

Schneider Series Service Manual

TM2DMM8DRT

1. Description

The TM2DMM8DRT from Schneider Electric is a discrete I/O module that operates with a discrete input voltage of 24 VDC. It features relay output types designed to meet various control requirements while ensuring reliable performance within specified voltage limits.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line Modicon
Part	Number TM2DMM8DRT
EAN	3595863995787
Weight	0.19 lbs (0.09 kg)
Product	Discrete I/O Module
Discrete	Input Voltage 24 VDC
Discrete	Output Type Relay
Input	Voltage Limits 20.4 to 28.8 V
Discrete	Input Current 7 mA
Input	Impedance 3.4 kOhm
Current	per Channel 2A
Maximum	Current Per Output Common 7A
Contact	Resistance 45 mOhm
Minimum	Switching Current 0.1 mA at 0.1 V DC
Mounting	Support 35 mm symmetrical DIN rail
Electrical	Connection 1 removable screw terminal block
Local	Signalling 1 display block

3. Product Information

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Technical specifications for TM2DMM8DRT

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Product Line Modicon

Part Number TM2DMM8DRT

EAN 3595863995787

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Discrete Input Current 7 mA

Input Impedance 3.4 kOhm

Current per Channel 2A

Maximum Current Per Output Common 7A

Contact Resistance 45 mOhm

Minimum Switching Current 0.1 mA at 0.1 V DC

Mounting Support 35 mm symmetrical DIN rail

Electrical Connection 1 removable screw terminal block

Local Signalling 1 display block

Range of Product

Modicon M238 logic controller

Product or Component Type

Discrete I/O module

Discrete input number

4

Discrete input voltage

24 V

Discrete input voltage type

DC

Discrete output number

4

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

1 for output

1 for input

Contact resistance

45 mOhm

Response time

<= 10 ms from state 0 to state 1 output
<= 5 ms from state 1 to state 0 output
4 ms at state 0 input
4 ms at state 1 input
Minimum switching current
0.1 mA 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
20 mA 24 V DC at state 1 for all input/output
25 mA 5 V DC at state 1 for all input/output
Local signalling
1 display block
Electrical connection
1 removable screw terminal block
Mounting Support
35 mm symmetrical DIN rail
Net Weight
0.209 lb(US) (0.095 kg)
Environment
Depth
2.8 in (70 mm)
Height
3.5 in (90 mm)
Width
1.7 in (42.9 mm)
Description
The Schneider Electric Modicon TM2DMM8DRT is an effective discrete I/O module designed for automation applications. Capable of handling a discrete input voltage of 24 VDC, it provides reliable operation within a voltage range of 20.4 to 28.8 V. The discrete input current is rated at 7 mA, and the input impedance stands at 3.4 kOhm, allowing for versatile integration in various systems. Each channel supports a current rating of up to 2 A, which is beneficial for robust control tasks.
Furthermore, the module can manage a maximum common output current of 7 A, facilitating greater flexibility in output configurations. The contact resistance of the unit measures at 45 mOhm, ensuring efficient signal transmission. For minimal load operations, the module requires a minimum switching current of just 0.1 mA at an input voltage of 0.1 V DC, ensuring precise control under low-load conditions.
Mounting solutions for the TM2DMM8DRT are simplified with compatibility for a 35 mm symmetrical DIN rail, promoting streamlined installation processes. Weighing an approximate 0.095 kg, the module is lightweight and manageable. Its compact dimensions of 90 mm in height, 70 mm in depth, and 42.9 mm in width allow integration within limited spaces.
Electrical connection is made through a removable screw terminal block, enhancing convenience for wiring and maintenance. Additionally, the module features a display block for local signaling, providing immediate visual feedback of its operational status.