

# Product data sheet

Specifications



## discrete output module, Modicon TM3, 32 outputs transistor PNP, HE10

TM3DQ32TK

### 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	32
Discrete output logic	Positive logic (source)
Discrete output voltage	24 V DC transistor output
Discrete output current	100 mA transistor output

### Complementary

Discrete I/O number	32
Current consumption	5 mA 5 V DC via bus connector at state off) 0 mA 24 V DC via bus connector at state off) 25 mA 5 V DC via bus connector at state on) 40 mA 24 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	<1.2 W transistor output
Local signalling	for output status 1 LED per channel (green)
Electrical connection	HE-10 connector for outputs
Maximum cable distance between devices	Unshielded cable <16.40 ft (5 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	3.20 in (81.3 mm)
Width	1.32 in (33.5 mm)
Net Weight	0.25 lb(US) (0.112 kg)

## Environment

Standards	EN/IEC 61131-2
Product Certifications	cULus CE 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 dBµV/m QP class A 10 m)30...230 MHz EN/IEC 55011 Radiated emissions 47 dBµV/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	3606480611513
Returnability	Yes
Country of origin	TW

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.96 in (7.525 cm)
Package 1 Width	4.20 in (10.661 cm)

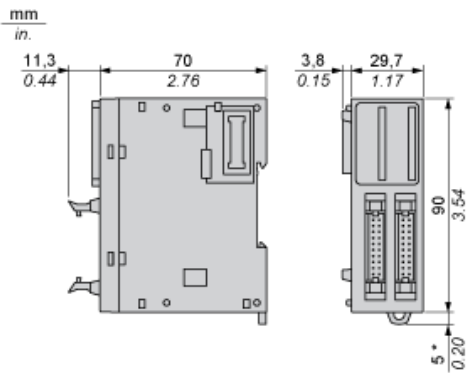
<b>Package 1 Length</b>	5.07 in (12.89 cm)
<b>Package 1 Weight</b>	7.76 oz (220.0 g)
<b>Unit Type of Package 2</b>	CAR
<b>Number of Units in Package 2</b>	42
<b>Package 2 Height</b>	11.65 in (29.6 cm)
<b>Package 2 Width</b>	15.59 in (39.6 cm)
<b>Package 2 Length</b>	22.20 in (56.4 cm)
<b>Package 2 Weight</b>	22.75 lb(US) (10.32 kg)
<b>Unit Type of Package 3</b>	P12
<b>Number of Units in Package 3</b>	504
<b>Package 3 Height</b>	29.53 in (75 cm)
<b>Package 3 Width</b>	47.24 in (120 cm)
<b>Package 3 Length</b>	31.50 in (80 cm)
<b>Package 3 Weight</b>	305.12 lb(US) (138.4 kg)

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>California proposition 65</b>	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>
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
<b>PVC free</b>	Yes

Dimensions

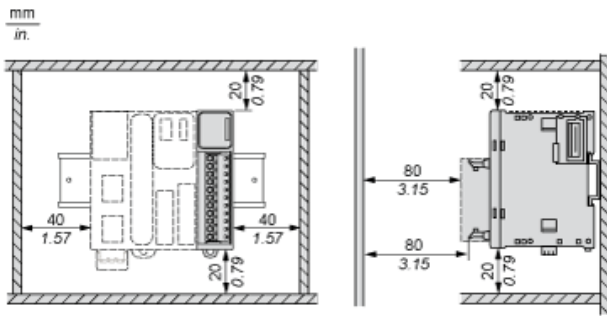
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(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

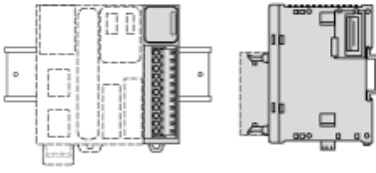
Spacing Requirements

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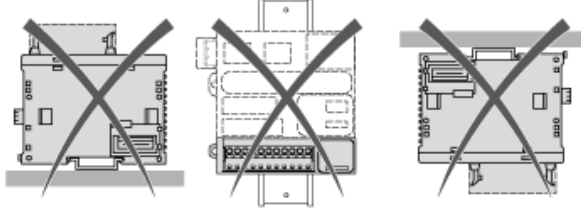


**Mounting on a Rail**

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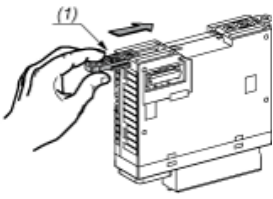


**Incorrect Mounting**



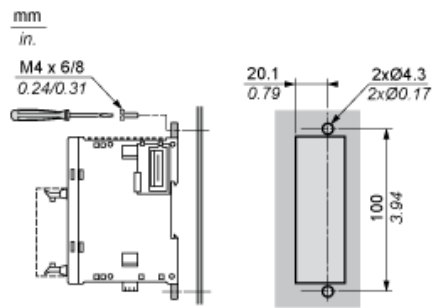
**Mounting on a Panel Surface**

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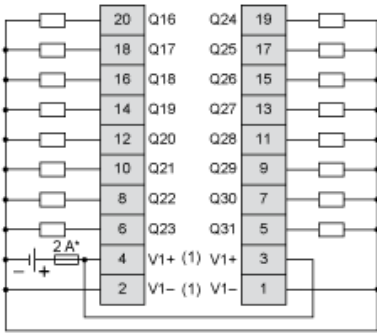
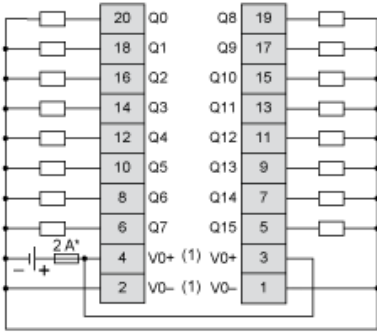
(1) Install a mounting strip

**Mounting Hole Layout**



**Digital Transistor Output Module (32-channel, Source)**

**Wiring Diagram**



- (\*) Type T fuse
- (1) The V0+ terminals are connected internally.  
The V0- terminals are connected internally.  
The V1+ terminals are connected internally.  
The V1- terminals are connected internally.  
The V0+ and V1+ terminals are not connected internally.  
The V0- and V1- terminals are not connected internally.

**Recommended replacement(s)**