

Product data sheet

Specifications



I/O expansion module, Modicon M238 logic controller, Twido, 4 inputs voltage/current high level, 2 output, wear part

TM2AMM6HT

! Discontinued

! Discontinued on: Jan 26, 2021

Main

Range Of Product	Modicon M238 logic controller
Product Or Component Type	I/O expansion module
Analogue Input Number	4
Input Level	High level
Analogue Input Type	current 4...20 mA non differential voltage 0...10 V non differential
Analogue Output Number	2
Analogue Output Type	Current 4...20 mA Voltage 0...10 V
Cross Talk	≤ 2 LSB

Complementary

Range Compatibility	Twido Advantys OTB
Analogue Input Resolution	12 bits
Analogue Output Resolution	12 bits
Lsb Value	2.5 mV voltage voltage 4 μ A current current
Permissible Continuous Overload	40 mA current 13 V voltage
Input Impedance	≥ 1 Ohm voltage ≤ 250 MOhm current
Load Type	Resistive
Load Impedance Ohmic	≥ 2000 Ohm voltage ≤ 300 Ohm current
Stabilisation Time	20 ms
Conversion Time	20 ms + 1 controller cycle time
Sampling Duration	16 ms
Acquisition Period	16 ms per channel + 1 controller cycle time
Measurement Error	+/- 0.5 % of full scale 0...10 V 25 °C +/- 0.5 % of full scale 4...20 mA 25 °C +/- 0.9 % of full scale 0...10 V 25 °C +/- 0.9 % of full scale 4...20 mA 25 °C

Temperature Coefficient	+/- 0.02 %FS/°C 0...10 V +/- 0.02 %FS/°C 4...20 mA +/-0.015 %FS/°C 0...10 V 0...10 V +/-0.015 %FS/°C 4...20 mA 4...20 mA
Repeat Accuracy	+/- 1 %FS output +/-0.5 %FS input
Non-Linearity	+/- 0.4 %FS current +/- 0.4 %FS voltage +/- 0.5 %FS current +/- 0.5 %FS voltage
Output Error	+/- 1 %FS
Output Ripple	<= 1 LSB
Total Error	+/- 1.5 %FS current +/- 1.5 %FS voltage +/-1 %FS current current +/-1 %FS voltage voltage
Type Of Cable	Shielded cable
Insulation Between Channel And Internal Logic	Photocoupler
Supply	External supply
[Us] Rated Supply Voltage	24 V DC
Supply Voltage Limits	19.2...30 V
Electrical Connection	1 removable screw terminal block
Current Consumption	60 mA 5 V DC internal 80 mA 24 V DC external
Net Weight	0.19 lb(US) (0.085 kg)

Environment

Dielectric Strength	1500 V between the I/O and the external supply circuit 800 V between I/O channel 800 V between the I/O and internal logic
Width	0.93 in (23.5 mm)
Depth	2.76 in (70 mm)
Height	3.54 in (90 mm)

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.93 in (7.446 cm)
Package 1 Width	4.11 in (10.434 cm)
Package 1 Length	4.89 in (12.419 cm)
Package 1 Weight	6.01 oz (170.5 g)
Unit Type Of Package 2	S03
Number Of Units In Package 2	18
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	6.85 lb(US) (3.107 kg)

Contractual warranty

Warranty

18 months

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

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)

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

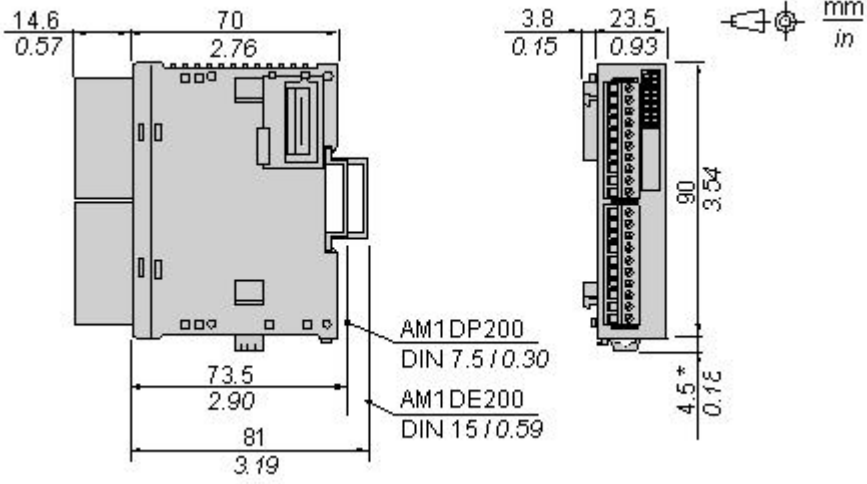
Circularity Profile

[End of Life Information](#)

Dimensions Drawings

Analog Mixed I/O Module (6-channel, Voltage/Current)

Dimensions

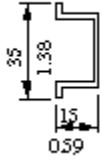


NOTE: * 8.5 mm (0.33 in) when the clip-on lock is pulled out.

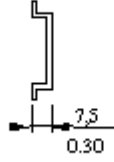
Mounting and Clearance

DIN Rail Mounting

AM1DE200
IEC/EN 60715



AM1DP200



AM1ED200



DZ5MB200

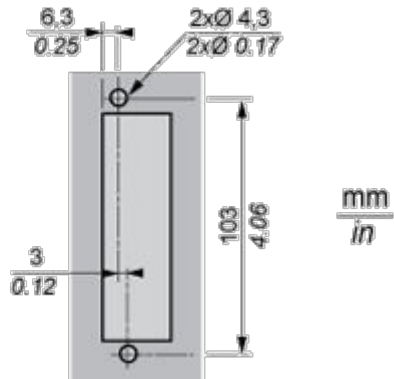
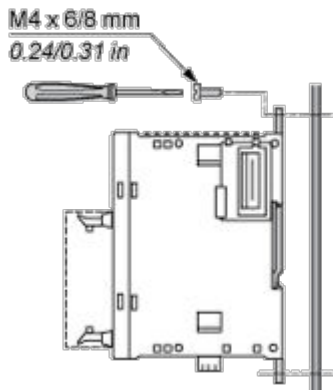


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

Mounting Hole Layout



Connections and Schema

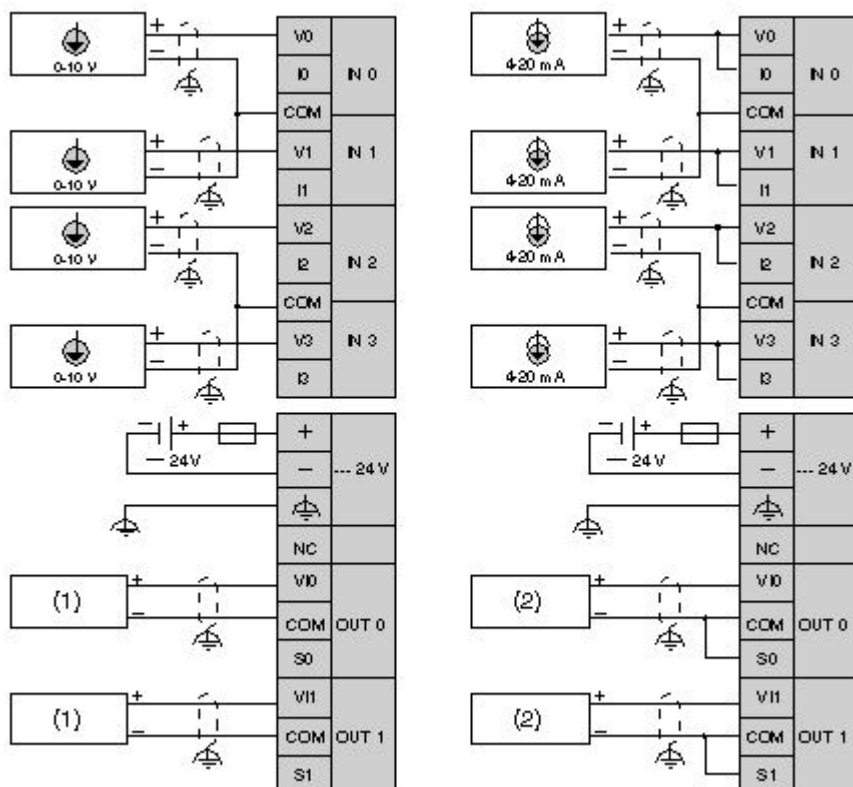
Wiring Requirements

Cable Types and Wire Sizes for Removable Screw Terminal Block

<p>0.35 mm in.</p>							
mm ²	0,14...1,5	0,25...0,5	0,25...1,5	0,14...0,5	0,14...0,75	0,25...0,34	0,5
AWG	26...16	24...20	24...16	26...20	26...18	24...22	20

Analog Mixed I/O Module (6-channel, Voltage/Current)

Wiring Diagram



- (1) Voltage preactuator
- (2) Current preactuator