

Product data sheet

Specifications



I/O expansion module, Modicon M238 logic controller, Twido, 4 inputs voltage/current/temperature, non differential, wear part

TM2AMI4LT

! 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
Analogue Input Type	voltage 0...10 V non differential Pt 100/Pt 1000 temperature probe - 200...600 °C non differential Ni 100/Ni 1000 temperature probe - 50...150 °C non differential current 0...20 mA non differential
Cross Talk	<= 1 LSB

Complementary

Range Compatibility	Twido Advantys OTB
Analogue Input Resolution	12 bits
Lsb Value	2.5 mV voltage voltage 4.8 µA current current 0.2 °C temperature probe Pt 100/Pt 1000 0.05 °C temperature probe Ni 100/Ni 1000
Permissible Continuous Overload	40 mA current 13 V voltage
Input Impedance	>= 10 kOhm temperature probe 470 Ohm current 10 kOhm voltage
Sampling Duration	160 ms
Acquisition Period	320 ms per channel + 1 controller cycle time temperature probe 160 ms per channel + 1 controller cycle time voltage/current
Measurement Error	+/- 0.2 % of full scale 0...10 V 0...10 V 25 °C +/- 0.2 % of full scale 4...20 mA 4...20 mA 25 °C +/- 0.4 % of full scale Pt 100/Pt 1000, Ni 100/ Ni 1000 25 °C
Temperature Coefficient	+/- 0.004 %FS/°C temperature probe +/- 0.009 %FS/°C current +/- 0.009 %FS/°C voltage
Repeat Accuracy	+/-0.1 %FS
Non-Linearity	+/- 0.02 %FS
Total Error	+/-0.5 %FS
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	20.4...28.8 V
Electrical Connection	1 removable screw terminal block
Current Consumption	50 mA 5 V DC internal 60 mA 24 V DC external
Net Weight	0.19 lb(US) (0.085 kg)

Environment

Dielectric Strength	2500 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	2.82 in (7.17 cm)
Package 1 Width	3.99 in (10.138 cm)
Package 1 Length	4.80 in (12.186 cm)
Package 1 Weight	5.15 oz (146.0 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	6.77 lb(US) (3.07 kg)

Contractual warranty

Warranty	18 months
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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](#)

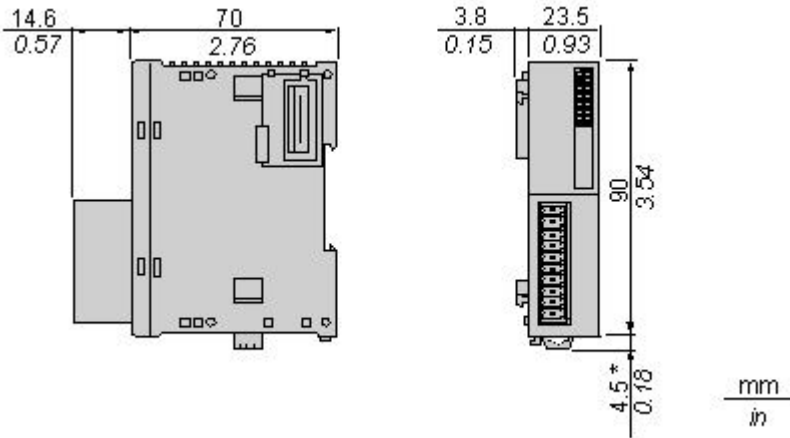
Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile [End of Life Information](#)

Dimensions Drawings

Analog Input Module (4-channel, Voltage/Current/Temperature)

Dimensions

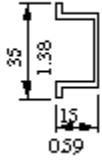


NOTE: * 8.5 mm (0.33 in) when the clip-on lock is pulled out.

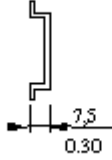
Mounting and Clearance

DIN Rail Mounting

AM1DE200
IEC/EN 60715



AM1DP200



AM1ED200



DZ5MB200

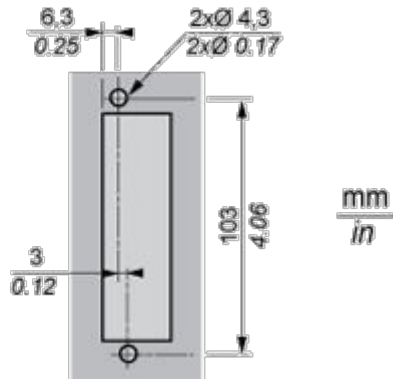
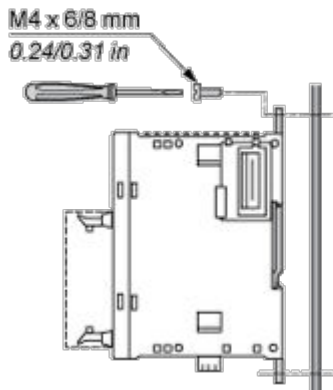


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

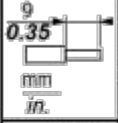





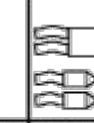
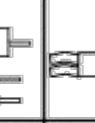
Mounting Hole Layout



Connections and Schema

Wiring Requirements

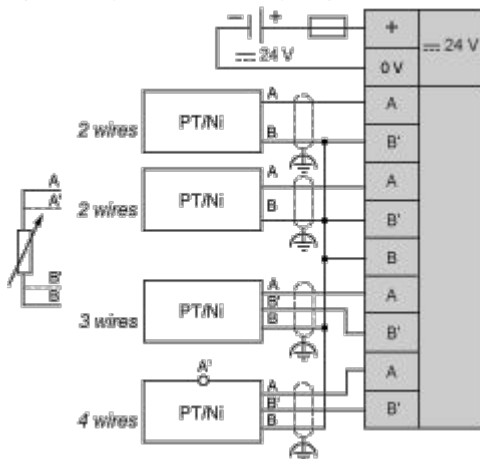
Cable Types and Wire Sizes for Removable Screw Terminal Block

							
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 Input Module (4-channel, Voltage/Current/Temperature)

Wiring Diagrams

Inputs configured for measuring temperature



Inputs configured for measuring voltage/current

