TM3DI8A

module TM3 - 8 inputs 120V AC





Main

Range of product	Modicon TM3
Product or component type	Discrete input module
Range compatibility	Modicon M221 Modicon M241 Modicon M251
Discrete input number	8 input conforming to IEC 61131-2 Type 1
Discrete input voltage	120 V
Discrete input current	7.5 mA for input

Complementary

Discrete I/O number	8
Current consumption	0 mA at 24 V DC via bus connector at state on 0 mA at 24 V DC via bus connector at state off 70 mA at 5 V DC via bus connector at state on 25 mA at 5 V DC via bus connector at state off
Discrete input voltage type	AC
Voltage state 1 guaranteed	79132 V for input
Current state 1 guaranteed	215 mA for input
Voltage state 0 guaranteed	020 V for input
Current state 0 guaranteed	<= 15 mA for input
Input impedance	11 kOhm
Response time	25 ms for turn-on 30 ms for turn-off
Local signalling	1 LED per channel green for input status
Electrical connection	Removable screw terminal block pitch 5.08 mm with 11 terminal(s) of 2.5 mm ² connection capacity for inputs
Insulation	Non-insulated between inputs 1500 V AC between input and internal logic 1500 V AC between input groups
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

Environment

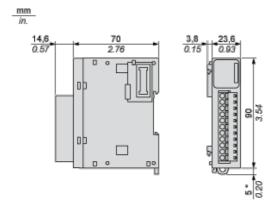
standards	EN/IEC 61131-2 EN/IEC 61010-2-201	
product certifications	C-Tick CULus	
resistance to electrostatic discharge	4 kV (on contact) conforming to EN/IEC 61000-4-2 8 kV (in air) conforming to EN/IEC 61000-4-2	
resistance to electromagnetic fields	10 V/m at 80 MHz1 GHz conforming to EN/IEC 61000-4-3 3 V/m at 1.4 GHz2 GHz conforming to EN/IEC 61000-4-3 1 V/m at 2 GHz3 GHz conforming to EN/IEC 61000-4-3	
resistance to magnetic fields	30 A/m 50/60 Hz conforming to EN/IEC 61000-4-8	
resistance to fast transients	1 kV for I/O conforming to EN/IEC 61000-4-4	
surge withstand	2 kV for I/O (AC) in common mode conforming to EN/IEC 61000-4-5	

resistance to conducted disturbances	10 Vrms at 0.1580 MHz conforming to EN/IEC 61000-4-6 3 Vrms at 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 μ V/m QP with class A, condition of test: 10 m (radio frequency: 30230 MHz) conforming to EN/IEC 55011 Radiated emissions, test level: 47 dB μ V/m QP with class A, condition of test: 10 m (radio frequency: 2301000 MHz) conforming to EN/IEC 55011
ambient air temperature for operation	-1055 °C for horizontal installation -1035 °C for vertical 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 (vibration frequency: 58.4 Hz) on DIN rail 3 gn (vibration frequency: 8.4150 Hz) on DIN rail 3.5 mm (vibration frequency: 58.4 Hz) on panel 3 gn (vibration frequency: 8.4150 Hz) on panel
shock resistance	15 gn (test wave duration:11 ms)

Offer Sustainability

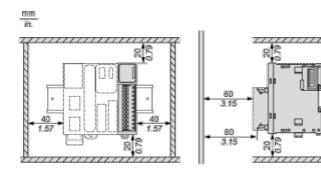
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1348 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Dimensions



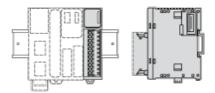
(*) 8.5 mm/0.33 in. when the clamp is pulled out.

Spacing Requirements

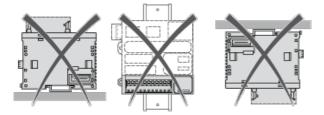




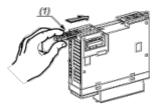
Mounting on a Rail



Incorrect Mounting

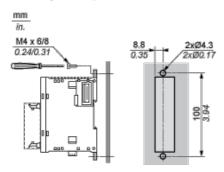


Mounting on a Panel Surface



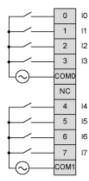
(1) Install a mounting strip

Mounting Hole Layout



Digital Input Module (8-channel, 120 Vac)

Wiring Diagram



The COM0 and COM1 terminal are **not** connected internally.