

Product datasheet

Specifications



Modicon TM3 - 4 analog inputs, 2 analog output (screw) 24Vdc

TM3AM6

EAN Code: 3606480648946

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 µA 0...20 mAcurrent 3.91 µA 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Repeat Accuracy	+/-0.5 %FS for input +/-0.5 %FS for output
Non-Linearity	+/- 0.2 %FS
Output Ripple	20 mV
Cross Talk	<= 1 LSB
[Us] Rated Supply Voltage	24 V DC
Supply Voltage Limits	20.4...28.8 V
Type Of Cable	Twisted shielded pairs cable <30 m for input/output circuit
Current Consumption	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
Local Signalling	1 LED (green) for PWR
Electrical Connection	10 x 1.5 mm ² removable screw terminal block with pitch 3.81 mm adjustment for inputs 10 x 1.5 mm ² removable screw terminal block with pitch 3.81 mm adjustment for inputs, outputs and supply
Insulation	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
Marking	CE
Surge Withstand	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
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	70 mm
Width	23.6 mm
Net Weight	0.11 kg

Environment

Standards	IEC 61131-2
Product Certifications	CE UKCA RCM EAC cULus 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 conforming to IEC 61000-4-8
Resistance To Fast Transients	1 kV (I/O) conforming to IEC 61000-4-4
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
Immunity To Microbreaks	10 ms
Ambient Air Temperature For Operation	-10...55 °C horizontal installation -10...35 °C vertical 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
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
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	7.500 cm
Package 1 Width	10.500 cm
Package 1 Length	12.500 cm
Package 1 Weight	214.000 g
Unit Type Of Package 2	S04
Number Of Units In Package 2	42
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	10.027 kg

Contractual warranty

Warranty	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-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

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

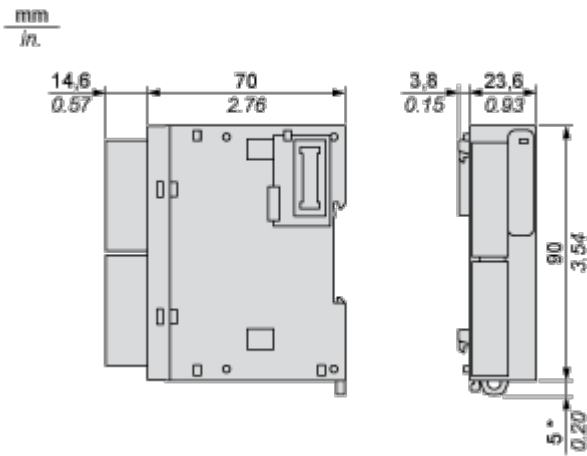
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

[End of Life Information](#)

Dimensions Drawings

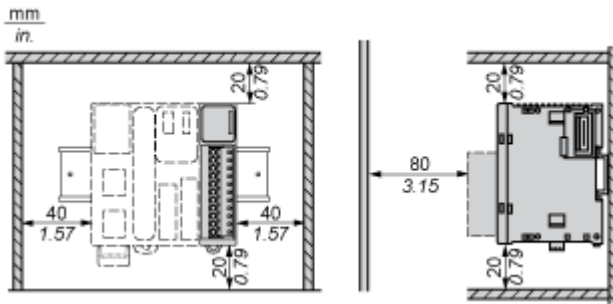
Dimensions



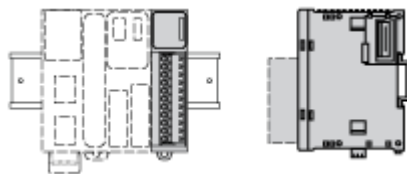
(*) 8.5 mm/0.33 in when the clamp is pulled out.

Mounting and Clearance

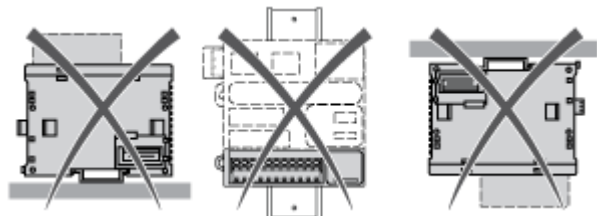
Spacing Requirements



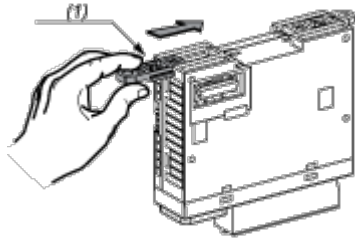
Mounting on a Rail



Incorrect Mounting

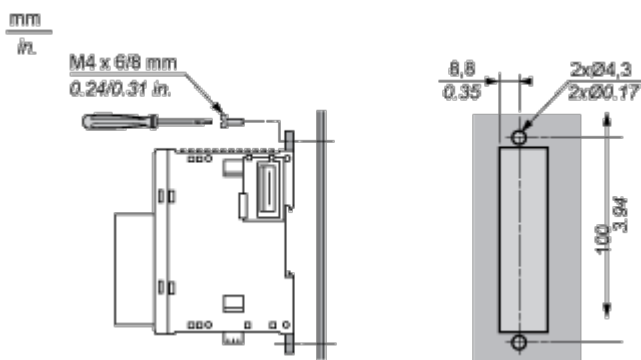


Mounting on a Panel Surface



- (1) Install a mounting strip

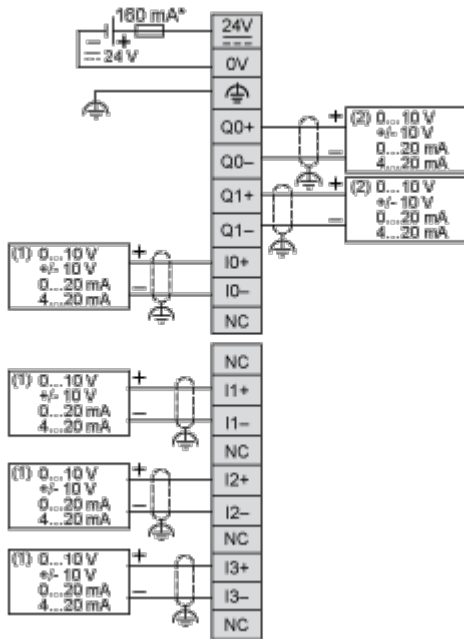
Mounting Hole Layout



Connections and Schema

Analogue Mixed I/O Module

Wiring Diagram (Current / Voltage)



(*) Type T fuse

(1) Current/Voltage analog output device

(2) Current/Voltage analog input device