

Bảng thông số sản phẩm

Thông số kỹ thuật



analog output module, Modicon TM3, 2 outputs, screw, 24V DC

TM3AQ2

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
Analogue output type	Current: 4...20 mA Current: 0...20 mA Voltage: 0...10 V Voltage: - 10...10 V

Complementary

Analogue output resolution	11 bits + sign 12 bits
LSB value	2.44 mV 0...10 Vvoltage 4.88 mV - 10...10 Vvoltage 4.88 μ A 0...20 mAcurrent 3.91 μ 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
Absolute accuracy error	+/- 0.1 % of full scale at 25 °C +/- 1 % of full scale
Temperature drift	+/- 0.006 %FS/°C
Repeat accuracy	+/- 0.4 %FS
Non-linearity	+/- 0.01 %FS
Output ripple	20 mV
Cross talk	\leq 1 LSB
[Us] rated supply voltage	24 V DC
Supply voltage limits	20.4...28.8 V
Type of cable	Twisted shielded pairs cable \leq 30 m for output circuit
Current consumption	40 mA at 5 V DC via bus connector full load 35 mA at 5 V DC via bus connector no load 30 mA at 24 V DC via external supply no load 70 mA at 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 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 output common 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	0.115 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	7.566 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

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 CO₂ thấp.

Hướng dẫn đánh giá tính bền vững của sản phẩm là tài liệu kỹ thuật phổ thông giúp làm rõ các tiêu chuẩn nhân 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](#)

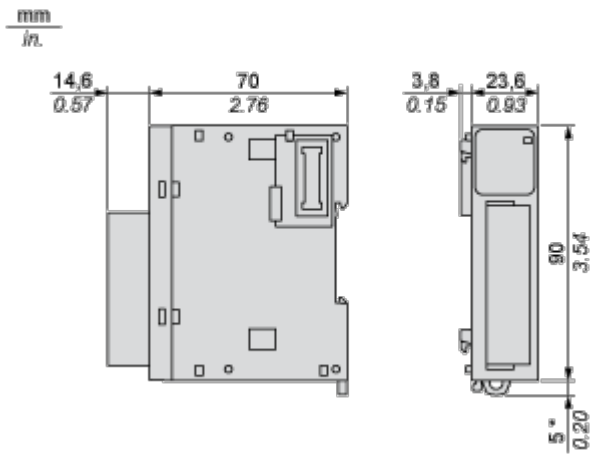
Weee

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](#)

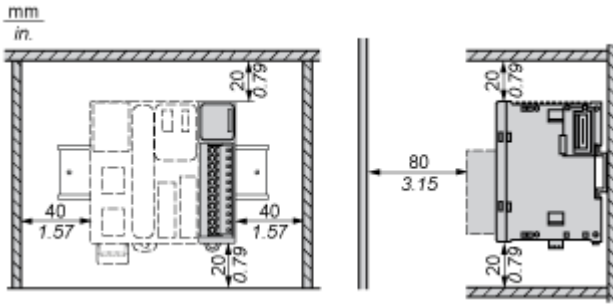
Dimensions



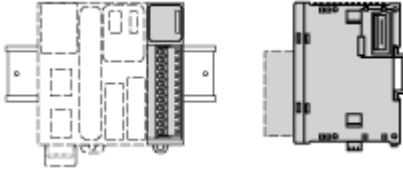
(*) 8.5 mm/0.33 in when the clamp is pulled out.

Mounting and Clearance

Spacing Requirements



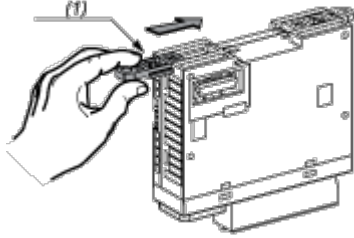
Mounting on a Rail



Incorrect Mounting

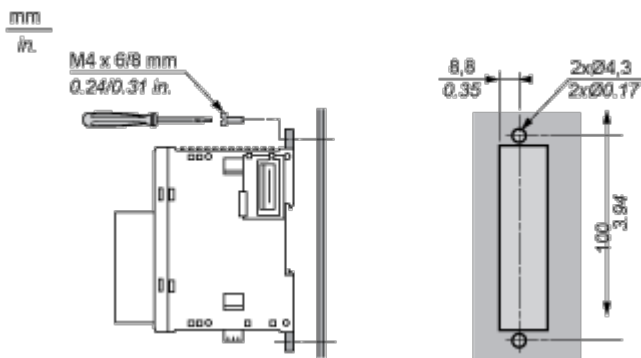


Mounting on a Panel Surface



- (1) Install a mounting strip

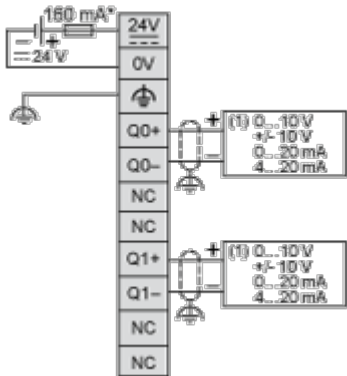
Mounting Hole Layout



Connections and Schema

Analogue Output Module

Wiring Diagram (Current / Voltage)



(*) Type T fuse

(1) Voltage/current pre-actuator