

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 phase motors 20 Hp at 240 V AC 60 Hz for 3 phase motors 40 Hp at 480 V AC 60 Hz for 3 phase motors 50 hp at 600 V AC 60 Hz for 3 phase motors
[Ue] rated operational voltage	<= 690 V AC 47...63 Hz
[Ie] rated operational current	80 A (at <122 °F (50 °C)) at <= 440 V AC-3 80 A (at <122 °F (50 °C)) at <= 440 V AC-1
[Ith] conventional free air thermal current	80 A (at 122 °F (50 °C))
[Ui] rated insulation voltage	690 V IEC 60947-4-1 600 V UL 60947-4-1 600 V 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

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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	For DS (device status) 1 LED (green/red) For LS (load status) 1 LED (green/red)
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 0.00...0.05 in ² (1...35 mm ²) AWG 16...AWG 2)rigid EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) AWG 16...AWG 4)rigid EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) AWG 16...AWG 2)flexible without cable end EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) AWG 16...AWG 4)flexible without cable end EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) AWG 16...AWG 2)flexible with cable end EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) AWG 16...AWG 4)flexible with cable end
Tightening torque	44.25 Lbf.In (5 N.m) 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm) 70.81 lbf.in (8 N.m) 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm)
Width	2.17 in (55 mm)
Height	5.35 in (136 mm)
Depth	4.92 in (125 mm)
Net Weight	0.94 lb(US) (0.425 kg)

Environment

Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Ambient air temperature for operation	14...122 °F (-10...50 °C) without derating 122...140 °F (50...60 °C) with current derating
Relative Humidity	5...95 %
Operating altitude	0...6561.68 ft (0...2000 m) without derating
IP degree of protection	IP20
Pollution degree	2
Protective treatment	TC
Fire resistance	1760 °F (960 °C) UL 94 1562 °F (850 °C) IEC 60695-2-1 1202 °F (650 °C) IEC 60695-2-12
Shock resistance	15 gn 11 ms) IEC 60068-2-27

Vibration resistance	1.5 mm peak to peak 3...13 Hz) IEC 60068-2-6 1 gn 13...200 Hz) 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

Ordering and shipping details

Category	22352-TESYS ISLAND LOAD CONTROLLERS
Discount Schedule	I12
GTIN	3606489832865
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.56 in (6.5 cm)
Package 1 Width	5.31 in (13.5 cm)
Package 1 Length	6.69 in (17.0 cm)
Package 1 Weight	17.46 oz (495.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	8
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	9.46 lb(US) (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