

Product datasheet

Specifications



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

LTMTMBD

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	Modbus RTU
Bus type	Modbus 2-wire RS 485 interface, addressing 1...247, transmission rate 1.2...19.2 kbit/s, terminal block with 2 shielded twisted pairs

Complementary

[Ui] rated insulation voltage	24 V DC conforming to 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 for control circuit

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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 at 24 V
Current state 0 guaranteed	Digital input: 0...12 V and 5 mA for 10 ms
Current state 1 guaranteed	Digital input: 18...30 V and 5 mA for 10 ms
maximum output switching frequency	2 Hz
Load current	10 A at 250 V AC/DC 5 A at 30 V DC
Permissible power	480 VA (AC-15), I _e = 2 A, 500000 cycles (output) 30 W (DC-13), I _e = 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 I _g 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	7.5 mm for supply voltage 5.0 mm for others
Connections - terminals	Control circuit: connector 1 cable(s) 0.2...2.5 mm² (AWG 24...AWG 14) flexible without cable end Control circuit: connector 2 cable(s) 0.2...1.5 mm² (AWG 24...AWG 14) flexible without cable end Control circuit: connector 1 cable(s) 0.25...2.5 mm² (AWG 24...AWG 14) flexible with ferrule with cable end Control circuit: connector 2 cable(s) 0.2...1.5 mm² (AWG 24...AWG 14) flexible with ferrule with cable end Control circuit: connector 1 cable(s) 0.25...2.5 mm² (AWG 24...AWG 14) flexible stranded with cable end Control circuit: connector 2 cable(s) 0.2...1.5 mm² (AWG 24...AWG 14) flexible stranded with cable end Control circuit: connector 1 cable(s) 0.2...2.5 mm² (AWG 24...AWG 14) solid with cable end Control circuit: connector 2 cable(s) 0.2...1 mm² (AWG 24...AWG 14) solid with cable end
Width	112 mm
Height	45 mm
Depth	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	650 °C conforming to IEC 60947-1 960 °C conforming to UL 94
Ambient air temperature for operation	-20...70 °C
Ambient air temperature for storage	-40...80 °C
Operating altitude	<= 2000 m without derating
Mechanical robustness	Vibrations mounted on symmetrical rail: 1 Gn, 5...300 Hz conforming to 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	6.5 cm
Package 1 Width	10.5 cm
Package 1 Length	11 cm
Package 1 Weight	288 g
Unit Type of Package 2	S01
Number of Units in Package 2	4
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	1.623 kg
Unit Type of Package 3	P06
Number of Units in Package 3	192
Package 3 Height	1050 cm
Package 3 Width	62 cm
Package 3 Length	82 cm
Package 3 Weight	67.296 kg

Contractual warranty

Warranty (in months)	18
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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	441 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	31 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	408 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.8 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant with Exemptions
SCIP Number	0be6a459-9102-4f27-8f16-efc9583f3f4e
REACH Regulation	REACH Declaration
Halogen-free status	Halogen free plastic parts product
PVC free	Yes
Silicone-free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	0
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Technical Illustration

Assembly's dimensions

