Product data sheet Characteristics

TPRPM038

Power interface module, TeSys island, 40A AC-1, 38A AC-3, 18.5kW / 20hp





Main

Range of product	TeSys	
Product name	TeSys island	 -
Device short name	TPRPM	
Product or component type	Power module	
Device presentation	Power module connected to an automation controller through a bus coupler Operational only when connected to a bus coupler	
Function available	Upstream voltage presence detection Electronic thermal overload protection Monitoring of currents Control of third party power devices when associated to TPRDG IO module	
Product compatibility	TPRBC bus coupler TPRDG digital IO module TPRAN analog IO module	
Poles description	3P	
Motor power kW	9 kW at 230 V AC 50 Hz 18.5 kW at 380415 V AC 50 Hz 18.5 kW at 440 V AC 50 Hz 18.5 kW at 500 V AC 50 Hz 18.5 kW at 690 V AC 50 Hz	
Motor power HP (UL / CSA)	2 hp at 120 V AC 60 Hz for 1 phase motors 5 hp at 240 V AC 60 Hz for 1 phase motors 10 hp at 208 V AC 60 Hz for 3 phases motors 10 hp at 240 V AC 60 Hz for 3 phases motors 20 hp at 480 V AC 60 Hz for 3 phases motors 25 hp at 600 V AC 60 Hz for 3 phases motors	
[Ue] rated operational voltage	<= 690 V AC 4763 Hz	
[le] rated operational current	38 A (at <50 °C) at <= 440 V AC-3 40 A (at <50 °C) at <= 440 V AC-1	
[lth] conventional free air thermal current	40 A (at 50 °C)	
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1 600 V conforming to UL 60947-4-1	F

[Uimp] rated impulse withstand voltage	6 kV
Overvoltage category	III
Thermal protection adjustment range	0.7638 A
Thermal overload class	Class 530
Reset	Remotely or automatically
[Uc] control circuit voltage	24 V DC supplied by the bus coupler
Current consumption	60 mA
Power dissipation in W	0.9 W at le AC-3

Complementary

Complementary		
Protection type	Thermal overload protection Motor overheat Overcurrent Undercurrent Jam Long start Stall Rapid cycle lockout Phase loss Rapid restart lockout Phase reversal Phase sequence Phase unbalance Ground current	
Monitoring type	Time device ON Number of faults Number of device power cycles Average current lavg Average voltage Vavg Max current Imax Max voltage Vmax	
Local signalling	1 LED (green/red) for DS (device status) 1 LED (green/red) for LS (load status)	
Standards	EN/IEC 60947-1 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1	
Product certifications	EAC CCC CSA UL	
Mounting mode	Horizontal and vertical (35 mm symmetrical DIN rail)	
Connections - terminals	Screw-clamp terminals 1 cable(s) 1.510 mm² (AWG 16AWG 8) rigid Screw-clamp terminals 2 cable(s) 1.510 mm² (AWG 16AWG 8) rigid Screw-clamp terminals 1 cable(s) 2.510 mm² (AWG 14AWG 8) flexible without cable end Screw-clamp terminals 2 cable(s) 2.510 mm² (AWG 14AWG 8) flexible without cable end Screw-clamp terminals 1 cable(s) 1.510 mm² (AWG 16AWG 10) flexible with cable end Screw-clamp terminals 2 cable(s) 1.56 mm² (AWG 16AWG 10) flexible with cable end	
Tightening torque	2.5 N.m - with screwdriver flat Ø 6 mm 2.5 N.m - with screwdriver Philips No 3	
Width	45 mm	
Height	121 mm	
Depth	115 mm	
Net weight	0.255 kg	

Environment

Ambient air temperature for storage	-2570 °C
Ambient air temperature for operation	-1050 °C without derating 5060 °C with current derating
Relative humidity	595 %
Operating altitude	02000 m without derating

IP degree of protection	egree of protection IP20	
Pollution degree	2	
Protective treatment	TC	
Fire resistance	960 °C conforming to UL 94 850 °C conforming to IEC 60695-2-1 650 °C conforming to IEC 60695-2-12	
Shock resistance	15 gn (duration = 11 ms) conforming to IEC 60068-2-27	
Vibration resistance	1.5 mm peak to peak (f= 313 Hz) conforming to IEC 60068-2-6 1 gn (f= 13200 Hz) conforming to IEC 60068-2-6	
Electromagnetic compatibility	Electrostatic discharge immunity test, level 3, 8 kV air, 6 kV contact, conforming to EN/IEC 61000-4-2 Radiated RF field immunity test, level 3, 10 V/m, conforming to EN/IEC 61000-4-3 Fast transient immunity test, level 4, 4 kV, conforming to EN/IEC 61000-4-4 Surge immunity test (differential mode), level 3, 2 kV, conforming to EN/IEC 61000-4-5 Surge immunity test (common mode), level 4, 4 kV, conforming to EN/IEC 61000-4-5 Conducted RF disturbance immunity test, 20 V, conforming to EN/IEC 61000-4-6	

Packing Units

Package 1 Weight	278.000 g	
Package 1 Height	11.500 cm	
Package 1 width	4.500 cm	
Package 1 Length	12.000 cm	

Offer Sustainability

Sustainable offer status	Green Premium product	
EU RoHS Directive Compliant EU RoHS Declaration		
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information	
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	
Halogen content performance	Halogen free plastic parts product	