

TPRSM001

SIL interface module, TeSys island, 24VDC,
Isolated switching input for safe stop



Main

Range	TeSys
Product name	TeSys island
Device short name	TPRSM
Product or component type	SIL interface module
Device presentation	Implementation of a safe stop function for SIL motor starters TPRSS Safe stop operable for safety-related system conforming to ISO 13849-1 Operational only when connected to a bus coupler TPRBC
Function of module	Safe stop with 1NC or 2NC contacts monitoring
Product compatibility	TPRBC bus coupler TPRSS SIL motor starter
[Ue] rated operational voltage	Input/output circuit: 24 V DC
[Ui] rated insulation voltage	Input/output circuit: 50 V
[Uimp] rated impulse withstand voltage	2 kV for input/output circuit conforming to IEC 60947-1
Overvoltage category	III
Input type	Isolated switching input for safe stop
Input protection type	Internal, electronic
Input voltage	15...28.8 V DC state 1 0...5 V DC state 0
Output type	Relay instantaneous opening, 1 NO circuit(s), potential free
Output thermal current	8 A for relay output
Protection type	External fuse, 8 A gG fuse for relay output
Local signalling	1 LED (green/red) for DS (device status) 1 LED (green/red) for SS (safe stop status)

Complementary

[Us] rated supply voltage	24 V DC supplied by the bus coupler
Current consumption	10 mA
Power dissipation in W	0.7 W maximum
Safety function	Safe stop: category 0 conforming to IEC 60204-1 Safe stop: category 1 conforming to IEC 60204-1
Safety integrity level	SIL 2 conforming to IEC 61508 in single channel system architecture SILCL 2 conforming to IEC 62061 in single channel system architecture PL = d category 2 conforming to ISO 13849-1 in single channel system architecture
Standards	UL 60947-5-1 IEC 60947-5-1
Product certifications	EAC (pending)[RETURN]UL[RETURN]CSA
Mounting mode	Horizontal and vertical (35 mm symmetrical rail)
Connections - terminals	Control circuit: removable spring terminal block 5 cable(s) 0.2...2.5 mm ² (AWG 24...AWG 14) rigid Control circuit: removable spring terminal block 5 cable(s) 0.2...2.5 mm ² (AWG 24...AWG 14) flexible without cable end Control circuit: removable spring terminal block 5 cable(s) 0.25...2.5 mm ² (AWG 22...AWG 14) flexible with cable end
Width	25 mm

Height	118 mm
Depth	114 mm
Net weight	0.159 kg

Environment

Ambient air temperature for storage	-25...70 °C
Ambient air temperature for operation	-10...60 °C
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
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, level 3, 8 kV air, 6 kV contact, conforming to EN/IEC 61000-4-2 Radiated RF fields, level 3, 10 V/m, conforming to EN/IEC 61000-4-3 Fast transients immunity test, level 3, 2 kV, conforming to EN/IEC 61000-4-4 Surge immunity test (common mode), level 3, 2 kV, conforming to EN/IEC 61000-4-5

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	15.5 cm
Package 1 Weight	266.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.019 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

Contractual warranty

Warranty	18 months
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