

# Bảng thông số sản phẩm

Thông số kỹ thuật



## IO analog module, Modicon TM3, 4 inputs, 2 output, screw, 24V DC

TM3AM6

### Main

Range of product	Modicon TM3
product or component type	Input/output analog module
Range compatibility	Modicon M221 Modicon M241 Modicon M251 Modicon M262
Analogue input number	4
Analogue input type	current 4...20 mA current 0...20 mA voltage 0...10 V voltage - 10...10 V
Analogue output number	2
Analogue output type	Current: 4...20 mA Current: 0...20 mA Voltage: 0...10 V Voltage: - 10...10 V

### Complementary

Analogue input resolution	12 bits 11 bits + sign
Permissible continuous overload	13 V, analogue input type: voltage 40 mA, analogue input type: current
Input impedance	<= 50 Ohm current >= 1 MOhm voltage
Analogue output resolution	12 bits 11 bits + sign
LSB value	2.44 mV 0...10 Vvoltage 4.88 mV - 10...10 Vvoltage 4.88 $\mu$ A 0...20 mAcurrent 3.91 $\mu$ A 4...20 mAcurrent
Load type	Resistive
Load impedance ohmic	1 kOhm voltage 300 Ohm current
Stabilisation time	1 ms
Conversion time	1 ms + 1 ms per channel + 1 controller cycle time
Sampling duration	1 ms 10 ms
Absolute accuracy error	+/- 1 % of full scale +/- 0.2 % of full scale at 25 °C
Temperature drift	+/- 0.01 %FS/°C

<b>Repeat accuracy</b>	+/-0.5 %FS for input +/-0.5 %FS for output
<b>Non-linearity</b>	+/- 0.2 %FS
<b>Output ripple</b>	20 mV
<b>Cross talk</b>	<= 1 LSB
<b>[Us] rated supply voltage</b>	24 V DC
<b>Supply voltage limits</b>	20.4...28.8 V
<b>Type of cable</b>	Twisted shielded pairs cable <30 m for input/output circuit
<b>Current consumption</b>	45 mA at 5 V DC via bus connector no load 55 mA at 5 V DC via bus connector full load 55 mA at 24 V DC via external supply no load 100 mA at 24 V DC via external supply full load
<b>Local signalling</b>	1 LED (green) for PWR
<b>Electrical connection</b>	10 x 1.5 mm <sup>2</sup> removable screw terminal block with pitch 3.81 mm adjustment for inputs 10 x 1.5 mm <sup>2</sup> removable screw terminal block with pitch 3.81 mm adjustment for inputs, outputs and supply
<b>Insulation</b>	Between input and supply at 1500 V AC Between input and internal logic at 500 V AC Between output and supply at 1500 V AC Between output and internal logic at 500 V AC
<b>marking</b>	CE
<b>Surge withstand</b>	1 kV power supply common mode conforming to IEC 61000-4-5 0.5 kV power supply differential mode conforming to IEC 61000-4-5 1 kV I/O common mode conforming to IEC 61000-4-5 0.5 kV I/O differential mode conforming to IEC 61000-4-5
<b>Mounting support</b>	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
<b>Height</b>	90 mm
<b>Depth</b>	70 mm
<b>Width</b>	23.6 mm
<b>net weight</b>	0.11 kg

## Environment

<b>Standards</b>	IEC 61131-2
<b>Product certifications</b>	CE UKCA RCM EAC cULus 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 conforming to IEC 61000-4-8
<b>Resistance to fast transients</b>	1 kV (I/O) conforming to IEC 61000-4-4
<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>Immunity to microbreaks</b>	10 ms
<b>Ambient air temperature for operation</b>	-10...55 °C horizontal installation -10...35 °C vertical 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
<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
<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>	7.500 cm
<b>Package 1 Width</b>	10.500 cm
<b>Package 1 Length</b>	12.500 cm
<b>Package 1 Weight</b>	214.000 g
<b>Unit Type of Package 2</b>	S04
<b>Number of Units in Package 2</b>	42
<b>Package 2 Height</b>	30.000 cm
<b>Package 2 Width</b>	40.000 cm
<b>Package 2 Length</b>	60.000 cm
<b>Package 2 Weight</b>	10.027 kg

## Bền vững

Nhãn **Green Premium™** là cam kết của Schneider Electric trong việc cung cấp sản phẩm với hiệu suất môi trường tốt nhất. Green Premium cam kết tuân thủ các quy định mới nhất, minh bạch về tác động môi trường, cũng như các sản phẩm tuần hoàn và CO<sub>2</sub> thấp.

**Hướng dẫn đánh giá tính bền vững của sản phẩm** là tài liệu kỹ thuật phổ thông giúp làm rõ các tiêu chuẩn nhãn sinh thái toàn cầu và cách diễn giải việc khai báo môi trường.

[Tìm hiểu thêm về Green Premium >](#)

[Hướng dẫn đánh giá về sự bền vững của sản phẩm >](#)



Minh bạch [RoHS/REACH](#)

## Hiệu suất sức khỏe

Toxic Heavy Metal Free

Mercury Free

Rohs Exemption Information [Yes](#)

Pvc Free

## Chứng nhận & Tiêu chuẩn

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

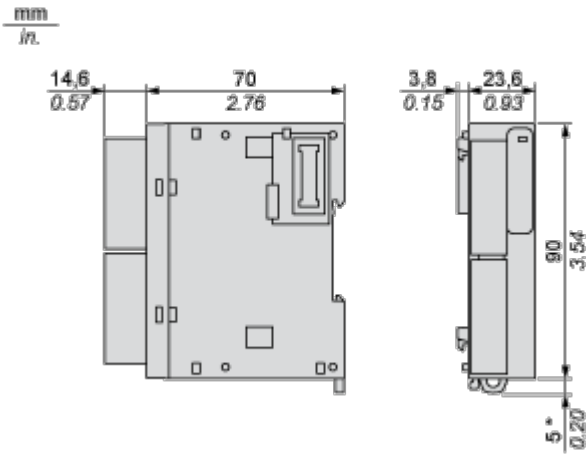
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

[End of Life Information](#)

**Dimensions**

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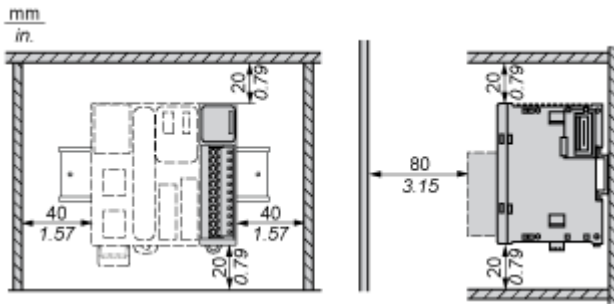


(\*) 8.5 mm/0.33 in when the clamp is pulled out.

## Mounting and Clearance

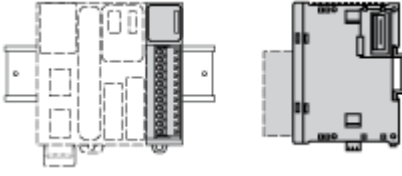
### Spacing Requirements

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Mounting on a Rail

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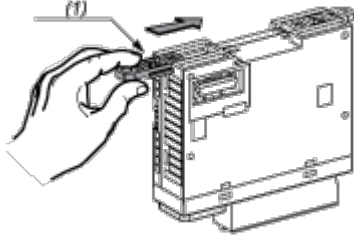


Incorrect Mounting



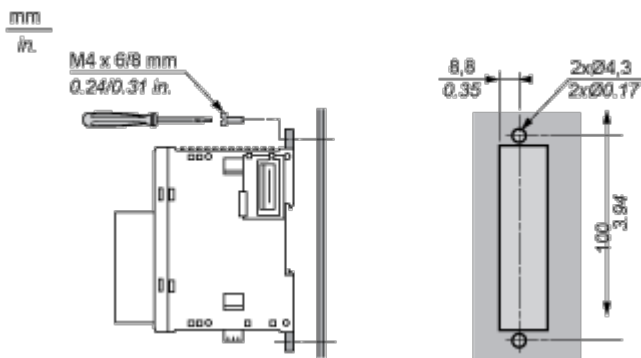
## Mounting on a Panel Surface

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- (1) Install a mounting strip

## Mounting Hole Layout

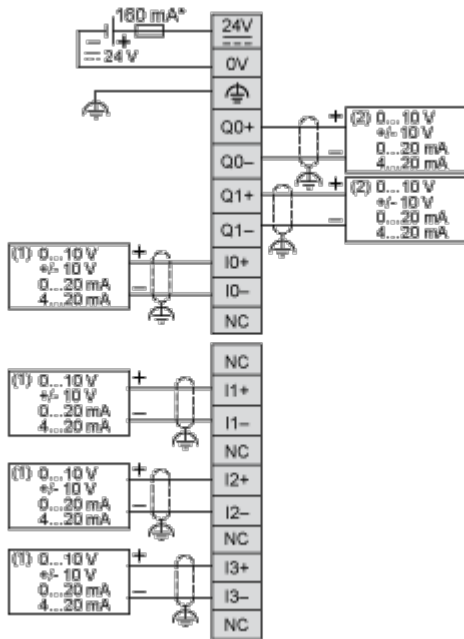




## Connections and Schema

### Analogue Mixed I/O Module

#### Wiring Diagram (Current / Voltage)



(\*) Type T fuse

(1) Current/Voltage analog output device

(2) Current/Voltage analog input device