Product datasheet

Specifications





motor controller LTMR TeSys T - 24 V DC 100 A for Modbus

LTMR100MBD

Main

Range	TeSys
Product name	TeSys T
Device short name	LTMR
product or component type	Motor controller
Device application	Equipment monitoring and control
Measurement current	5100 A
[Us] rated supply voltage	24 V DC
Current consumption	56127 mA
Supply voltage limits	20.426.24 V DC
Communication port protocol	Modbus
Bus type	Modbus 2-wire RS 485 interface, addressing 1247, transmission rate 1.219.2 kbit/s, RJ45 with 2 shielded twisted pairs Modbus 2-wire RS 485 interface, addressing 1247, transmission rate 1.219.2 kbit/s, terminal block with 2 shielded twisted pairs

Complementary

[Ui] rated insulation voltage	690 V conforming to EN/IEC 60947-1 690 V conforming to CSA C22.2 No 14 690 V conforming to UL 508
[Uimp] rated impulse withstand voltage	6 kV current or voltage measurement circuit conforming to EN/IEC 60947-4-1 0.8 kV communication circuit conforming to EN/IEC 60947-4-1 0.8 kV supply, inputs and outputs conforming to EN/IEC 60947-4-1
Short-circuit withstand	100 kA conforming to EN/IEC 60947-4-1
Associated fuse rating	4 A gG for output 0.5 A gG for control circuit
Protection type	Thermal overload protection Phase unbalance Overload (long time) Phase failure Thermal protection Power factor variation Reverse polarity protection Overload Locked rotor Load fluctuation Earth-leakage protection

Network and machine diagnosis type	Remaining operating time before overload tripping
type	Phase fault and earth fault trip counters Fault recording
	Waiting time after overload tripping
	Motor control command recording
	Event recording
	Starting current and time
	Trip history information
	Running hours counter/operating time
	Trip context information
Logic input number	6
Input current	7 mA
Current state 0 guaranteed	Logic input: < 5 V and <= 15 mA for 5 ms
Current state 1 guaranteed	Logic input: < 15 V and 215 mA for 15 ms
maximum output switching frequency	2 Hz
Load current	5 A at 250 V AC for logic output
	5 A at 30 V DC for logic output
Permissible power	480 VA (AC-15), le = 2 A, 500000 cycles (output)
·	30 W (DC-13), le = 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	Phase current I1, I2, I3 RMS
	Average current lavg Earth-fault current
	Imbalance current
Measurement accuracy	515 % earth fault current internal measurement
	1 % voltage (100830 V)
	3 % power factor
	5 % earth fault current external measurement
	+/- 30 min/year internal clock
	0,02 temperature
	5 % active and reactive power 0,02 current
Overvoltage category	III
Connection pitch	5.08 mm
Connections - terminals	Control circuit: connector 1 cable(s) 0.252.5 mm ² (AWG 24AWG 14) flexible with
	cable end Control circuit: connector 1 cable(s) 0.22.5 mm² (AWG 24AWG 14) flexible
	without cable end
	Control circuit: connector 1 cable(s) 0.252.5 mm ² (AWG 24AWG 14) flexible without cable end
	Control circuit: connector 1 cable(s) 0.22.5 mm² (AWG 24AWG 14) solid without
	cable end Control circuit: connector 2 cable(s) 0.2…1 mm² (AWG 24AWG 14) flexible with
	cable end Control circuit: connector 2 cable(s) 0.21.5 mm² (AWG 24AWG 14) flexible
	without cable end Control circuit: connector 2 cable(s) 0.51.5 mm ² (AWG 24AWG 14) flexible
	without cable end
	Control circuit: connector 2 cable(s) 0.21 mm ² (AWG 24AWG 14) solid without cable end
Tightening torque	Control circuit: 0.50.6 N.m flat screwdriver 3 mm

Pollution degree

3

Electromagnetic compatibility	Electrostatic discharge, 3, 8 kV air, 6 kV contact, conforming to EN/IEC 61000-4-2 Radiated RF fields, 3, 10 V/m, conforming to EN/IEC 61000-4-3 Fast transients immunity test (other circuits), level 3, 2 kV, conforming to EN/IEC 61000-4-4 Fast transients immunity test (on supply and relay outputs), level 4, 4 kV, conforming to EN/IEC 61000-4-4 Voltage dips and interruptions immunity test, 70 %, 500 ms, conforming to EN/IEC 61000-4-11 Conducted RF disturbances, 10 V, conforming to EN/IEC 61000-4-6 Temperature sensor: surges (serial mode), 0.5 kV, conforming to EN/IEC 61000-4-5 Temperature sensor: surges (common mode), 1 kV, conforming to EN/IEC 61000-4-5 Control circuit: surges (serial mode), 1 kV, conforming to EN/IEC 61000-4-5 Control circuit: surges (common mode), 1 kV, conforming to EN/IEC 61000-4-5 Relay outputs and supply: surges (serial mode), 2 kV, conforming to EN/IEC 61000-4-5 Relay outputs and supply: surges (common mode), 4 kV, conforming to EN/IEC 61000-4-5 Relay outputs and supply: surges (common mode), 4 kV, conforming to EN/IEC 61000-4-5
Width	91 mm
Height	61 mm
Depth	122.5 mm
net weight	0.53 kg
Web services	Web server
Compatibility code	LTMR

Environment

Standards	IACS E10
	CSA C22.2 No 14
	EN 60947-4-1
	UL 508
	IEC 60947-4-1
Product certifications	NOM
	RMRoS
	DNV
	C-Tick
	RINA
	CSA
	BV
	GL
	KERI
	EAC
	LROS (Lloyds register of shipping)
	ABS
	UL
	CCC
	ATEX
Protective treatment	12 x 24 hour cycles conforming to EN/IEC 60068-2-30
	48 h conforming to EN/IEC 60070-2-11
	TH conforming to EN/IEC 60068
Fire resistance	650 °C conforming to EN/IEC 60695-2-12
	960 °C conforming to UL 94
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Ambient air temperature for operation	-2060 °C
Ambient air temperature for	-4080 °C
storage	-4000 C
Operating altitude	<= 2000 m without derating
Mechanical robustness	Vibrations mounted on symmetrical rail: 1 Gn, 5300 Hz conforming to EN/IEC
	60068-2-6
	Vibrations plate mounted: 4 Gn, 5300 Hz conforming to EN/IEC 60068-2-6
	Shocks half sine wave acceleration: 15 Gn for 11 ms conforming to EN/IEC
	60068-2-27
IP degree of protection	IP20
in degree of protection	IFZU

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.1 cm
Package 1 Width	10.0 cm
Package 1 Length	13.5 cm
Package 1 Weight	519.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.564 kg

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

Halogen Free Plastic Parts Product

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information