

Product datasheet

Specifications



Discrete I/O module, Modicon TM3, 32 IO (16 digital inputs, 16 digital outputs, screw)

TM3RDM32R

Main

Range of product	Modicon TM3
Product or component type	Discrete I/O module
Range compatibility	Modicon Easy M200
Discrete input number	16 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
Discrete output type	Relay normally open
Discrete output number	16
Discrete output logic	Positive or negative
Discrete output voltage	24 V DC for relay output 240 V AC for relay output
Discrete output current	2000 mA for relay output

Complementary

Discrete I/O number	32
Current consumption	80 mA at 24 V DC via bus connector (at state on) 95 mA at 5 V DC via bus connector (at state on)
Discrete input voltage type	DC
Voltage state 1 guaranteed	15...28.8 V for input
Current state 1 guaranteed	≥ 2.5 mA (input)
Voltage state 0 guaranteed	0...5 V for input
Current state 0 guaranteed	≤ 1 mA (input)
Input impedance	4.7 kOhm
Response time	4 ms (turn-on) 4 ms (turn-off)
Maximum current per output common	4 A
Mechanical durability	20000000 cycles
Minimum load	10 mA at 5 V DC for relay output
Local signalling	1 LED per channel (green) for I/O state

Electrical connection	11 x 1.5 mm ² removable screw terminal block with pitch 3.81 mm adjustment for outputs 9 x 1.5 mm ² removable screw terminal block with pitch 3.81 mm adjustment for inputs
Maximum cable distance between devices	Unshielded cable: <50 m for input Unshielded cable: <150 m for output
Insulation	Between input and internal logic at 500 V AC Non-insulated between inputs Between input groups and output groups at 1500 V AC Between open contact at 750 V AC Between output and internal logic at 500 V AC Non-insulated between outputs
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	51 mm
Net weight	0.208 kg

Environment

Resistance to electrostatic discharge	8 kV in air conforming to EN/IEC 61000-4-2 6 kV on contact conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m 80 MHz...1 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	2 kV for relay output conforming to EN/IEC 61000-4-4 1 kV for input conforming to EN/IEC 61000-4-4
Surge withstand	2 kV output common mode conforming to EN/IEC 61000-4-5 1 kV input common mode conforming to EN/IEC 61000-4-5
Resistance to conducted disturbances	10 V 0.15...80 MHz conforming to EN/IEC 61000-4-6
Electromagnetic emission	Radiated emissions - test level: 40 dB μ V/m QP class A (10 m) at 30...230 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 47 dB μ V/m QP class A (10 m) at 230...1000 MHz conforming to EN/IEC 55011
Ambient air temperature for operation	0...55 °C horizontal installation
Ambient air temperature for storage	-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...2000 m
Storage altitude	0...3000 m
Vibration resistance	3.5 mm at 5...8.4 Hz on DIN rail 1 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.7 Hz on panel 2 gn at 8.7...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	12.4 cm
Package 1 Width	7.2 cm

Package 1 Length	10.3 cm
Package 1 Weight	292 g
Unit Type of Package 2	S03
Number of Units in Package 2	26
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	8092 g
Unit Type of Package 3	P12
Number of Units in Package 3	624
Package 3 Height	80 cm
Package 3 Width	120 cm
Package 3 Length	105 cm
Package 3 Weight	203208 g

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Recommended replacement(s)