Product data sheet
Characteristics

TM5SDM12DT
discrete IO module, Modicon TM5, 8 DI, 4O, 24V DC, 1 wire



Main

Range of product	Modicon TM5
Product or component type	Discrete I/O module
Product compatibility	PacDrive LMC Pro 2 Motion controller PacDrive LMC Pro PacDrive LMC Eco Logic controller
Range compatibility	Modicon M258 Modicon LMC058 PacDrive LMC motion controller
Discrete input number	8
Discrete input voltage	24 V DC (voltage limits: 20.4...28.8 V)
Discrete input logic	Sink
Discrete output number	4
Discrete output logic	Source
Discrete output voltage	24 V DC (20.4...28.8 V) for transistor

Complementary

Current per channel	0.5 A
Maximum current per output common	2 A
Peak output current	12 A
Switching frequency	<= 500 Hz resistive load
Response time	<= 300 µs from state 0 to state 1 for output <= 300 µs from state 1 to state 0 for output
Discrete input number	8 at 24 V DC
Discrete input current	3.75 MA at 24 V DC
Voltage state 1 guaranteed	>= 15 V
Voltage state 0 guaranteed	<= 5 V
Input impedance	6.4 kOhm
Input filtering	<= 25 ms configurable by software <= 100 ms hardware
Discrete output number	4 transistor at 24 V DC
Maximum leakage current	5 MA 24 V DC when switched off
Maximum voltage drop	<0.3 V at 500 mA for output
Typical current consumption	42 MA at 5 V DC 21 MA at 24 V DC
Electrical connection	1 wire
Power dissipation in W	1.52 W

Local signalling	1 LED (green) for power supply 1 LED (red) for power supply 4 LEDs (yellow) for output status 8 LEDs (green) for input status
Height	99 Mm
Width	12.5 Mm
Depth	75 Mm
Net weight	0.025 Kg
Electromagnetic compatibility	Electrostatic discharge immunity test, 4 kV on contact conforming to IEC 61000-4-2 Electrostatic discharge immunity test, 8 kV in air conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields, 1 V/m 2...2.7 GHz conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test, 1 kV I/O conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test, 1 kV shielded cable conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test, 2 kV power lines conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test, 0.5 kV differential mode conforming to IEC 61000-4-5 1.2/50 µs shock waves immunity test, 1 kV common mode conforming to IEC 61000-4-5 Conducted RF disturbances conforming to IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11

Environment

IP degree of protection	IP20
Marking	CE
Product certifications	GOST-R[RETURN]CULus[RETURN]C-Tick[RETURN]CSA
Standards	CSA C22.2 No 142 UL 508 CSA C22.2 No 213 IEC 61131-2
Ambient air temperature for operation	-10…55 °C without derating (horizontal installation) -10…60 °C with derating factor (horizontal installation) -10…50 °C (vertical installation)
Ambient air temperature for storage	-40…70 °C
Relative humidity	5…95 % without condensation
Operating altitude	0...2000 m
Pollution degree	2
Vibration resistance	1 gn (f = 8.4…150 Hz) on DIN rail 3.5 mm (f = 5…8.4 Hz) on DIN rail
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	2.000 Cm
Package 1 Width	6.000 Cm
Package 1 Length	10.500 Cm
Package 1 Weight	39.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	97
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	4.040 Kg

Offer Sustainability

Recyclability potential, in %	0
Total lifecycle Carbon footprint	63 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1.3128094835892783
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.013655386248670175
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.026934615911367

Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	61.314337060225455
REACh free of SVHC	Yes
Carbon footprint of the use phase [B2, B3, B4, B6]	61 kg CO2 eq.
Toxic heavy metal free	Yes
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.06221197119903745
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	63
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
REACh Regulation	Free of Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, wh
PVC free	Yes
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised