

TM2AMI4LT

analog input module M238- 4 inputs voltage/
current/temperature- non differential



Main

Range of product	Modicon M238 logic controller
Product or component type	Analog input module
Analogue input number	4
Analogue input type	Current 4...20 mA non differential Voltage 0...10 V non differential Temperature probe - 200...600 °C Pt 100/Pt 1000 non differential Temperature probe - 50...150 °C Ni 100/Ni 1000 non differential
Cross talk	<= 1 LSB

Complementary

Range compatibility	Twido Advantys OTB
Analogue input resolution	12 bits
LSB value	0.2 °C temperature probe Pt 100/Pt 1000 0.05 °C temperature probe Ni 100/Ni 1000 2.5 mV voltage voltage 4.8 µA current current
Permissible continuous overload	13 V voltage 40 mA current
Input impedance	>= 10 kOhm temperature probe 10 kOhm voltage 470 Ohm current
Sampling duration	<= 160 ms
Acquisition period	160 ms per channel + 1 controller cycle time voltage/current 320 ms per channel + 1 controller cycle time temperature probe
Measurement error	+/- 0.4 % of full scale Pt 100/Pt 1000, Ni 100/ Ni 1000 25 °C +/- 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
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
Product weight	0.085 kg

Environment

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

Offer Sustainability

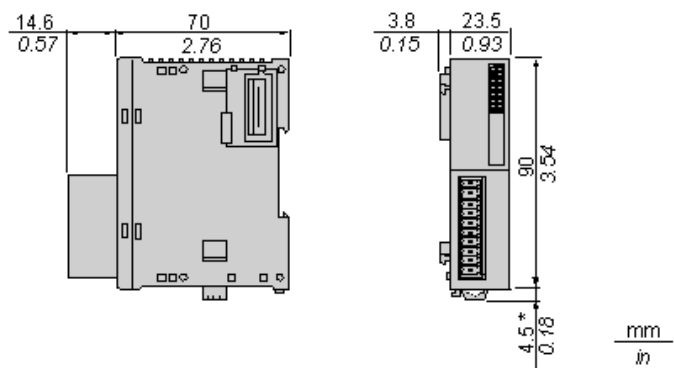
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1039 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available  Product environmental
Product end of life instructions	Available  End of life manual

Contractual warranty

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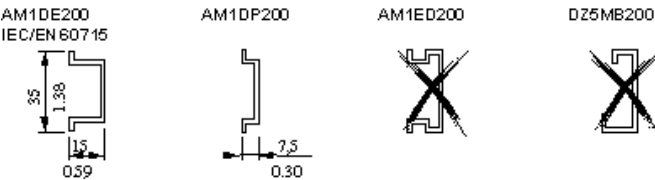
Analog Input Module (4-channel, Voltage/Current/Temperature)

Dimensions



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

DIN Rail Mounting

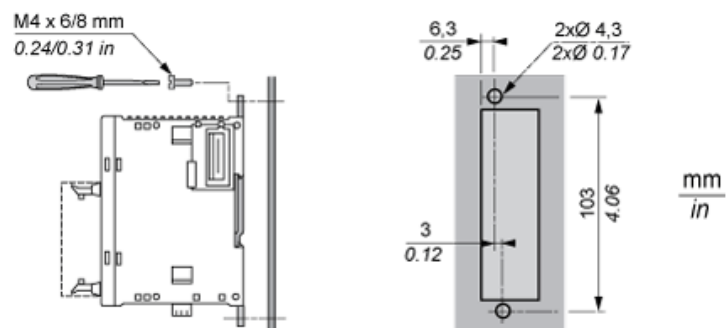


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

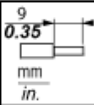
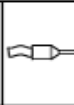
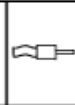
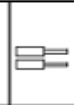
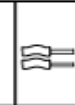
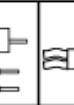
Module Mounting on a Panel Surface

Mounting Hole Layout



Wiring Requirements

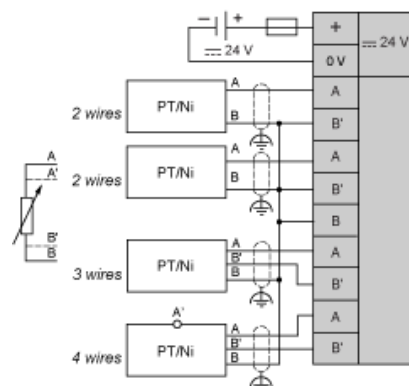
Cable Types and Wire Sizes for Removable Screw Terminal Block

							
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

