Product data sheet

Specifications

Motor Management main unit, TeSys Tera, ProfiNet, 4 DI and 3 DO, supply 24VDC

LTMTPNBD

Launching in: 30 October 2024

Coming soon

Main

Range	TeSys
Product name	TeSys Tera
Device short name	LTMT
Product or component type	Motor controller
Device application	Equipment monitoring and control
[Us] rated supply voltage	24 V DC
Current consumption	56...127 mA
Supply voltage limits	18…30 V DC
Communication port protocol	PROFINET
Bus type	ProfiNet IO IEEE 802.3 0...159 10...100 Mbit/s, 2xRJ45 4 shielding pairs cable

Complementary

[Ui] rated insulation voltage	690 V AC IEC 60185
Short-circuit withstand	100 kA
Overvoltage category	III
[Uimp] rated impulse withstand voltage	0.8 kV
Associated fuse rating	0.5 A gG control circuit

Protection type	Overload protection Stalled rotor Locked rotor Short-circuit Undercurrent Overcurrent Current unbalance Phase reversal Phase loss Earth fault protection internal Earth fault protection external Excessive starting time Max number of start Undervoltage Overvoltage Voltage unbalance Underfrequency Overfrequency Reacceleration Temperature protection Analog input protection Communication failure Fail to stop Under power Over power Power factor variation Anti-backspin timer Block output DI interlock protection
Network and machine diagnosis type	Motor statistics Motor status Event recording Running hours counter/operating time Number of starts and stops Running hours /stop hours counter Start curve showing motor start record Pre-alarms Trip history information Alarm counters
Logic input number	4
Input current	7 mA 24 V
Current state 0 guaranteed	Digital input 0...12 V 5 mA 10 ms
Current state 1 guaranteed	Digital input 18...30 V 5 mA 10 ms
maximum output switching frequency	2 Hz
Load current	10 A 250 V AC/DC 5 A 30 V DC
Permissible power	480 VA AC-15), Ie = 2 A, 500000 cycles output) 30 W DC-13), Ie = 1.25 A, 500000 cycles output)
maximum operating rate	1800 cyc/h
Contacts type and composition	1 NO + 1 NC fault signal 3 NO
Metering type	Thermal memory Line, phase and average current Line to line and average voltage Motor temperature input Ground fault current Ig Active and reactive power Active and reactive energy Frequency Total voltage harmonic distortion THD (V) Total voltage harmonic distortion THD (U) Total current harmonic distortion THD (I) Phase sequence

Measurement accuracy	1 % current 0.3...3 A) 1 % current 2.5...25 A) 3 % current 7...70 A) 3 % current 10...100 A) 1 % voltage 110...690 V) +/- 2.5 % earth fault current external measurement +/- 3...5 % earth fault current internal measurement current > 0.03 A in the 0.3...3 A range) +/- 3...5 % earth fault current internal measurement current > 0.25 A in the 2.5...25 A range) +/- 3...5 % earth fault current internal measurement current > 0.7 A in the 7...70 A range) +/- 3...5 % earth fault current internal measurement current > 1 A in the 10...100 A range) +/- 2 % temperature +/- 2 % THD measurement +/- 3...6 % power factor +/- 2...5 % active and reactive energy +/- 30 min/year internal clock
Connection pitch	0.3 in (7.5 mm) for supply voltage 0.2 in (5.0 mm) for others
Connections - terminals	Control circuit connector 1 0.0003…0.004 in² (0.2…2.5 mm²) AWG 24...AWG 14)flexible without cable end Control circuit connector 2 0.0003…0.002 in² (0.2…1.5 mm²) AWG 24...AWG 14)flexible without cable end Control circuit connector 1 0.0004…0.004 in² (0.25…2.5 mm²) AWG 24...AWG 14)flexible with ferrule with cable end Control circuit connector 2 0.0003…0.002 in² (0.2…1.5 mm²) AWG 24...AWG 14)flexible with ferrule with cable end Control circuit connector 1 0.0004…0.004 in² (0.25…2.5 mm²) AWG 24...AWG 14)flexible stranded with cable end Control circuit connector 2 0.0003…0.002 in² (0.2…1.5 mm²) AWG 24...AWG 14)flexible stranded with cable end Control circuit connector 1 0.0003…0.004 in² (0.2…2.5 mm²) AWG 24...AWG 14)solid with cable end Control circuit connector 2 0.0003…0.002 in² (0.2…1 mm²) AWG 24...AWG 14)solid with cable end
Width	4.4 in (112 mm)
Height	1.8 in (45 mm)
Depth	3.5 in (90 mm)
Web services	Web server

Environment

Standards	EN/IEC 60947-4-1 UL/CSA 60947-4-1
Product certifications	UL IEC cUL
Fire resistance	1202 °F (650 °C) IEC 60947-1 1760 °F (960 °C) UL 94
Ambient air temperature for operation	-4…158 °F (-20…70 °C)
Ambient air temperature for storage	-40…176 °F (-40…80 °C)
Operating altitude	<= 2000 m without derating
Mechanical robustness	Vibrations mounted on symmetrical rail1 Gn, 5...300 Hz EN/IEC 60068-2-27
IP degree of protection	IP20

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.6 in (6.5 cm)

Package 1 Width	4.1 in (10.5 cm)
Package 1 Length	4.3 in (11 cm)
Package 1 Weight	10.4 oz (295.5 g)
Unit Type of Package 2	S01
Number of Units in Package 2	4
Package 2 Height	5.9 in (15 cm)
Package 2 Width	5.9 in (15 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	3.578 lb(US) (1.623 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	192
Package 3 Height	413.4 in (1050 cm)
Package 3 Width	26.0 in (66 cm)
Package 3 Length	33.9 in (86 cm)
Package 3 Weight	151.537 lb(US) (68.736 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**402 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**11 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**391 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.7 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**0be6a459-9102-4f27-8f16-efc9583f3f4e**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
Halogen content performance	**Halogen free plastic parts product**
PVC free	**Yes**
Silicon free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**0**
Circularity Profile	**End of Life Information**
Take-back	**Nej**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**