bus connector (at state off) 24 mA at 5 V DC via bus connector (at state on)
Discrete Input Voltage Type	DC
Voltage State 1 Guaranteed	15...28.8 V for input
Current State 1 Guaranteed	≥ 2.5 mA (input)
Voltage State 0 Guaranteed	0...5 V for 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	1 LED per channel (green) for input status
Electrical Connection	11 x 2.5 mm ² removable screw terminal block with pitch 5.08 mm adjustment for inputs
Maximum Cable Distance Between Devices	Unshielded cable: <30 m for regular input
Insulation	Between input and internal logic at 500 V AC Non-insulated between inputs
Marking	CE
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

Depth	84.6 mm
Width	27.4 mm
Net Weight	0.085 kg

Environment

Standards	IEC 61131-2
Product Certifications	CE cULus UKCA RCM EAC cULus HazLoc
Resistance To Electrostatic Discharge	8 kV in air conforming to IEC 61000-4-2 4 kV on contact conforming to IEC 61000-4-2
Resistance To Electromagnetic Fields	10 V/m 80 MHz...1 GHz conforming to IEC 61000-4-3 3 V/m 1.4 GHz...2 GHz conforming to IEC 61000-4-3 1 V/m 2 GHz...3 GHz conforming to IEC 61000-4-3
Resistance To Magnetic Fields	30 A/m 50/60 Hz conforming to IEC 61000-4-8
Resistance To Fast Transients	1 kV for I/O conforming to IEC 61000-4-4
Surge Withstand	1 kV I/O common mode conforming to IEC 61000-4-5 DC
Resistance To Conducted Disturbances	10 V 0.15...80 MHz conforming to IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)
Electromagnetic Emission	Radiated emissions - test level: 40 dB μ V/m QP class A (10 m) at 30...230 MHz conforming to IEC 55011 Radiated emissions - test level: 47 dB μ V/m QP class A (10 m) at 230...1000 MHz conforming to IEC 55011
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 (in operation) 10...95 %, without condensation (in storage)
Ip Degree Of Protection	IP20 with protective cover in place
Pollution Degree	2
Operating Altitude	0...2000 m
Storage Altitude	0...3000 m
Vibration Resistance	3.5 mm at 5...8.4 Hz on DIN rail 3 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on panel 3 gn at 8.4...150 Hz on panel
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	7.652 cm
Package 1 Width	10.664 cm
Package 1 Length	12.68 cm
Package 1 Weight	220.0 g
Unit Type Of Package 2	CAR

Number Of Units In Package 2	42
Package 2 Height	29.4 cm
Package 2 Width	39.5 cm
Package 2 Length	57.7 cm
Package 2 Weight	10.32 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	133 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-CO₂ 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

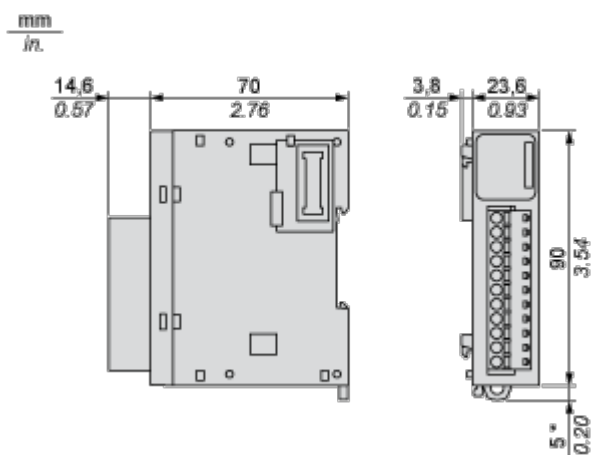
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

[End of Life Information](#)

Dimensions Drawings

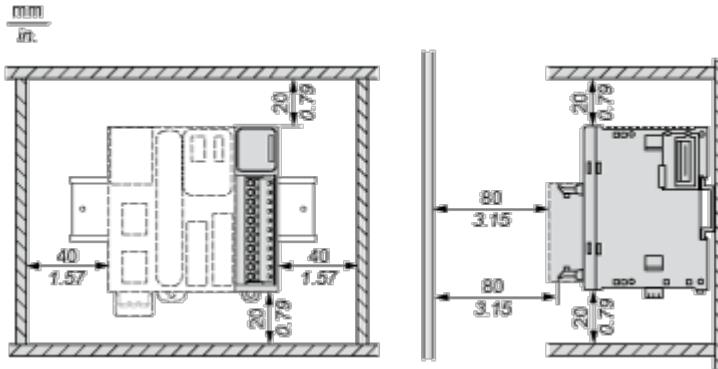
Dimensions



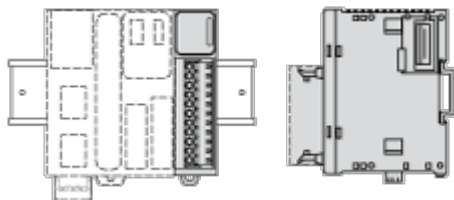
(*) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

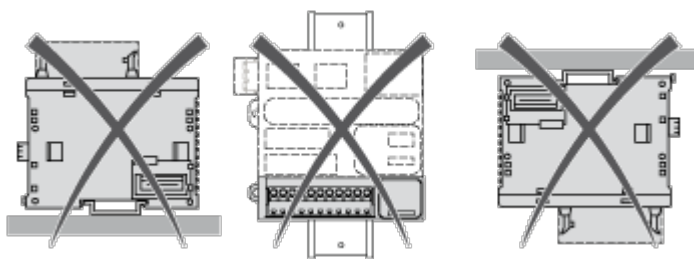
Spacing Requirements



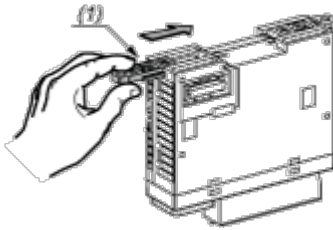
Mounting on a Rail



Incorrect Mounting

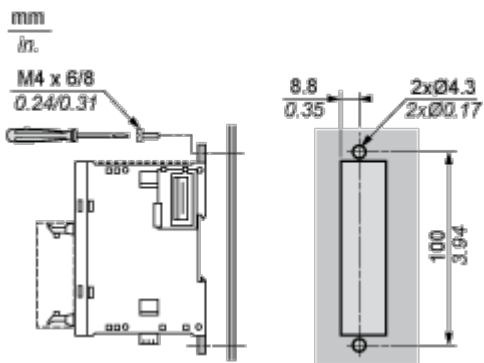


Mounting on a Panel Surface



- (1) Install a mounting strip

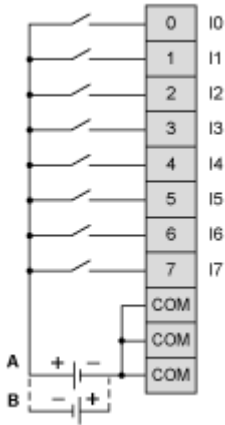
Mounting Hole Layout



Connections and Schema

Digital Input Module (8-channel, 24 Vdc)

Wiring Diagram



The 3 COM terminals are connected internally.

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