

# Product datasheet

Specifications



## Modicon TM3 - 32 inputs (HE10) 24Vdc

TM3DI32K

EAN Code: 3606480611414

### 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	32 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	5 mA for input

### Complementary

Discrete I/O number	32
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) 65 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	4.4 kOhm
Response time	4 ms (turn-on) 4 ms (turn-off)
Local signalling	1 LED per channel (green) for input status
Electrical connection	HE-10 connector 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	81.3 mm

<b>Width</b>	33.5 mm
<b>Net weight</b>	0.1 kg

## Environment

<b>Standards</b>	IEC 61131-2
<b>Product certifications</b>	cULus CE UKCA RCM EAC cULus HazLoc
<b>Resistance to electrostatic discharge</b>	8 kV in air conforming to IEC 61000-4-2 4 kV on contact conforming to IEC 61000-4-2
<b>Resistance to electromagnetic fields</b>	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
<b>Resistance to magnetic fields</b>	30 A/m 50/60 Hz conforming to IEC 61000-4-8
<b>Resistance to fast transients</b>	1 kV for I/O conforming to IEC 61000-4-4
<b>Surge withstand</b>	1 kV I/O common mode conforming to IEC 61000-4-5 DC
<b>Resistance to conducted disturbances</b>	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)
<b>Electromagnetic emission</b>	Radiated emissions - test level: 40 dB $\mu$ V/m QP class A ( 10 m) at 30...230 MHz conforming to IEC 55011 Radiated emissions - test level: 47 dB $\mu$ V/m QP class A ( 10 m) at 230...1000 MHz conforming to IEC 55011
<b>Ambient air temperature for operation</b>	-10...35 °C vertical installation -10...55 °C horizontal installation
<b>Ambient air temperature for storage</b>	-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...3000 m
<b>Vibration resistance</b>	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
<b>Shock resistance</b>	15 gn for 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>	7.639 cm
<b>Package 1 Width</b>	10.55 cm
<b>Package 1 Length</b>	12.87 cm
<b>Package 1 Weight</b>	220.0 g
<b>Unit Type of Package 2</b>	CAR
<b>Number of Units in Package 2</b>	42

<b>Package 2 Height</b>	29.6 cm
<b>Package 2 Width</b>	40.3 cm
<b>Package 2 Length</b>	55.9 cm
<b>Package 2 Weight</b>	10.431 kg
<b>Unit Type of Package 3</b>	P12
<b>Number of Units in Package 3</b>	504
<b>Package 3 Height</b>	105 cm
<b>Package 3 Width</b>	120 cm
<b>Package 3 Length</b>	80 cm
<b>Package 3 Weight</b>	133 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## 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

## 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

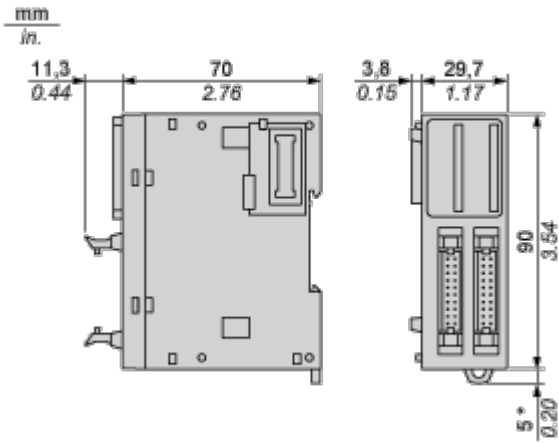
**Circularity Profile**

[End of Life Information](#)

## Dimensions Drawings

### Dimensions

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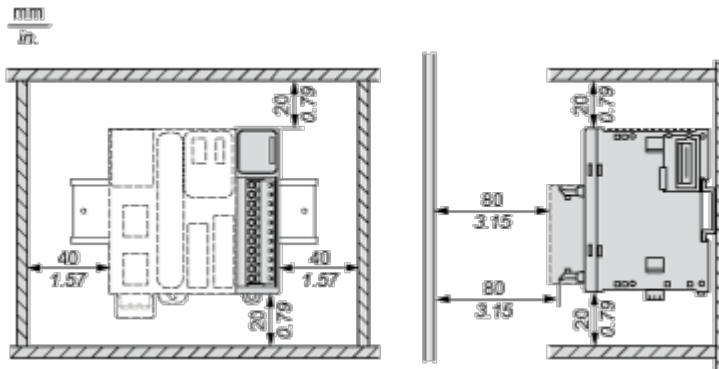


(\* ) 8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

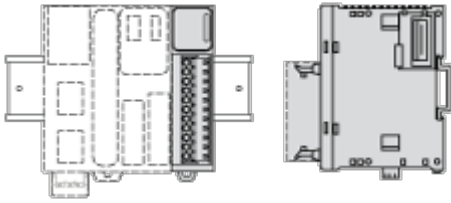
Spacing Requirements

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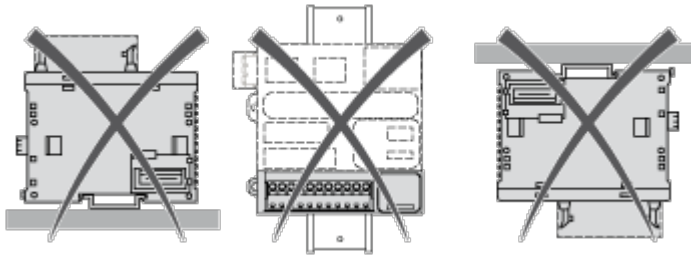


**Mounting on a Rail**

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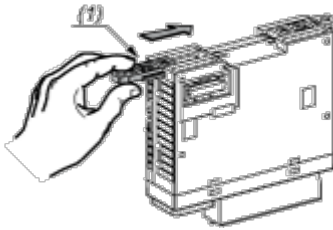


**Incorrect Mounting**



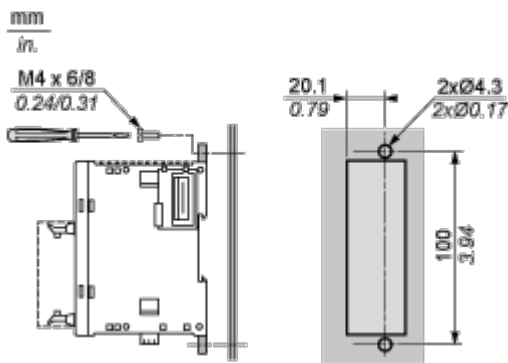
Mounting on a Panel Surface

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- (1) Install a mounting strip

Mounting Hole Layout

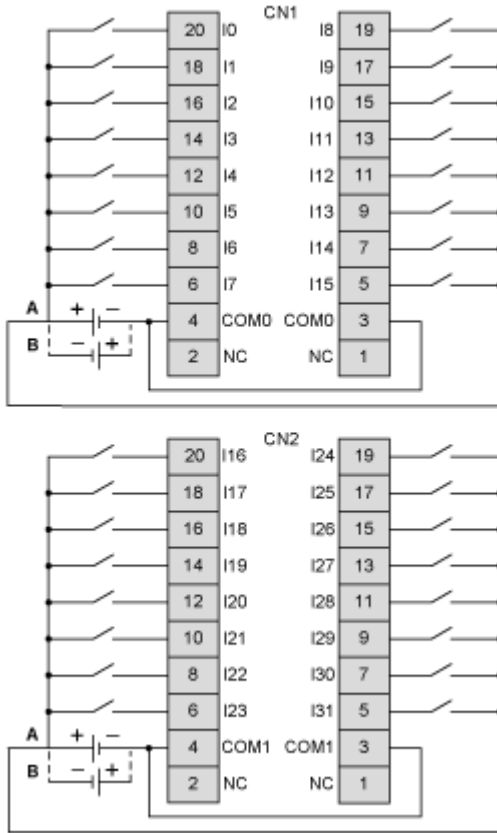




Connections and Schema

Digital Input Module (32-channel, 24 Vdc)

Wiring Diagram



The COM0 and COM1 terminals are **not** connected internally

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