



Main

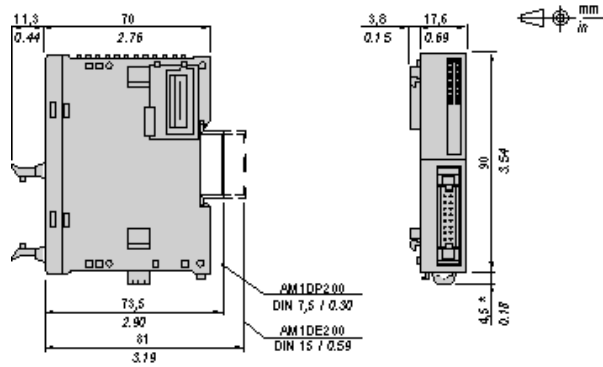
Range of product	Modicon M238 logic controller
Product or component type	Discrete output module
Discrete output number	16
Discrete output type	Transistor
Discrete output voltage	24 V
Discrete output logic	Source
Discrete output current	0.4 A

Complementary

Range compatibility	Advantys OTB Twido
Output voltage limits	20.4...28.8 V
Current per channel	0.48 A
Current per output common	2 A
Number of common point	1
Response time	450 µs from state 0 to state 1 450 µs from state 1 to state 0
[Ures] residual voltage	<= 1 V at state 1
Leakage current	0.1 mA
Inductive load	<= 10 mH
Tungsten load	<= 9.6 W
Short-circuit protection	With automatic reactivation
Overload protection	With automatic reactivation
Isolation between channels	None
Isolation between channels and internal logic	500 V for 1 minute
Current consumption	15 mA 5 V DC at state 1 for all output 20 mA 24 V DC at state 1 for all output
Local signalling	2 display blocks
Electrical connection	1 connector HE10
Mounting support	35 mm symmetrical DIN rail
Product weight	0.07 kg

Digital Transistor Output Module (16-channel, Source)

Dimensions



* 8.5 mm (0.33 in) when the clamp is pulled out.

Accessories Mounting Accessories

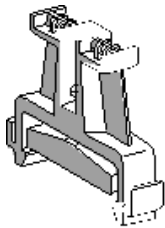
Cables

Cable name	Reference
Digital I/O Cables	
Cable equipped at a one end with an HE10 connector. (AWG 22 / 0.34 mm ² ; length: 3 m / 9.84 ft)	TWDFCW30K
Cable equipped at a one end with an HE10 connector. (AWG 22 / 0.34 mm ² ; length: 5 m / 16.4 ft)	TWDFCW50K
Telefast [®] Cables for TM2 digital I/O expansion modules	
Cable equipped with a HE10 connector at each end. (AWG 28 / 0.08 mm ² ; length: 0.5 m / 1.64 ft)	ABFT20E050
Cable equipped with a HE10 connector at each end. (AWG 28 / 0.08 mm ² ; length: 1 m / 3.28 ft)	ABFT20E100
Cable equipped with a HE10 connector at each end. (AWG 28 / 0.08 mm ² ; length: 2 m / 6.56 ft)	ABFT20E200

Terminal Block End Clamp Type AB1AB8P35

Terminal block end clamp type AB1AB8P35 Terminal Block End Clamps (reference AB1AB8P35) help reduce side-to-side movement of your controller and modules on the mounting rail. A controller and its associated modules are mounted on the mounting rail between two end clamps in order to improve the shock and vibration characteristics of the assembly.

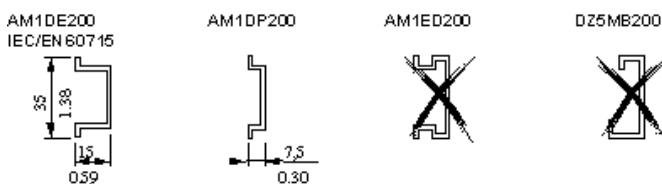
The following picture shows an end clamps type AB1AB8P35:



The DIN Rail

You can mount the controller and its expansions on a mounting rail. A mounting rail can be attached to a smooth mounting surface or suspended from a Electronic Industries Alliance rack or in a Type 4 cabinet.

The following picture shows the different sizes of the DIN rail:

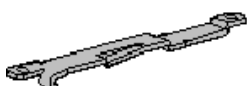


Rail depth	Catalogue part number
15 mm (0.59 in.)	AM1DE200
7,5 mm (0.30 in.)	AM1DP200

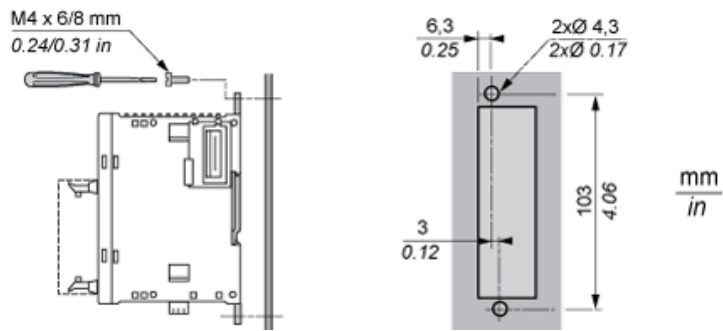
Do not use AM1ED200 and DZ5MB200

TWDXMT5 Mounting Strip

TWDXMT5 mounting strip The following illustration shows a TWDXMT5 Panel Mount Kit which can be used instead of mounting rail to mount your controller and I/O modules directly to a panel:



Mounting Hole Layout



Wiring requirements Wiring Requirements

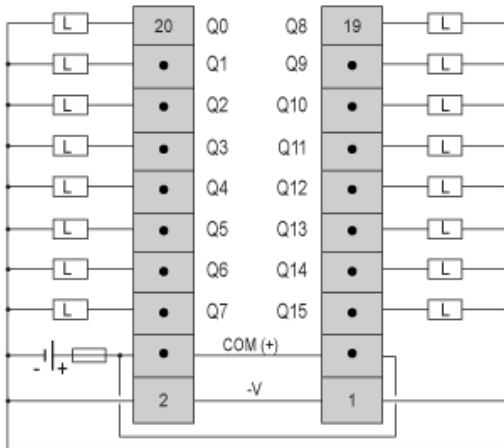
Cable Types and Wire Sizes for Removable Screw Terminal Block

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

Digital Transistor Output Module (16-channel, Source)

Wiring Diagram

The following diagram shows the connection of the outputs module and the transistor output wiring.



- The COM0(+) terminals are connected together internally.
- The -V terminals are connected together internally.
- Connect an appropriate fuse for the load, not to exceed 0.4 A on the outputs and not to exceed 2 A on the power supply.

WARNING

UNINTENDED EQUIPMENT OPERATION

Do not connect wires to unused terminals or terminals marked "Not Connected (N.C.)".
Failure to follow these instructions can result in death, serious injury, or equipment damage.