Product data sheet
Characteristics

TPRPM080
Power module, TeSys island, 80A at AC-1, 80A at AC-3, 37kW, 50hp

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	22 KW at 230 V AC 50 Hz 37 KW at 380...415 V AC 50 Hz 37 KW at 440 V AC 50 Hz 37 KW at 500 V AC 50 Hz 37 kW at 690 V AC 50 Hz
Motor power HP (UL / CSA)	5 Hp at 120 V AC 60 Hz for 1 phase motors 10 Hp at 240 V AC 60 Hz for 1 phase motors 20 Hp at 208 V AC 60 Hz for 3 phases motors 20 Hp at 240 V AC 60 Hz for 3 phases motors 40 Hp at 480 V AC 60 Hz for 3 phases motors 50 hp at 600 V AC 60 Hz for 3 phases motors
[Ue] rated operational voltage	<= 690 V AC 47...63 Hz
[Ie] rated operational current	80 A (at <50 °C) at <= 440 V AC-3 80 A (at <50 °C) at <= 440 V AC-1 80 A (at <50 °C) AC-3e
[Ith] conventional free air thermal current	80 A (at 50 °C)
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1 600 V conforming to UL 60947-4-1 600 V conforming to CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV
Overvoltage category	III
Thermal protection adjustment range	4…80 A
Thermal overload class	Class 5…30
Reset	Remotely or automatically
[Uc] control circuit voltage	24 V DC supplied by the bus coupler
Current consumption	60 mA
Power dissipation in W	2.3 W at Ie AC-3

Complementary

Protection type	Thermal overload protection Motor overheat Overcurrent Undercurrent Jam Long start Stall Rapid cycle lockout Rapid restart lockout Phase reversal Phase loss Phase sequence Phase unbalance Ground current
Monitoring type	Time device ON Number of faults Number of device power cycles Average current Iavg 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	CCC[RETURN]UL[RETURN]EAC[RETURN]CSA
Mounting mode	Horizontal and vertical (35 mm symmetrical DIN rail)
Connections - terminals	EverLink BTR screw connectors 1 cable(s) 1…35 mm² (AWG 16...AWG 2) rigid EverLink BTR screw connectors 2 cable(s) 1…25 mm² (AWG 16...AWG 4) rigid EverLink BTR screw connectors 1 cable(s) 1…35 mm² (AWG 16...AWG 2) flexible without cable end EverLink BTR screw connectors 2 cable(s) 1…25 mm² (AWG 16...AWG 4) flexible without cable end EverLink BTR screw connectors 1 cable(s) 1…35 mm² (AWG 16...AWG 2) flexible with cable end EverLink BTR screw connectors 2 cable(s) 1…25 mm² (AWG 16...AWG 4) flexible with cable end
Tightening torque	5 N.M - cable 1…25 mm² hexagonal 4 mm 8 N.m - cable 25…35 mm² hexagonal 4 mm
Width	55 mm
Height	136 mm
Depth	125 mm
Net weight	0.425 kg

Environment

Ambient air temperature for storage	-25…70 °C
Ambient air temperature for operation	-10…50 °C without derating 50…60 °C with current derating
Relative humidity	5…95 %
Operating altitude	0...2000 m without derating
IP degree 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= 3…13 Hz) conforming to IEC 60068-2-6 1 gn (f= 13…200 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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.5 cm
Package 1 Width	13.5 cm
Package 1 Length	17.0 cm
Package 1 Weight	495.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	8
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.292 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant with Exemptions
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
Halogen content performance	Halogen free plastic parts product