

TM2AMI4LT

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



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, analogue input type: current 13 V, analogue input type: 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 at 25 °C +/- 0.2 % of full scale 4...20 mA 4...20 mA at 25 °C +/- 0.4 % of full scale Pt 100/Pt 1000, Ni 100/ Ni 1000 at 25 °C
Temperature coefficient	+/- 0.004 %FS/°C, analogue input type: temperature probe +/- 0.009 %FS/°C, analogue input type: current +/- 0.009 %FS/°C, analogue input type: 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 at 5 V DC internal 60 mA at 24 V DC external
Net weight	0.085 kg

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Environment

Dielectric strength	2500 V between the I/O and internal logic
Width	23.5 mm
Depth	70 mm
Height	90 mm

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.17 cm
Package 1 Width	10.138 cm
Package 1 Length	12.186 cm
Package 1 Weight	146.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	18
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.07 kg

Offer Sustainability

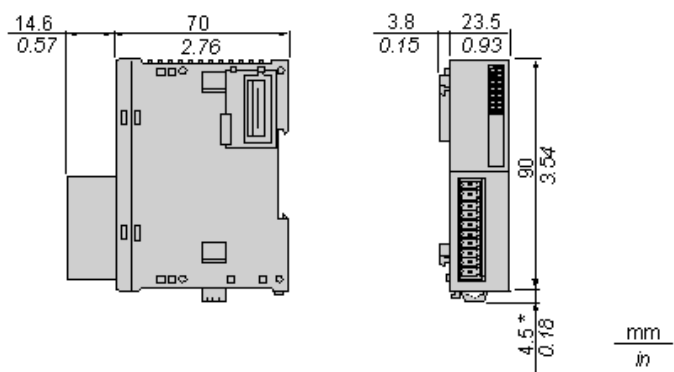
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

Warranty	18 months
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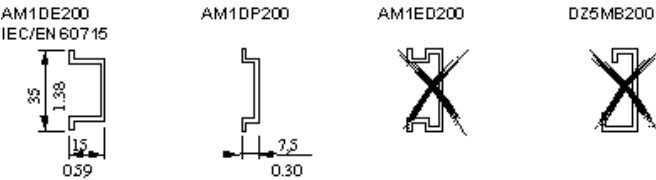
Analog Input Module (4-channel, Voltage/Current/Temperature)

Dimensions



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

DIN Rail Mounting

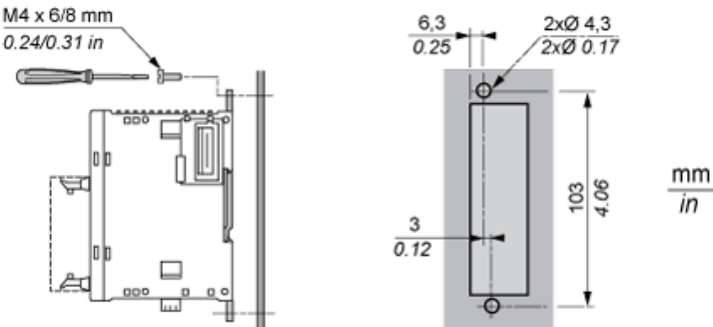


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

Mounting Hole Layout



Wiring Requirements

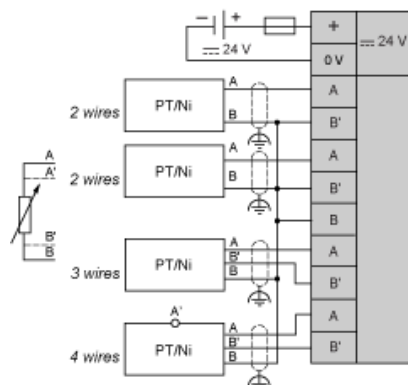
Cable Types and Wire Sizes for Removable Screw Terminal Block

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

