# **Product datasheet**

Specifications





# Modicon TM3 - 16 inputs (screw) 24Vdc

TM3DI16

EAN Code: 3606480611384

## 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	16 for input conforming to IEC 61131-2 type 3	
Discrete Input Logic	Sink or source (positive/negative)	
Discrete Input Voltage	24 V	
Discrete Input Current	7 mA for input	

# Complementary

Complementary		
Discrete I/O Number	16	
Current Consumption	40 mA at 5 V DC via bus connector (at state on) 5 mA at 5 V DC via bus connector (at state off) 0 mA at 24 V DC via bus connector (at state on) 0 mA at 24 V DC via bus connector (at state off)	
Discrete Input Voltage Type	DC	
Voltage State 1 Guaranteed	1528.8 V for input	
Current State 1 Guaranteed	>= 2.5 mA (input)	
Voltage State 0 Guaranteed	teed 05 V for input	
Current State 0 Guaranteed	<= 1 mA (input)	
Input Impedance	3.4 kOhm	
Response Time	4 ms (turn-on) 4 ms (turn-off)	
Local Signalling	1 LED per channel (green) for input status	
Electrical Connection	$10x1.5\;mm^2$ removable screw terminal block with pitch 3.81 mm adjustment for inputs	
Maximum Cable Distance Between Devices	Unshielded cable: <50 m for regular input	
Insulation	Between input and internal logic at 500 V AC Non-insulated between inputs	
Marking	CE	
Mounting Support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 plate or panel with fixing kit	
Height	90 mm	

Depth	84.6 mm
Width	27.4 mm
Net Weight	0.1 kg

# **Environment**

Standards	IEC 61131-2	
Product Certifications	CE cULus UKCA RCM EAC cULus	
Resistance To Electrostatic Discharge	8 kV in air conforming to IEC 61000-4-2 4 kV on contact conforming to IEC 61000-4-2	
Resistance To Electromagnetic Fields	10 V/m 80 MHz1 GHz conforming to IEC 61000-4-3 3 V/m 1.4 GHz2 GHz conforming to IEC 61000-4-3 1 V/m 2 GHz3 GHz conforming to IEC 61000-4-3	
Resistance To Magnetic Fields	30 A/m 50/60 Hz conforming to IEC 61000-4-8	
Resistance To Fast Transients	1 kV for I/O conforming to IEC 61000-4-4	
Surge Withstand 1 kV I/O common mode conforming to IEC 61000-4-5 DC		
Resistance To Conducted Disturbances	10 V 0.1580 MHz conforming to IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)	
Electromagnetic Emission	Radiated emissions - test level: 40 dB $\mu$ V/m QP class A ( 10 m) at 30230 MHz conforming to IEC 55011 Radiated emissions - test level: 47 dB $\mu$ V/m QP class A ( 10 m) at 2301000 MHz conforming to IEC 55011	
Ambient Air Temperature For Operation	-1035 °C vertical installation -1055 °C horizontal installation	
Ambient Air Temperature For Storage	-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	02000 m	
Storage Altitude	03000 m	
Vibration Resistance	3.5 mm at 58.4 Hz on DIN rail 3 gn at 8.4150 Hz on DIN rail 3.5 mm at 58.4 Hz on panel 3 gn at 8.4150 Hz on panel	
Shock Resistance	15 gn for 11 ms	

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	7.345 cm
Package 1 Width	10.498 cm
Package 1 Length	12.471 cm
Package 1 Weight	210.8 g
Unit Type Of Package 2	S04

Number Of Units In Package 2	42
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	10.5 kg
Unit Type Of Package 3	P12
Number Of Units In Package 3	504
Package 3 Height	105 cm
Package 3 Width	120 cm
Package 3 Length	80 cm
Package 3 Weight	132 kg

# **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium\*

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

## Well-being performance

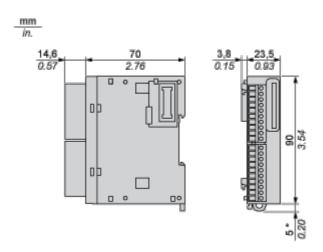
<b>⊘</b>	Reach Free Of Svhc	
<b>⊘</b>	Toxic Heavy Metal Free	
<b>⊘</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes
<b>Ø</b>	Pvc Free	

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

## **Dimensions Drawings**

#### **Dimensions**

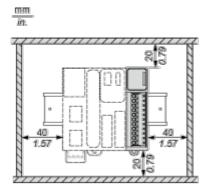


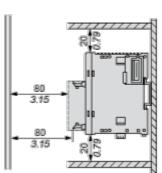
(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

## **TM3DI16**

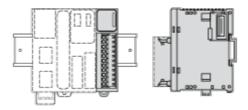
# Mounting and Clearance

## **Spacing Requirements**

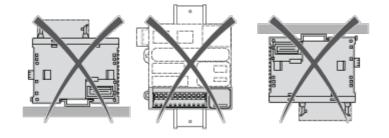




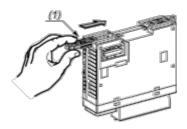
## Mounting on a Rail



## **Incorrect Mounting**

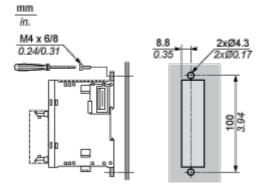


#### Mounting on a Panel Surface



(1) Install a mounting strip

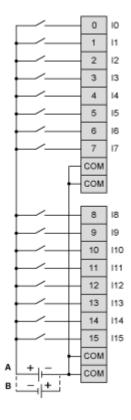
#### **Mounting Hole Layout**



Connections and Schema

#### Digital Input Module (16-channel, 24 Vdc)

#### Wiring Diagrams



The 4 COM terminals are connected internally

- (A) Sink wiring (positive logic)
- (B) Source wiring (negative logic)