

# Product data sheet

Specifications



## Analog input module, Modicon M238 logic controller, 2 inputs thermocouple low level, differential

TM2AMI2LT

! Discontinued on: 28 June 2019

! To be end-of-service on: 30 June 2024

! Discontinued - Service only

### 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 with thermocouple J differential thermocouple - 270...1370 °C with thermocouple K differential thermocouple - 270...400 °C with thermocouple T differential
Cross talk	<= 2 LSB

### Complementary

Range compatibility	Twido Advantys OTB
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, analogue input type: 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 at 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

<b>Electrical connection</b>	1 removable screw terminal block
<b>Current consumption</b>	30 mA at 24 V DC external 60 mA at 5 V DC internal
<b>Net weight</b>	0.085 kg

## Environment

<b>Dielectric strength</b>	500 V between the I/O and the external supply circuit 2500 V between the I/O and internal logic
<b>Width</b>	23.5 mm
<b>Depth</b>	70 mm
<b>Height</b>	90 mm

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	7.5 cm
<b>Package 1 Width</b>	10.5 cm
<b>Package 1 Length</b>	12.4 cm
<b>Package 1 Weight</b>	154.0 g

## Offer Sustainability

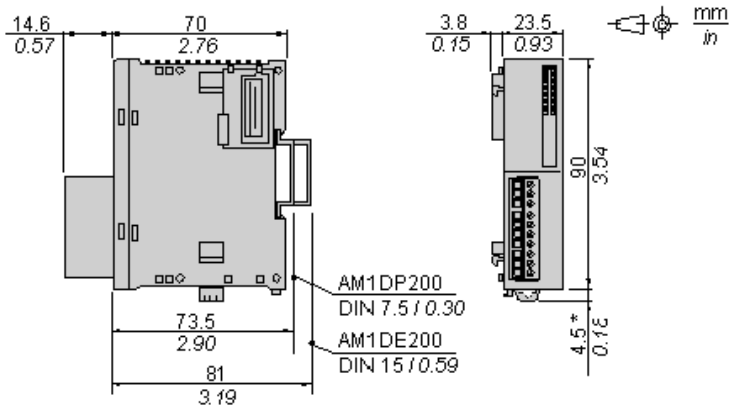
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

<b>Warranty</b>	18 months
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Analog Input Module (2-channel, Thermocouple)

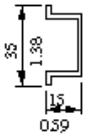
Dimensions



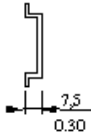
NOTE: \* 8.5 mm (0.33 in) when the clip-on lock is pulled out.

**DIN Rail Mounting**

AM1DE200  
 IEC/EN 60715



AM1DP200



AM1ED200



DZ5MB200

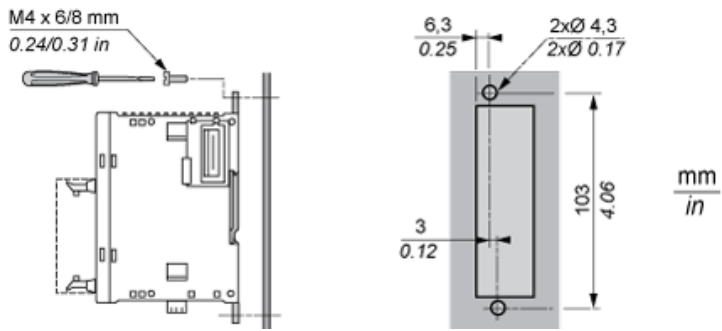


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

Mounting Hole Layout



**Wiring Requirements**

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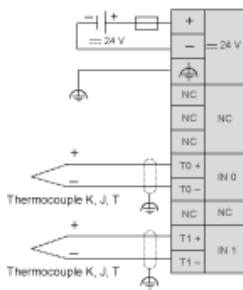
**Cable Types and Wire Sizes for Removable Screw Terminal Block**

 9 0.35 mm in.							
mm <sup>2</sup>	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 (2-channel, Thermocouple)**

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**Wiring Diagram**



(1) Thermocouple K, J, T

**Recommended replacement(s)**

TM2AMI2LT is replaced by the following product range:



**Modicon TM3**

Expansion I/O modules for Modicon M221, M241, M251 and M262

Products: 65