

LTMR27MFM

motor controller LTMR TeSys T - 100..240 V AC
27 A for Modbus



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	1.35...27 A
[Us] rated supply voltage	100...240 V AC 50/60 Hz
Current consumption	8...62.8 mA
Supply voltage limits	93.5...264 V AC
Communication port protocol	Modbus
Bus type	Modbus 2-wire RS 485 interface, addressing 1...247, transmission rate 1.2...19.2 kbit/s, RJ45 with 2 shielded twisted pairs 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	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	4 kV supply, inputs and outputs conforming to EN/IEC 60947-4-1 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
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	Reverse polarity protection Overload (long time) Earth-leakage protection Phase unbalance Overload Load fluctuation Phase failure

	Power factor variation Thermal protection Locked rotor Thermal overload protection
Network and machine diagnosis type	Fault recording Starting current and time Remaining operating time before overload tripping Waiting time after overload tripping Motor control command recording Event recording Trip history information Running hours counter/operating time Phase fault and earth fault trip counters Trip context information
Logic input number	6
Input current	3.1 mA at 100 V 7.5 mA at 240 V
Current state 0 guaranteed	Logic input: 0...40 V and ≤ 15 mA for 25 ms
Current state 1 guaranteed	Logic input: 79...264 V and ≥ 2 mA for 25 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), $I_e = 2$ 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	Temperature Phase current I1, I2, I3 RMS Average current Iavg Earth-fault current Imbalance current
Measurement accuracy	5...15 % earth fault current internal measurement 1 % voltage (100...830 V) 3 % power factor 5 % earth fault current external measurement +/- 30 min/year internal clock 0,02 temperature 1 % current 5 % active and reactive power
Overvoltage category	III
Connection pitch	5.08 mm
Connections - terminals	Control circuit: connector 1 cable(s) 0.25...2.5 mm ² (AWG 24...AWG 14) flexible with cable end Control circuit: connector 1 cable(s) 0.2...2.5 mm ² (AWG 24...AWG 14) flexible without cable end Control circuit: connector 1 cable(s) 0.25...2.5 mm ² (AWG 24...AWG 14) flexible without cable end Control circuit: connector 1 cable(s) 0.2...2.5 mm ² (AWG 24...AWG 14) solid without cable end Control circuit: connector 2 cable(s) 0.2...1 mm ² (AWG 24...AWG 14) flexible with cable end Control circuit: connector 2 cable(s) 0.2...1.5 mm ² (AWG 24...AWG 14) flexible without cable end Control circuit: connector 2 cable(s) 0.5...1.5 mm ² (AWG 24...AWG 14) flexible without cable end Control circuit: connector 2 cable(s) 0.2...1 mm ² (AWG 24...AWG 14) solid without cable end
Tightening torque	Control circuit: 0.5...0.6 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 Communication: surges (common mode), 2 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 Control circuit: surges (common mode), 2 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	CSA C22.2 No 14 UL 508 EN 60947-4-1 IEC 60947-4-1 IACS E10
Product certifications	RMRoS LROS (Lloyds register of shipping) RINA ABS CCC EAC UL GL NOM DNV KERI ATEX BV CSA C-Tick
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
Ambient air temperature for operation	-20...60 °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 60068-2-6 Vibrations plate mounted: 4 Gn, 5...300 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

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
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

Contractual warranty

Warranty	18 months
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