

Product datasheet

Specifications



Modicon TM3 - 2 analog inputs high resolution (screw) 24Vdc

TM3AI2H

EAN Code: 3606480648885

Main

Range of product	Modicon TM3
Product or component type	Analog input module
Range compatibility	Modicon M221 Modicon M241 Modicon M251 Modicon M262
Analogue input number	2

Complementary

Analogue input type	Current 4...20 mA Current 0...20 mA Voltage 0...10 V Voltage - 10...10 V
Analogue input resolution	16 bits 15 bits + sign
Permissible continuous overload	13 V, analogue input type: voltage 40 mA, analogue input type: current
Input impedance	<= 50 Ohm >= 1 MOhm
Sampling duration	1 ms
Conversion time	1 ms + 1 ms per channel + 1 controller cycle time
Absolute accuracy error	+/- 0.1 % of full scale at 25 °C +/- 1 % of full scale
Repeat accuracy	+/-0.5 %FS
Cross talk	<= 1 LSB
Type of cable	Twisted shielded pairs cable <30 m for input circuit
Electrical connection	11 x 2.5 mm² removable screw terminal block with pitch 5.08 mm adjustment for inputs and supply
LSB value	0.153 mV, 0...10 V 0.305 mV, - 10...10 V 0.305 µA, 0...20 mA 0.244 µA, 4...20 mA
Insulation	Between input and supply at 1500 V AC Between input and internal logic at 500 V AC
Immunity to microbreaks	10 ms
Temperature drift	+/- 0.006 %FS/°C
Non-linearity	+/- 0.01 %FS
Typical current consumption	30 mA at 5 V DC no load 40 mA at 5 V DC full load 25 mA at 24 V DC

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

Local signalling	1 LED green for PWR
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
Width	23.6 mm
Depth	70 mm
Product weight	0.115 kg

Environment

IP degree of protection	IP20
Marking	CE
Product certifications	CE UKCA RCM EAC CULus CULus HazLoc
Standards	IEC 61131-2
Electromagnetic emission	Radiated emissions - test level: 40 dBµV/m QP class A (10 m) at 30...230 MHz conforming to IEC 55011 Radiated emissions - test level: 47 dBµV/m QP class A (10 m) at 230...1000 MHz conforming to IEC 55011
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
Operating altitude	0...2000 m
Pollution degree	2
Vibration resistance	3.5 mm (f = 5...8.4 Hz) on DIN rail 3 gn (f = 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	7.46 cm
Package 1 Width	10.645 cm
Package 1 Length	12.707 cm
Package 1 Weight	220.0 g
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	10.341 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	134 kg

Logistical informations

Country of origin	JP
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Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	38 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	14 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	23 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again

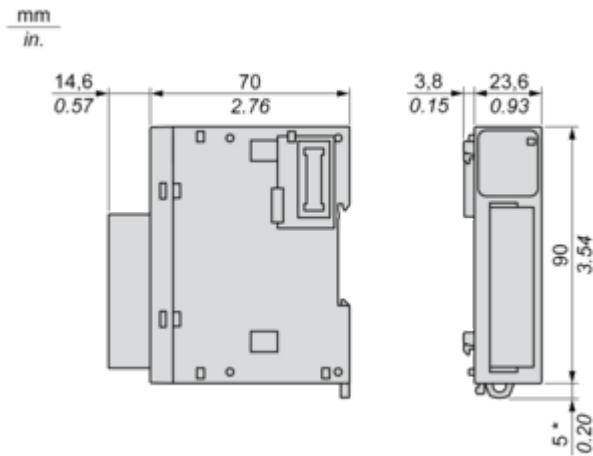


Repack and remanufacture

Recyclability potential, in %	3
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

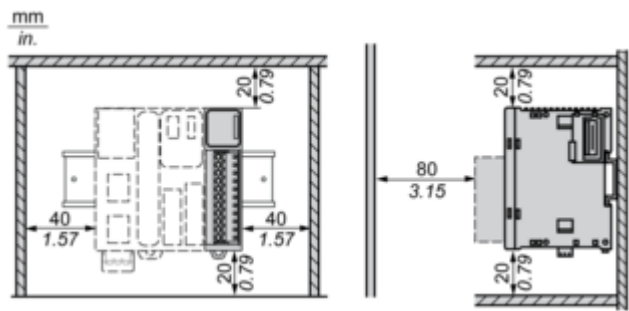
Dimensions



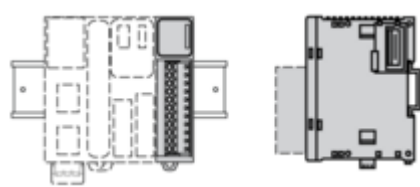
(*) 8.5 mm/0.33 in when the clamp is pulled out.

Mounting and Clearance

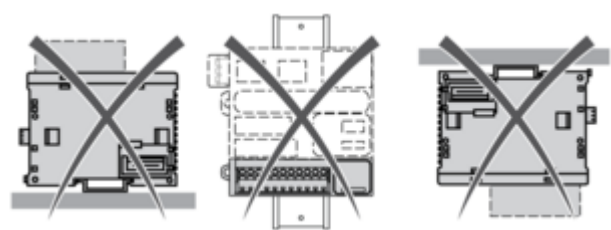
Spacing Requirements



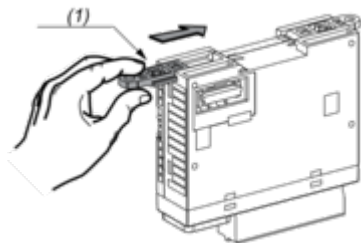
Mounting on a Rail



Incorrect Mounting

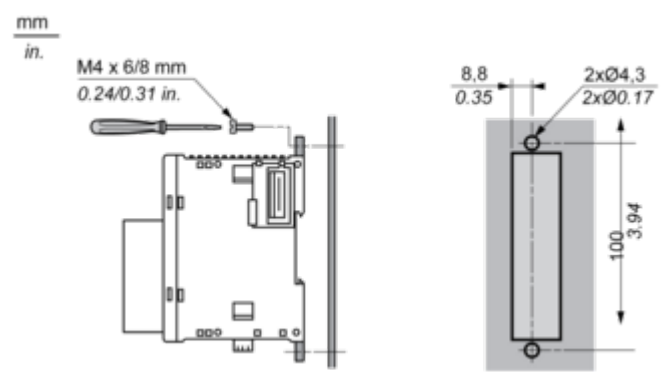


Mounting on a Panel Surface



(1) Install a mounting strip

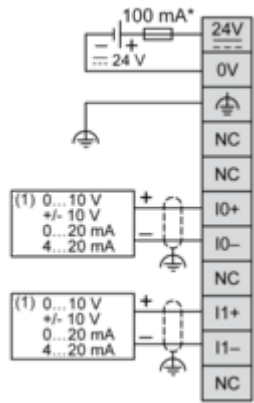
Mounting Hole Layout



Connections and Schema

Analogue Input Module

Wiring Diagram (Current / Voltage)



(*) Type T fuse
(1) Current/Voltage analog output device