



Main

Range of product	Modicon M238 logic controller
Product or component type	Analog input module
Analogue input number	2
Input level	Low level
Analogue input type	Thermocouple - 200...760 °C thermocouple J differential Thermocouple - 270...1370 °C thermocouple K differential Thermocouple - 270...400 °C thermocouple T differential
Cross talk	<= 2 LSB

Complementary

Range compatibility	Advantys OTB Twido
Analogue input resolution	12 bits
LSB value	0.1 °C thermocouple thermocouple T 0.3 °C thermocouple thermocouple J 0.325 °C thermocouple thermocouple K
Permissible continuous overload	+/- 7.5 V thermocouple
Input impedance	>= 1 MOhm thermocouple
Sampling duration	<= 200 ms
Acquisition period	200 ms per channel + 1 controller cycle time
Measurement error	0.2 % +/- 5 °C of full scale 25 °C
Temperature coefficient	+/-0.006 %FS/°C
Repeat accuracy	+/-0.5 %FS
Non-linearity	+/- 0.2 %FS
Total error	+/-1 %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	30 mA 24 V DC external 60 mA 5 V DC internal
Product weight	0.19 lb(US) (0.085 kg)

Environment

dielectric strength	2500 V between the I/O and internal logic 500 V between the I/O and the external supply circuit
width	0.93 in (23.5 mm)
depth	2.76 in (70 mm)
height	3.54 in (90 mm)

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 1039 - Schneider Electric declaration of conformity	Compliant - since 1039 - Schneider Electric declaration of conformity

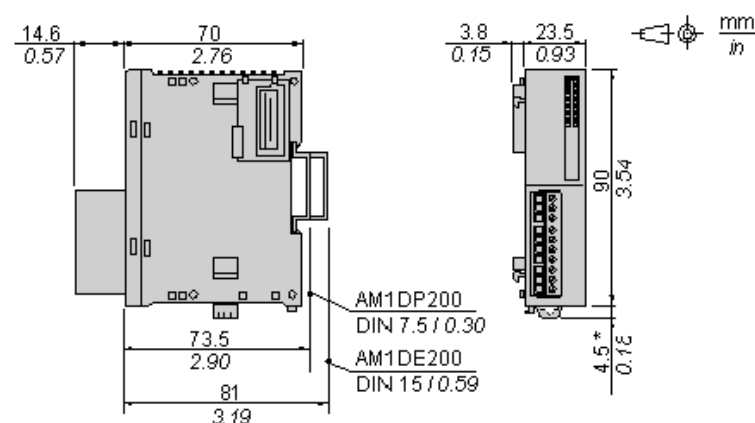
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Contractual warranty

Warranty period	18 months
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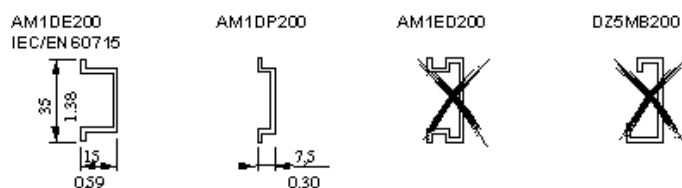
Analog Input Module (2-channel, Thermocouple)

Dimensions



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

DIN Rail Mounting

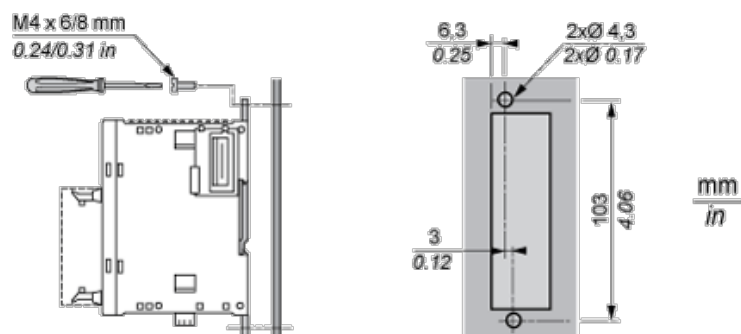


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

Mounting Hole Layout



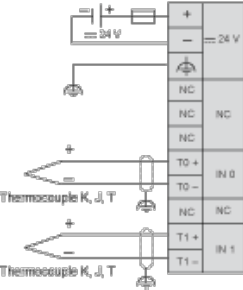
Wiring Requirements

Cable Types and Wire Sizes for Removable Screw Terminal Block

mm^2 in.	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

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Wiring Diagram



(1) Thermocouple K, J, T