



Main

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

Complementary

Range compatibility	Advantys OTB Twido
Analogue input resolution	12 bits
LSB value	0.05 °C temperature probe Ni 100/Ni 1000 0.2 °C temperature probe Pt 100/Pt 1000 4.8 µA current current 2.5 mV voltage voltage
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	+/- 0.4 % of full scale Pt 100/Pt 1000, Ni 100/ Ni 1000 25 °C +/- 0.2 % of full scale 4...20 mA 4...20 mA 25 °C +/- 0.2 % of full scale 0...10 V 0...10 V 25 °C
Temperature coefficient	+/- 0.009 %FS/°C voltage +/- 0.009 %FS/°C current +/- 0.004 %FS/°C temperature probe
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	60 mA 24 V DC external 50 mA 5 V DC internal
Product weight	0.085 kg

Environment

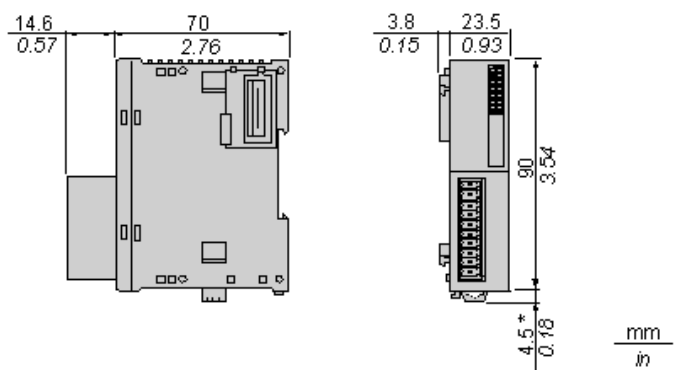
Dielectric strength	2500 V between the I/O and internal logic
Width	23.5 mm
Depth	70 mm
Height	90 mm

Offer Sustainability

Sustainable offer status	Green Premium product
Product environmental profile	Available  Download Product Environmental
Product end of life instructions	Available  Download End Of Life Manual

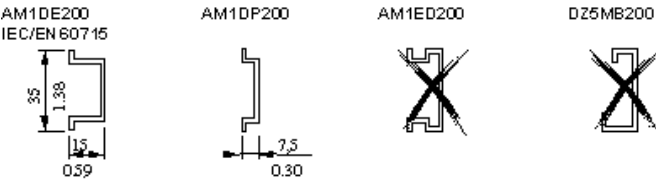
Analog Input Module (4-channel, Voltage/Current/Temperature)

Dimensions



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

DIN Rail Mounting

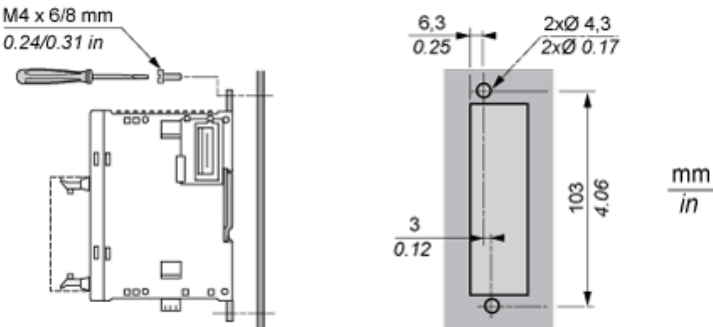


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

Mounting Hole Layout



Wiring Requirements

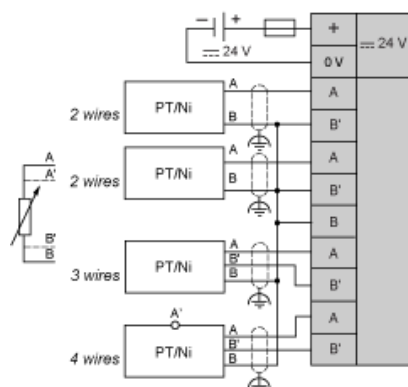
Cable Types and Wire Sizes for Removable Screw Terminal Block

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

