

Product datasheet

Specifications



Modicon TM3 - 2 analog outputs (screw) 24Vdc

TM3AQ2

EAN Code: 3606480648960

Main

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

Complementary

Analogue input resolution	12 bits 11 bits + sign
Stabilisation time	1 ms
Analogue output type	Current: 4...20 mA Current: 0...20 mA Voltage: 0...10 V Voltage: - 10...10 V
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	+/- 0.4 %FS
Output ripple	20 mV
Cross talk	<= 1 LSB
Type of cable	Twisted shielded pairs cable <30 m for output circuit
Electrical connection	11 x 2.5 mm ² removable screw terminal block with pitch 5.08 mm adjustment for outputs and supply
LSB value	2.44 mV, 0...10 V 4.88 mV, - 10...10 V 4.88 µA, 0...20 mA 3.91 µA, 4...20 mA
Insulation	Between output and supply at 1500 V AC Between output and internal logic at 500 V AC
Immunity to microbreaks	10 ms
Load impedance ohmic	1 kOhm voltage 300 Ohm current
load type	Resistive
Temperature drift	+/- 0.006 %FS/°C
Non-linearity	+/- 0.01 %FS

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

Typical current consumption	40 mA at 5 V DC full load 35 mA at 5 V DC no load 30 mA at 24 V DC no load 70 mA at 24 V DC full load
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	7.566 cm
Package 1 Width	10.629 cm
Package 1 Length	12.698 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	10.32 kg
Unit Type of Package 3	P12
Number of Units in Package 3	336
Package 3 Height	75 cm
Package 3 Width	120 cm
Package 3 Length	80 cm
Package 3 Weight	94 kg

Logistical informations

Country of origin	JP
-------------------	----

Contractual warranty

Warranty (in months)	18
----------------------	----

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	42 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]	27 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
SCIP Number	7cc01735-94b8-432b-9a81-f9da4dd7709d
EU RoHS Directive	Compliant
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer

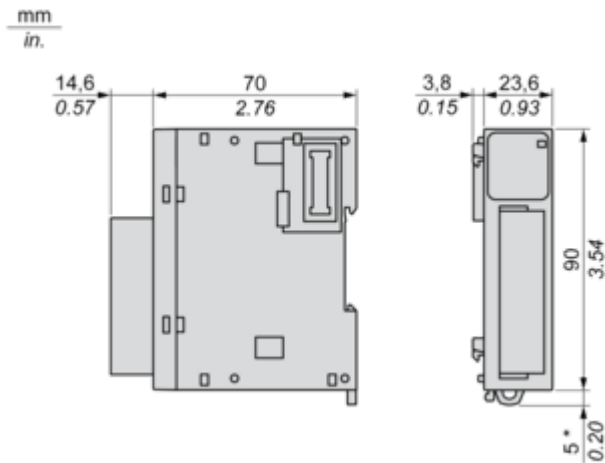
 Lifetime extension	
Repair	No

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

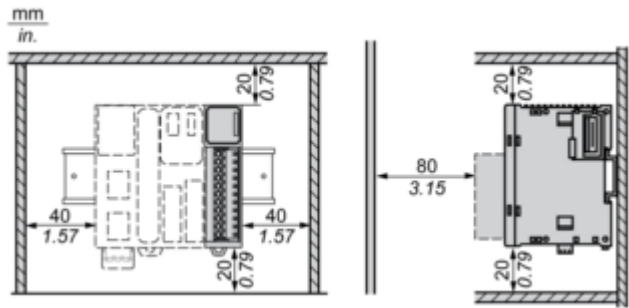
Dimensions



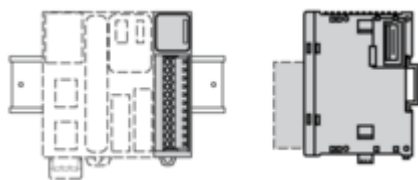
(*) 8.5 mm/0.33 in when the clamp is pulled out.

Mounting and Clearance

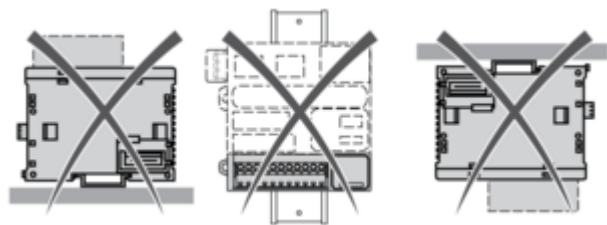
Spacing Requirements



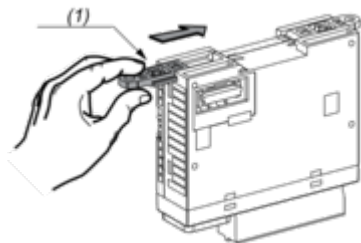
Mounting on a Rail



Incorrect Mounting

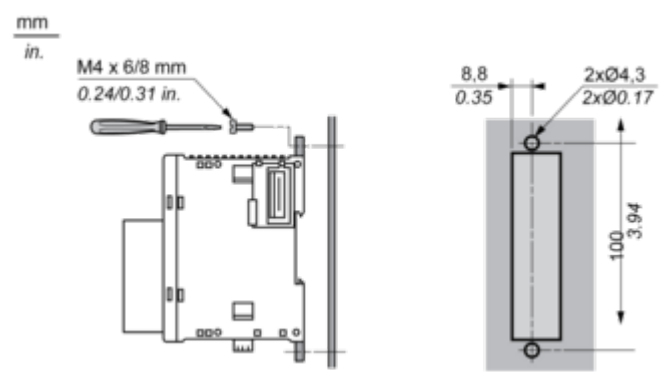


Mounting on a Panel Surface



(1) Install a mounting strip

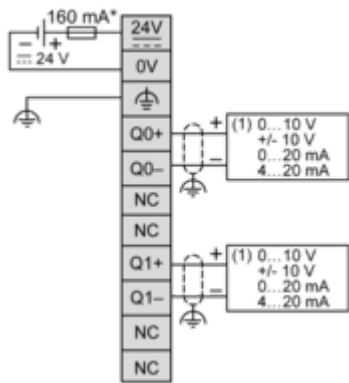
Mounting Hole Layout



Connections and Schema

Analogue Output Module

Wiring Diagram (Current / Voltage)



(*) Type T fuse
(1) Voltage/current pre-actuator