

Product data sheet

Specifications



analog output module, Modicon TM3, 4 outputs, screw, 24V DC

TM3AQ4

Product availability: Stock - Normally stocked in distribution facility

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	4
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
Analogue output resolution	11 bits + sign 12 bits
LSB value	2.44 mV 0...10 V voltage 4.88 mV - 10...10 V voltage 4.88 μ A 0...20 mA current 3.91 μ A 4...20 mA current
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
Absolute accuracy error	+/- 1 % of full scale +/- 0.2 % of full scale at 77 °F (25 °C)
Temperature Drift	+/- 0.01 %FS/°C
Repeat accuracy	+/- 0.4 %FS
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 <98.4 ft (30 m) output

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Current consumption	40 mA 5 V DC via bus connector no load 50 mA 5 V DC via bus connector full load 50 mA 24 V DC via external supply no load 125 mA 24 V DC via external supply full load
Local signalling	1 LED (green) for PWR
Electrical connection	11 x 2.5 mm ² removable screw terminal block with pitch 5.08 mm adjustment for outputs and supply
Insulation	Between output and supply 1500 V AC Between output and internal logic 500 V AC
Marking	CE
Surge withstand	1 kV power supply common mode IEC 61000-4-5 0.5 kV power supply differential mode IEC 61000-4-5 1 kV output common mode IEC 61000-4-5
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 plate or panel with fixing kit
Height	3.5 in (90 mm)
Depth	2.8 in (70 mm)
Width	0.9 in (23.6 mm)
Net Weight	0.254 lb(US) (0.115 kg)

Environment

Standards	IEC 61131-2
Product Certifications	CE UKCA RCM EAC cULus cULus HazLoc
Resistance to electrostatic discharge	8 kV in air IEC 61000-4-2 4 kV on contact IEC 61000-4-2
Resistance to electromagnetic fields	9.1 V/m (10 V/m) 80 MHz...1 GHz IEC 61000-4-3 2.7 V/m (3 V/m) 1.4 GHz...2 GHz IEC 61000-4-3 0.9 V/m (1 V/m) 2 GHz...3 GHz IEC 61000-4-3
Resistance to magnetic fields	98.4 A/m (30 A/m) IEC 61000-4-8
Resistance to fast transients	1 kV IEC 61000-4-4 I/O)
Resistance to conducted disturbances	10 V 0.15...80 MHz IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) Marine specification (LR, ABS, DNV, GL)
Electromagnetic emission	Radiated emissions 40 dB μ V/m QP class A 10 m)30...230 MHz IEC 55011 Radiated emissions 47 dB μ V/m QP class A 10 m)230...1000 MHz IEC 55011
Immunity to microbreaks	10 ms
Ambient Air Temperature for Operation	14...131 °F (-10...55 °C) horizontal installation 14...95 °F (-10...35 °C) vertical installation
Ambient Air Temperature for Storage	-13...158 °F (-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...6561.68 ft (0...2000 m)
Storage altitude	0...9842.5 ft (0...3000 m)

Vibration resistance	3.5 mm 5...8.4 Hz DIN rail 3 gn 8.4...150 Hz DIN rail
Shock resistance	15 gn 11 ms

Ordering and shipping details

Category	US10MSX22533
Discount Schedule	0MSX
GTIN	3606480648984
Returnability	Yes
Country of origin	JP

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.953 in (7.500 cm)
Package 1 Width	4.134 in (10.500 cm)
Package 1 Length	5.000 in (12.700 cm)
Package weight(Lbs)	7.760 oz (220.000 g)
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	15.748 in (40.000 cm)
Package 2 Length	23.622 in (60.000 cm)
Package 2 Weight	22.589 lb(US) (10.246 kg)



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

Carbon footprint (kg CO2 eq, Total Life cycle) 61

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](#) Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

PVC free Yes

Use Again

Repack and remanufacture

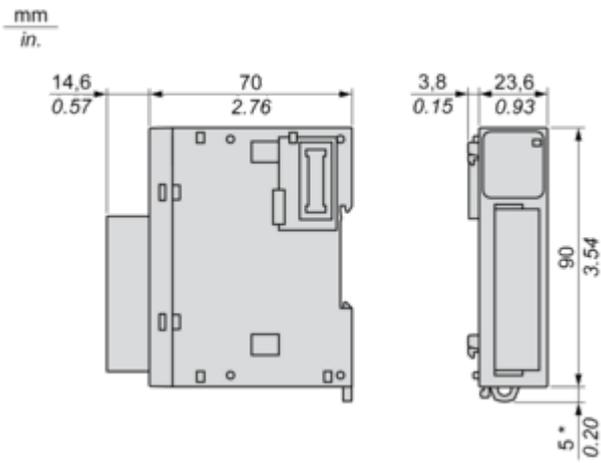
Circularity Profile [End of Life Information](#)

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

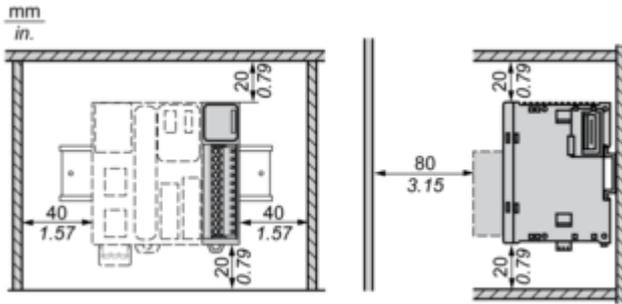
Dimensions



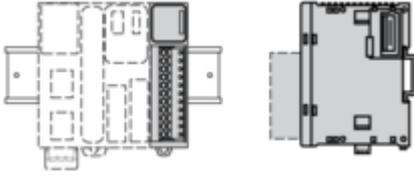
(*) 8.5 mm/0.33 in when the clamp is pulled out.

Mounting and Clearance

Spacing Requirements



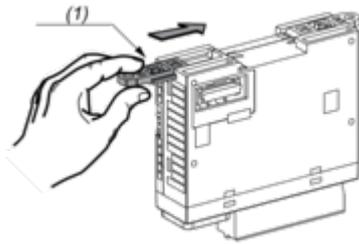
Mounting on a Rail



Incorrect Mounting

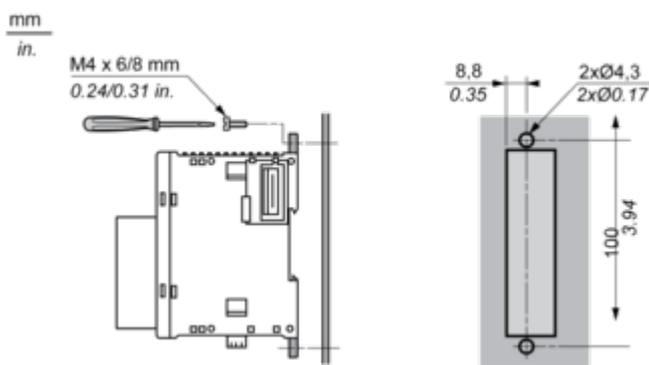


Mounting on a Panel Surface



(1) Install a mounting strip

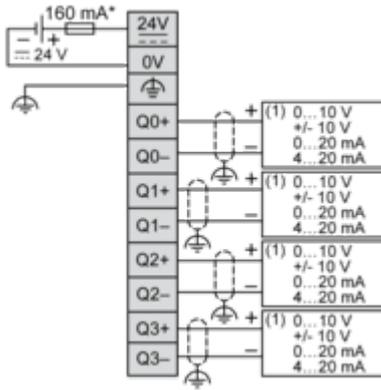
Mounting Hole Layout



Connections and Schema

Analogue Output Module

Wiring Diagram (Current / Voltage)



(*) Type T fuse

(1) Voltage/current pre-actuator