

Product data sheet

Specifications



discrete input module, Modicon TM3, 16 inputs, HE10, 24V DC

TM3DI16K

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	5 mA input

Complementary

Discrete I/O Number	16
Current Consumption	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) 35 mA 5 V DC via bus connector at state on)
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	4.4 kOhm
Response Time	4 ms turn-on) 4 ms turn-off)
Local Signalling	Input status 1 LED per channel green)
Electrical Connection	HE-10 connector 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	3.20 in (81.3 mm)

Width	0.84 in (21.4 mm)
Net Weight	1.43 lb(US) (0.65 kg)

Environment

Standards	IEC 61131-2
Product Certifications	cULus CE UKCA RCM EAC cULus HazLoc
Resistance To Electrostatic Discharge	8 kV in air IEC 61000-4-2 4 kV on contact IEC 61000-4-2
Resistance To Electromagnetic Fields	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
Resistance To Magnetic Fields	98.43 A/ft (30 A/m) 50/60 Hz IEC 61000-4-8
Resistance To Fast Transients	1 kV I/O IEC 61000-4-4
Surge Withstand	1 kV I/O common mode IEC 61000-4-5 DC
Resistance To Conducted Disturbances	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)
Electromagnetic Emission	Radiated emissions 40 dB μ V/m QP class A 10 m)30...230 MHz IEC 55011 Radiated emissions 47 dB μ V/m QP class A 10 m)230...1000 MHz IEC 55011
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 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	0.00...9842.52 ft (0...3000 m)
Vibration Resistance	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
Shock Resistance	15 gn 11 ms

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.95 in (7.5 cm)
Package 1 Width	4.92 in (12.5 cm)
Package 1 Length	4.13 in (10.5 cm)
Package 1 Weight	6.31 oz (179.0 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	18.36 lb(US) (8.326 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	233.69 lb(US) (106 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

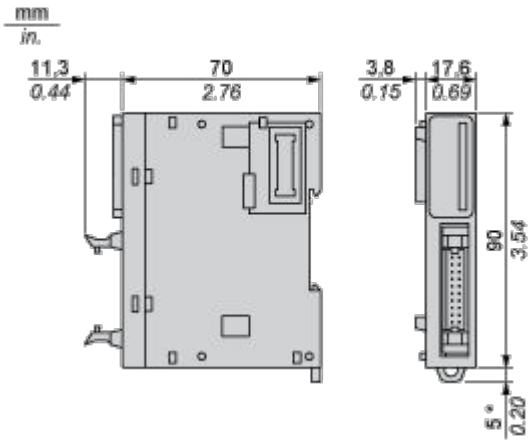
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

[End of Life Information](#)

Dimensions Drawings

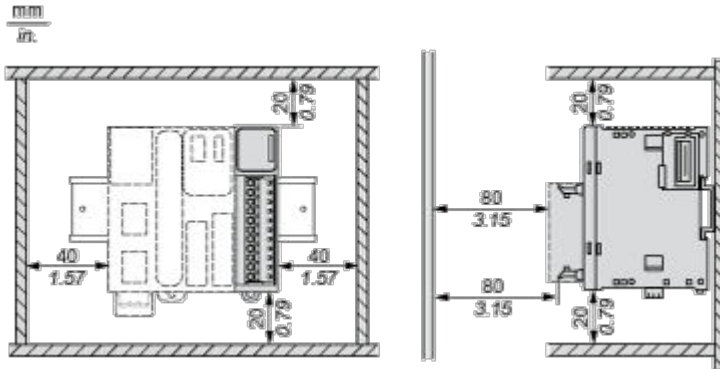
Dimensions



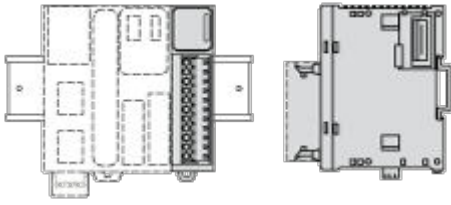
(*) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

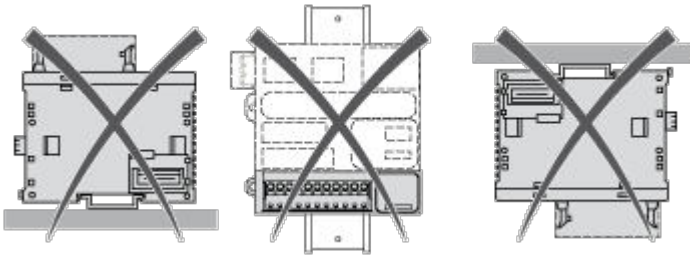
Spacing Requirements



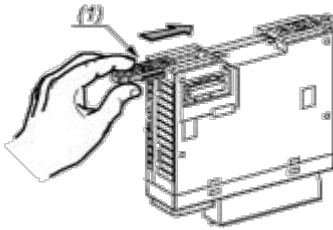
Mounting on a Rail



Incorrect Mounting

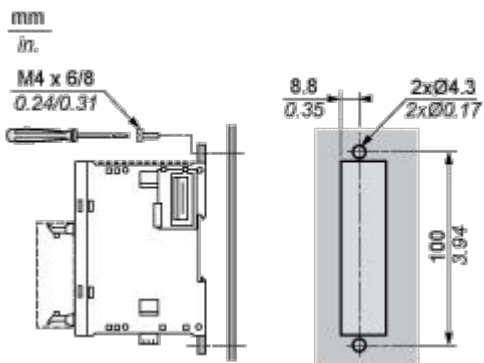


Mounting on a Panel Surface



- (1) Install a mounting strip

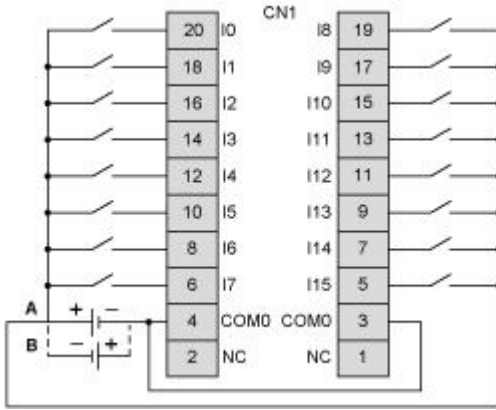
Mounting Hole Layout



Connections and Schema

Digital Input Module (16-channel, 24 Vdc)

Wiring Diagrams



The COM0 terminals are connected internally

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