

discrete I/O module, Modicon TM3, 8 IO, 4 inputs, 4 relay outputs, screw, 24V DC

TM3DM8R

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon TM3	
Product or Component Type	Discrete I/O module	
Range Compatibility	Modicon M241 Modicon M251 Modicon M221 Modicon M262	
Discrete input number	4 input IEC 61131-2 Type 1	
Discrete input logic	Sink or source (positive/negative)	
Discrete input voltage	24 V	
Discrete input current	7 mA input	
Discrete output type	Relay normally open	
Discrete output number	4	
Discrete output logic	Positive or negative	
Discrete output voltage	24 V DC relay output 240 V AC relay output	
Discrete output current	2000 mA relay output	

Complementary

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Discrete I/O number	8	
Current consumption	5 mA 5 V DC via bus connector at state off)	
	0 mA 24 V DC via bus connector at state on)	
	0 mA 24 V DC via bus connector at state off)	
	25 mA 5 V DC via bus connector at state on)	
Discrete input voltage type	DC	
Voltage state 1 guaranteed	1528.8 V input	
Current state 1 guaranteed	>= 2.5 mA input)	
Voltage state 0 guaranteed	05 V input	
Current state 0 guaranteed	<= 1 mA input)	
Input impedance	3.4 kOhm	
Response time	4 ms (turn-on)	
·	4 ms (turn-off)	
Maximum current per output common	7 A	
Mechanical durability	20000000 cycles	
Minimum load	10 mA 5 V DC relay output	
Local signalling	1 LED per channel (green) for I/O state	

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Electrical connection	11 x 2.5 mm² removable screw terminal block pitch 5.08 mm for inputs and outputs	
Maximum cable distance between devices	een Unshielded cable <98.4 ft (30 m) regular input	
Insulation	Between input and internal logic 500 V AC Non-insulated between inputs Between input groups and output groups 1500 V AC Between open contact 750 V AC Between output and internal logic 500 V AC Non-insulated between outputs	
Marking	CE	
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 plate or panel with fixing kit	
Height	3.5 in (90 mm)	
Depth	3.3 in (84.6 mm)	
Width	1.08 in (27.4 mm)	
Net Weight	2.09 lb(US) (0.95 kg)	

Environment

Environment		
Standards	IEC 61131-2	
Product Certifications	cULus CE UKCA RCM EAC cULus HazLoc	
Resistance to electrostatic discharge	8 kV in air IEC 61000-4-2 4 kV on contact IEC 61000-4-2	
Resistance to electromagnetic fields	9.1 V/m (10 V/m) 80 MHz1 GHz IEC 61000-4-3 2.7 V/m (3 V/m) 1.4 GHz2 GHz IEC 61000-4-3 0.9 V/m (1 V/m) 2 GHz3 GHz IEC 61000-4-3	
Resistance to magnetic fields	98.4 A/m (30 A/m) 50/60 Hz IEC 61000-4-8	
Resistance to fast transients	1 kV I/OIEC 61000-4-4 2 kV relay outputIEC 61000-4-4	
Surge withstand	2 kV output common mode IEC 61000-4-5 1 kV input common mode IEC 61000-4-5	
Resistance to conducted disturbances	10 V 0.1580 MHz IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) Marine specification (LR, ABS, DNV, GL)	
Electromagnetic emission	Radiated emissions 40 dBµV/m QP class A 10 m)30230 MHz IEC 55011 Radiated emissions 47 dBµV/m QP class A 10 m)2301000 MHz IEC 55011	
Ambient Air Temperature for Operation	1495 °F (-1035 °C) vertical installation 14131 °F (-1055 °C) horizontal installation	
Ambient Air Temperature for Storage	-13158 °F (-2570 °C)	
Relative humidity	1095 %, without condensation in operation) 1095 %, without condensation in storage)	
IP degree of protection	IP20 with protective cover in place	
pollution degree	2	
Operating altitude	06561.68 ft (02000 m)	
Storage altitude	09842.5 ft (03000 m)	
7ibration resistance 3.5 mm 58.4 Hz DIN rail 3 gn 8.4150 Hz DIN rail 3.5 mm 58.4 Hz panel 3 gn 8.4150 Hz panel		

Ordering and shipping details

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Category	US10MSX22533
Discount Schedule	0MSX
GTIN	3606480611520
Returnability	Yes
Country of origin	TW

Packing Units

PCE	
1	
2.95 in (7.5 cm)	
4.92 in (12.5 cm)	
4.13 in (10.5 cm)	
8.1 oz (230.0 g)	
S04	
42	
11.81 in (30 cm)	
15.75 in (40 cm)	
23.62 in (60 cm)	
23.464 lb(US) (10.643 kg)	
P12	
504	
41.34 in (105 cm)	
47.24 in (120 cm)	
31.50 in (80 cm)	
304.2 lb(US) (138 kg)	



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg CO2 eq, Total Life cycle)	76
Environmental Disclosure	Product Environmental Profile

Use Better

⊗ Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
California proposition 65	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 www.P65Warnings.ca.gov
PVC free	Yes

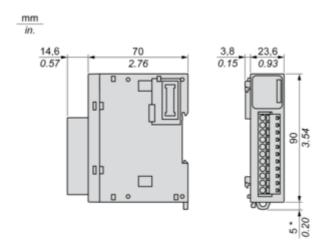
Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

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Dimensions Drawings

Dimensions



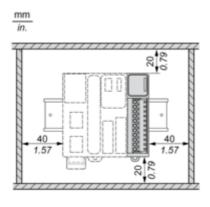
(*) 8.5 mm/0.33 in. when the clamp is pulled out.

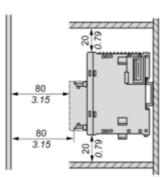
Product data sheet

TM3DM8R

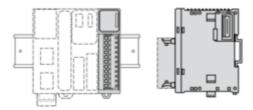
Mounting and Clearance

Spacing Requirements

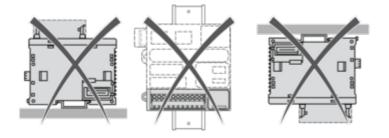




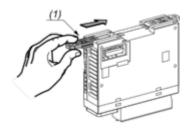
Mounting on a Rail



Incorrect Mounting

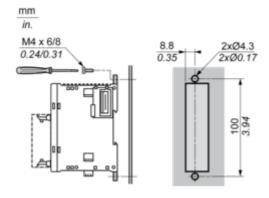


Mounting on a Panel Surface



(1) Install a mounting strip

Mounting Hole Layout

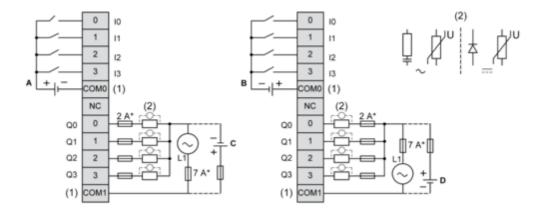


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Connections and Schema

Digital Mixed I/O Module (8-channel)

Wiring Diagram (Sink / Source)



- (*) Type T fuse
- (1) The COM0 and COM1 terminals are not connected internally.
- (2) To improve the life time of the contacts, and to protect from potential inductive load damage, it is recommended to connect a free wheeling diode in parallel to each inductive DC load or an RC snubber in parallel of each inductive AC load
- (A) Sink wiring (positive logic)
- (B) Source wiring (negative logic)
- (C) Source wiring (positive logic)
- (D) Sink wiring (negative logic)