

# Product data sheet

Specifications



## discrete output module, Modicon TM3, 8 outputs transistor PNP, spring

TM3DQ8TG

### Main

Range of Product	Modicon TM3
Product or Component Type	Discrete output module
Range compatibility	Modicon M241 Modicon M251 Modicon M221 Modicon M262
Discrete output type	Transistor
Discrete output number	8
Discrete output logic	Positive logic (source)
Discrete output voltage	24 V DC transistor output
Discrete output current	500 mA transistor output

### Complementary

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 off) 20 mA 24 V DC via bus connector at state on) 10 mA 5 V DC via bus connector at state on)
Response time	450 µs (turn-on) 450 µs (turn-off)
Maximum leakage current	0.1 mA transistor output
Maximum voltage drop	<0.4 V
Maximum tungsten load	<3 W transistor output
Local signalling	for output status 1 LED per channel (green)
Electrical connection	11 x 2.5 mm <sup>2</sup> removable spring terminal block pitch 5.08 mm for outputs
Maximum cable distance between devices	Unshielded cable <98.43 ft (30 m) transistor output
Insulation	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	3.54 in (90 mm)

Depth	3.33 in (84.6 mm)
Width	1.08 in (27.4 mm)
Net Weight	1.68 lb(US) (0.76 kg)

## Environment

Standards	EN/IEC 61131-2
Product Certifications	CE cULus UKCA RCM EAC cULus HazLoc
Resistance to electrostatic discharge	8 kV in air EN/IEC 61000-4-2 4 kV on contact EN/IEC 61000-4-2
Resistance to electromagnetic fields	9.14 V/m (10 V/m) 80 MHz...1 GHz EN/IEC 61000-4-3 2.74 V/m (3 V/m) 1.4 GHz...2 GHz EN/IEC 61000-4-3 0.91 V/m (1 V/m) 2 GHz...3 GHz EN/IEC 61000-4-3
Resistance to magnetic fields	98.43 A/m (30 A/m) 50/60 Hz EN/IEC 61000-4-8
Resistance to fast transients	1 kV I/O EN/IEC 61000-4-4
Surge withstand	1 kV I/O common mode EN/IEC 61000-4-5 DC
Resistance to conducted disturbances	10 V 0.15...80 MHz EN/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 dB $\mu$ V/m QP class A 10 m)30...230 MHz EN/IEC 55011 Radiated emissions 47 dB $\mu$ V/m QP class A 10 m)230...1000 MHz EN/IEC 55011
Ambient Air Temperature for Operation	14...95 °F (-10...35 °C) vertical installation 14...131 °F (-10...55 °C) horizontal installation
Ambient Air Temperature for Storage	-13...158 °F (-25...70 °C)
Relative humidity	10...95 %, without condensation in operation) 10...95 %, without condensation in storage)
IP degree of protection	IP20 with protective cover in place
Pollution degree	2
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0.00...9842.52 ft (0...3000 m)
Vibration resistance	3.5 mm 5...8.4 Hz DIN rail 3 gn 8.4...150 Hz DIN rail 3.5 mm 5...8.4 Hz panel 3 gn 8.4...150 Hz panel
Shock resistance	15 gn 11 ms

## Ordering and shipping details

Category	22533-M2XX PLC & ACCESSORIES
Discount Schedule	MSX
GTIN	3606480611476
Returnability	Yes
Country of origin	TW

## 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	4.92 in (12.5 cm)

Package 1 Length	4.13 in (10.5 cm)
Package 1 Weight	8.11 oz (230.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	4.93 lb(US) (2.234 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	144
Package 3 Height	29.53 in (75 cm)
Package 3 Width	23.62 in (60 cm)
Package 3 Length	31.50 in (80 cm)
Package 3 Weight	99.21 lb(US) (45 kg)

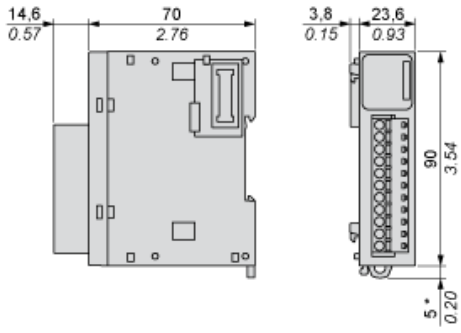
## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Dimensions

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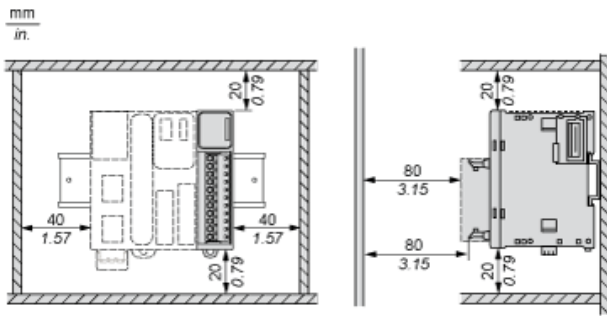
mm  
in.



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

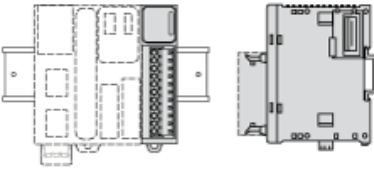
Spacing Requirements

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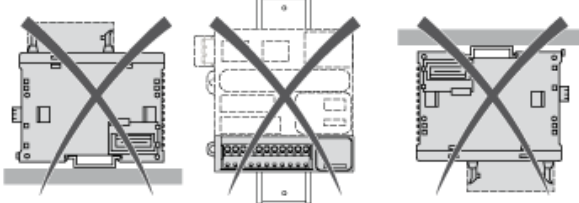


**Mounting on a Rail**

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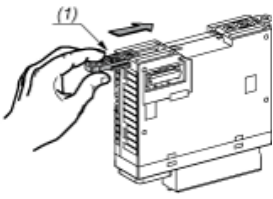


**Incorrect Mounting**



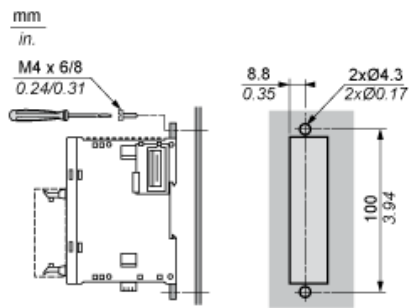
**Mounting on a Panel Surface**

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(1) Install a mounting strip

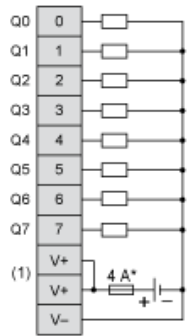
**Mounting Hole Layout**



## Digital Transistor Output Module (8-channel, Source)

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### Wiring Diagram



- (\*) Type T fuse
- (1) The V+ terminals are connected internally.

### Recommended replacement(s)