# Product data sheet

Specifications



# discrete input module, Modicon TM3, 32 inputs, HE10, 24V DC

TM3DI32K

### 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	32 for input conforming to IEC 61131-2 Type 1	
Discrete Input Logic	Sink or source (positive/negative)	
Discrete Input Voltage	24 V	
Discrete Input Current	5 mA for input	

# Complementary

Discrete I/O Number	32	
Current Consumption	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)	
	65 mA at 5 V DC via bus connector (at state on)	
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	05 V for input	
Current State 0 Guaranteed	<= 1 mA (input)	
Input Impedance	4.4 kOhm	
Response Time	4 ms (turn-on)	
	4 ms (turn-off)	
Local Signalling	1 LED per channel (green) for input status	
Electrical Connection	HE-10 connectorfor inputs	
Maximum Cable Distance Between Devices	Unshielded cable: <30 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	81.3 mm	

Width	33.5 mm
Net Weight	0.1 kg

# Environment

Standards	IEC 61131-2	
Product Certifications	cULus	
	CE	
	UKCA	
	RCM	
	EAC	
	cULus HazLoc	
Resistance To Electrostatic	8 kV in air conforming to IEC 61000-4-2	
Discharge	4 kV on contact conforming to IEC 61000-4-2	
Resistance To Electromagnetic	10 V/m 80 MHz1 GHz conforming to IEC 61000-4-3	
Fields	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	10 V 0.1580 MHz conforming to IEC 61000-4-6	
Disturbances	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 dBµV/m QP class A ( 10 m) at 30230 MHz	
	conforming to IEC 55011	
	Radiated emissions - test level: 47 dBµV/m QP class A ( 10 m) at 230…1000 MHz	
	conforming to IEC 55011	
Ambient Air Temperature For	-1035 °C vertical installation	
Operation	-1055 °C horizontal installation	
Ambient Air Temperature For Storage	-2570 °C	
Relative Humidity	1095 %, without condensation (in operation)	
· · · · · · · · · · · · · · · · · · ·	1095 %, without condensation (in storage)	
p 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 5…8.4 Hz on DIN rail	
	3 gn at 8.4…150 Hz on DIN rail	
	3.5 mm at 58.4 Hz on panel	
	3 gn at 8.4…150 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	7.639 cm
Package 1 Width	10.55 cm
Package 1 Length	12.87 cm
Package 1 Weight	220.0 g
Unit Type Of Package 2	CAR
Number Of Units In Package 2	42

Package 2 Height	29.6 cm
Package 2 Width	40.3 cm
Package 2 Length	55.9 cm
Package 2 Weight	10.431 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	133 kg

## Sustainability

**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

Eà

#### Well-being performance

Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes
Pvc Free

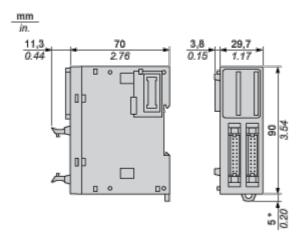
## **Certifications & Standards**

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
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

# Product data sheet

#### **Dimensions Drawings**

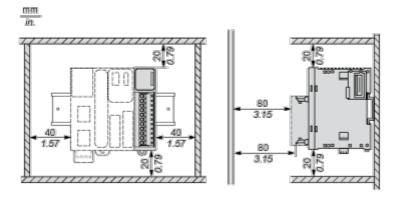
#### Dimensions



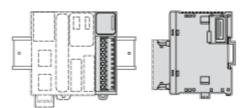
 $(^{*})$   $\,$  8.5 mm/0.33 in. when the clamp is pulled out.

Mounting and Clearance

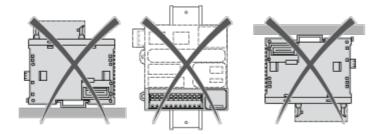
#### Spacing Requirements



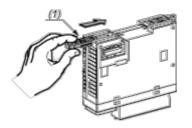
#### Mounting on a Rail



#### **Incorrect Mounting**

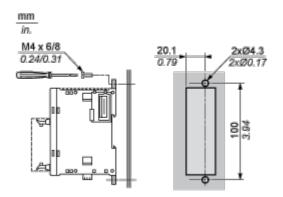


# Product data sheet



(1) Install a mounting strip

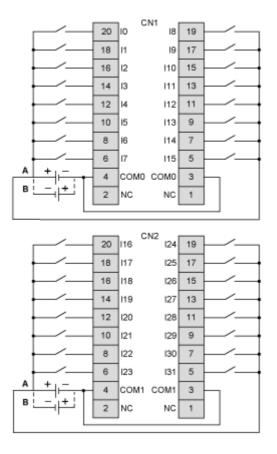
#### **Mounting Hole Layout**



#### Connections and Schema

#### Digital Input Module (32-channel, 24 Vdc)

#### Wiring Diagram



The COM0 and COM1 terminals are not connected internally

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