

Product datasheet

Specifications



motor controller LTMR TeSys T - 100..240 V AC 100 A for Profibus DP

LTMR100PFM

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	5...100 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	Profibus DP
Bus type	Profibus DP polarised 2-wire RS485 interface, addressing 1...125, transmission rate 9.6 kbit/s...12 Mbit/s, SUB-D 9 with 2 shielded twisted pairs, type A Profibus DP polarised 2-wire RS485 interface, addressing 1...125, transmission rate 9.6 kbit/s...12 Mbit/s, terminal block with 2 shielded twisted pairs, type A

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	Thermal overload protection Power factor variation Overload Locked rotor Thermal protection Reverse polarity protection Phase unbalance Earth-leakage protection Phase failure Load fluctuation Overload (long time)
Network and machine diagnosis type	Starting current and time Trip history information Running hours counter/operating time Phase fault and earth fault trip counters Trip context information Event recording

	Remaining operating time before overload tripping Motor control command recording Waiting time after overload tripping Fault recording
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	Earth-fault current Phase current I1, I2, I3 RMS Temperature Imbalance current Average current Iavg
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 5 % active and reactive power 0,02 current
Overvoltage category	III
Connection pitch	5.08 mm
Connections - terminals	Control circuit: connector 1 cable(s) 0.25...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	EN 60947-4-1 IACS E10 CSA C22.2 No 14 UL 508 IEC 60947-4-1
Product certifications	KERI RMRoS ABS UL ATEX NOM RINA BV CCC GL DNV CSA LROS (Lloyds register of shipping) EAC 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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10 cm
Package 1 Width	7.2 cm
Package 1 Length	13.5 cm
Package 1 Weight	532 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	5.649 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration

Product out of China RoHS scope. Substance declaration for your information

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
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

Contractual warranty

Warranty	18 months
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Recommended replacement(s)