



## Main

Range of Product	Modicon TM3
Product or Component Type	Discrete input module
Range Compatibility	Modicon M241 Modicon M251 Modicon M221 Modicon M262
Discrete input number	8 input IEC 61131-2 Type 1
Discrete input voltage	120 V
Discrete input current	7.5 mA input

## Complementary

Discrete I/O number	8
Current consumption	0 mA 24 V DC via bus connector at state on) 0 mA 24 V DC via bus connector at state off) 70 mA 5 V DC via bus connector at state on) 25 mA 5 V DC via bus connector at state off)
Discrete input voltage type	AC
Voltage state 1 guaranteed	79...132 V input
Current state 1 guaranteed	2...15 mA input)
Voltage state 0 guaranteed	0...20 V input
Current state 0 guaranteed	<= 15 mA input)
Input impedance	11 kOhm
Response time	25 ms (turn-on) 30 ms (turn-off)
Local signalling	For input status 1 LED per channel (green)
Electrical connection	11 x 2.5 mm <sup>2</sup> removable screw terminal block pitch 5.08 mm for inputs
Insulation	Non-insulated between inputs Between input and internal logic 1500 V AC Between input groups 1500 V AC
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)

## Environment

Standards	IEC 61131-2
Product Certifications	cULus[RETURN]CE[RETURN]UKCA[RETURN]RCM[RETURN]EAC[RETURN]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	9.14 V/m (10 V/m) 80 MHz...1 GHz IEC 61000-4-3 2.74 V/m (3 V/m) 1.4 GHz...2 GHz IEC 61000-4-3 0.91 V/m (1 V/m) 2 GHz...3 GHz IEC 61000-4-3
Resistance to magnetic fields	98.43 A/m (30 A/m) 50/60 Hz IEC 61000-4-8
Resistance to fast transients	1 kV I/O IEC 61000-4-4

Surge withstand	2 kV I/O common mode IEC 61000-4-5 AC
Resistance to conducted disturbances	10 V 0.15...80 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)30...230 MHz IEC 55011 Radiated emissions 47 dBµV/m QP class A 10 m)230...1000 MHz 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	3606480611629
Returnability	Yes
Country of origin	TW

## Packing Units

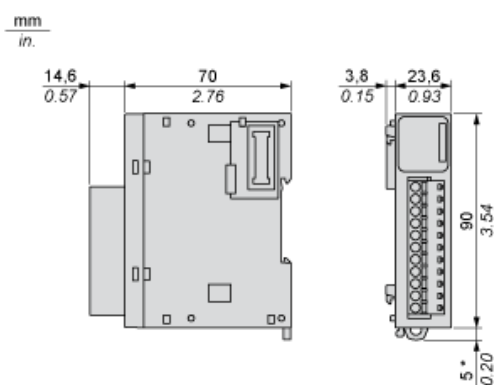
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.95 in (7.5 cm)
Package 1 Width	4.13 in (10.5 cm)
Package 1 Length	4.92 in (12.5 cm)
Package 1 Weight	8.11 oz (230.0 g)
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	15.75 in (40.0 cm)
Package 2 Length	23.62 in (60.0 cm)
Package 2 Weight	21.78 lb(US) (9.88 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>
REACH free of SVHC	Yes
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>

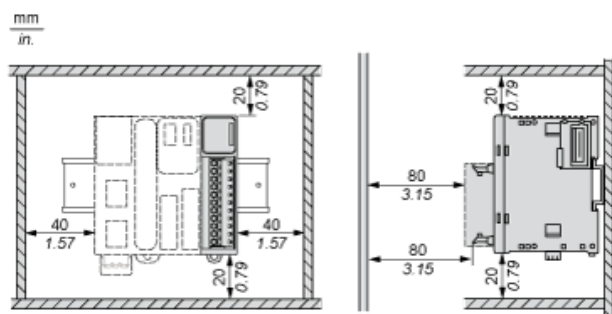
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## Dimensions



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

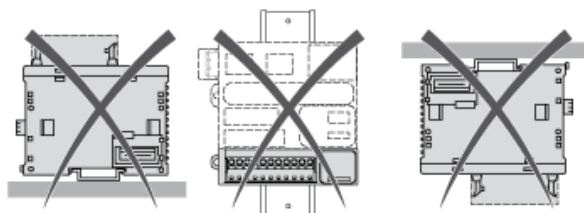
## Spacing Requirements



## Mounting on a Rail



## Incorrect Mounting

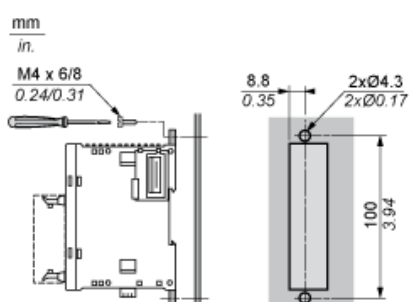


## Mounting on a Panel Surface



- (1) Install a mounting strip

## Mounting Hole Layout

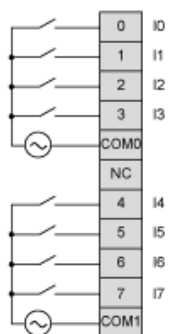


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## Digital Input Module (8-channel, 120 Vac)

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### Wiring Diagram



The COM0 and COM1 terminal are not connected internally.