

Product data sheet

Specifications



Analog input/output module, Modicon M238 logic controller, 2 inputs voltage/current high level, 1 output

TM2AMM3HT

⚠ Discontinued

⚠ Discontinued on: Jan 26, 2021

Main

| | |
|---------------------------|---|
| Range Of Product | Modicon M238 logic controller |
| Product Or Component Type | Input/output analog module |
| Analogue Input Number | 2 |
| Input Level | High level |
| Analogue Input Type | current 4...20 mA non differential voltage 0...10 V non differential |
| Analogue Output Number | 1 |
| Analogue Output Type | Current 4...20 mA Voltage 0...10 V |
| Cross Talk | ≤ 2 LSB |

Complementary

| | |
|---------------------------------|---|
| Range Compatibility | Twido Advantys OTB |
| Analogue Input Resolution | 12 bits |
| Analogue Output Resolution | 12 bits |
| Lsb Value | 2.5 mV voltage voltage 4.8 μ A current current |
| Permissible Continuous Overload | 40 mA current 13 V voltage |
| Input Impedance | ≥ 10 Ohm current ≥ 1 MOhm voltage |
| Load Type | Resistive |
| Load Impedance Ohmic | ≥ 2000 Ohm voltage ≤ 300 Ohm current |
| Stabilisation Time | 20 ms |
| Conversion Time | 20 ms + 1 controller cycle time |
| Sampling Duration | 10 ms |
| Acquisition Period | 60 ms per channel + 1 controller cycle time |
| Measurement Error | +/- 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 | +/-0.006 %FS/°C 0...10 V +/-0.006 %FS/°C 4...20 mA +/-0.015 %FS/°C 0...10 V 0...10 V +/-0.015 %FS/°C 4...20 mA 4...20 mA |

| | |
|--|--|
| Repeat Accuracy | +/-0.5 %FS input/output |
| Non-Linearity | +/- 0.2 %FS current current +/- 0.2 %FS voltage voltage |
| Output Error | +/- 1 %FS |
| Output Ripple | <= 1 LSB |
| Total Error | +/-1 %FS current current +/-1 %FS voltage voltage |
| 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 | 19.2...30 V |
| Electrical Connection | 1 removable screw terminal block |
| Current Consumption | 50 mA 24 V DC external 50 mA 5 V DC internal |
| Net Weight | 0.19 lb(US) (0.085 kg) |

Environment

| | |
|----------------------------|--|
| Dielectric Strength | 500 V between I/O channel 500 V between the I/O and the external supply circuit 500 V between the I/O and internal logic |
| Width | 0.93 in (23.5 mm) |
| Depth | 2.76 in (70 mm) |
| Height | 3.54 in (90 mm) |

Packing Units

| | |
|-------------------------------------|------------------------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 2.95 in (7.5 cm) |
| Package 1 Width | 4.13 in (10.5 cm) |
| Package 1 Length | 4.92 in (12.5 cm) |
| Package 1 Weight | 7.02 oz (199.0 g) |
| Unit Type Of Package 2 | S01 |
| Number Of Units In Package 2 | 6 |
| Package 2 Height | 5.91 in (15.0 cm) |
| Package 2 Width | 5.91 in (15.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 2.87 lb(US) (1.301 kg) |

Contractual warranty

| | |
|-----------------|-----------|
| Warranty | 18 months |
|-----------------|-----------|

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

Well-being performance

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)
[EU RoHS Declaration](#)

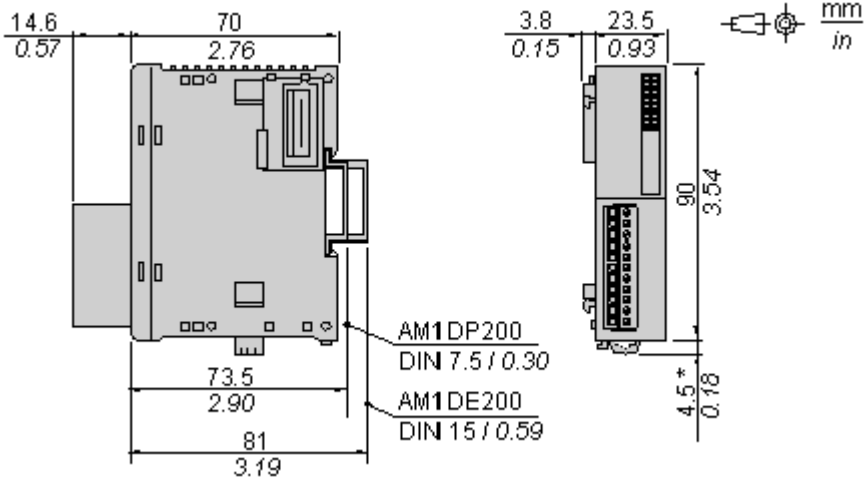
China Rohs Regulation [China RoHS declaration](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Analog Mixed I/O Module (3-channel, Voltage/Current)

Dimensions

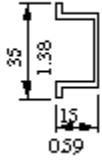


NOTE: * 8.5 mm (0.33 in) when the clip-on lock is pulled out.

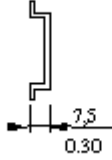
Mounting and Clearance

DIN Rail Mounting

AM1DE200
IEC/EN 60715



AM1DP200



AM1ED200



DZ5MB200

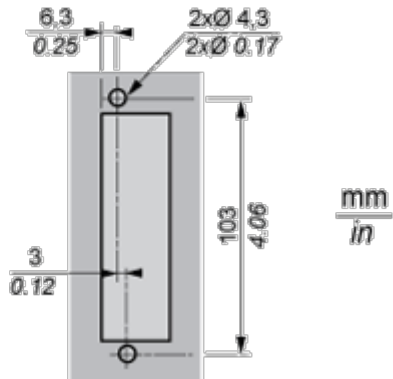
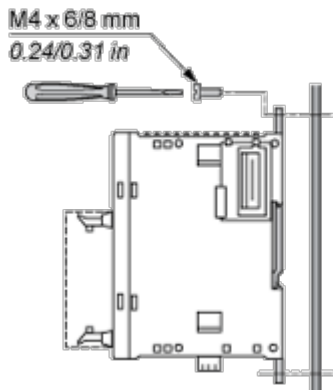


| Rail depth | Catalogue part number |
|-------------------|-----------------------|
| 15 mm (0.59 in.) | AM1DE200 |
| 7,5 mm (0.30 in.) | AM1DP200 |

NOTE: Do not use AM1ED200 and DZ5MB200

Module Mounting on a Panel Surface

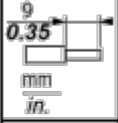



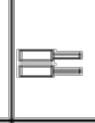

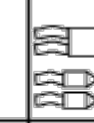
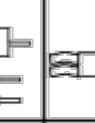
Mounting Hole Layout



Connections and Schema

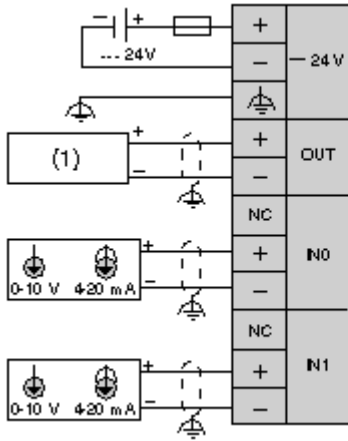
Wiring Requirements

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 Mixed I/O Module (3-channel, Voltage/Current)

Wiring Diagram



(1) Voltage/current preactuator

The (-) poles of inputs IN0 and IN1 are connected internally.