Product data sheet
Characteristics

TM2DMM24DRF

Discrete I/O module, Modicon M238 logic controller, 16 inputs 24 V DC, 8 output relay, terminal block

Main

Range of product	Modicon M238 logic controller
Product or component type	Discrete I/O module
Discrete input number	16
Discrete input voltage	24 V
Discrete input voltage type	DC
Discrete output number	8
Discrete output type	Relay

Complementary

Range compatibility	Twido Advantys OTB
Input voltage limits	20.4...28.8 V
Discrete input logic	Sink or source
Discrete input current	7 mA
Input impedance	3.4 kOhm
Discrete output function	1 NO
Current per channel	2 A
Maximum current per output common	7 A
Number of common point	2 for output 1 for input
Contact resistance	45 mOhm
Response time	<= 10 ms from state 0 to state 1 for output <= 5 ms from state 1 to state 0 for output 4 ms at state 0 for input 4 ms at state 1 for input
Minimum switching current	0.1 mA at 0.1 V DC
Isolation between channels	None
Isolation between channels and internal logic	2300 V for 1 minute (output) 500 V for 1 minute (input)
Isolation between input channel and output channel	1500 V for 1 minute
Isolation between output channels group	1500 V for 1 minute
Mechanical durability	20000000 cycles
Electrical durability	100000 Cycles 0.5 A AC-15 240 V AC cos phi = 0.35 inductive 100000 Cycles 1 A AC-15 240 V AC cos phi = 0.7 inductive 100000 Cycles 1 A DC-13 24 V DC inductive (L/R = 7 ms) 100000 Cycles 2 A 240 V AC resistive 100000 cycles 2 A 30 V DC resistive
Current consumption	45 mA at 24 V DC at state 1 for all input/output 65 mA at 5 V DC at state 1 for all input/output
Local signalling	1 display block
Electrical connection	1 spring terminal block
Mounting support	35 mm symmetrical DIN rail
Net weight	0.14 kg

Environment

Depth	70 mm
Height	90 mm
Width	42.9 mm

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7 cm
Package 1 Width	10.5 cm
Package 1 Length	12.5 cm
Package 1 Weight	230 g

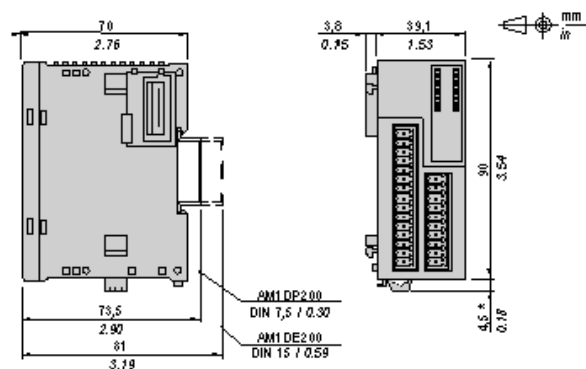## Offer Sustainability

REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

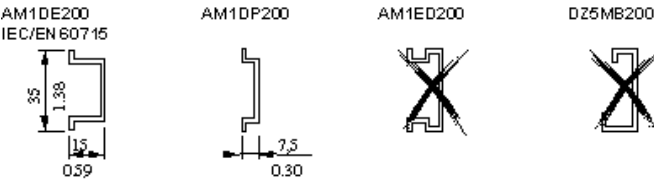|	
Warranty	18 months

Digital Mixed I/O Module (24-channel)

Dimensions

NOTE: * 8.5 mm (0.33 in) when the clamp 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
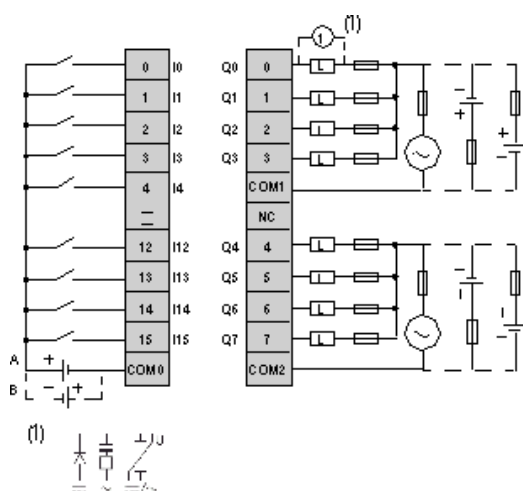
Module Mounting on a Panel Surface

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

Digital Mixed I/O Module (24-channel)

Wiring Diagram

A   Sink wiring (positive logic)

B   Source wiring (negative logic)

Fuse value for the load: 2 A

Fuse value for the power supply: 7 A