



### 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	0.4...8 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	Locked rotor Overload Phase unbalance Phase failure Earth-leakage protection Reverse polarity protection Load fluctuation

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

	Thermal protection Power factor variation Thermal overload protection Overload (long time)
Network and machine diagnosis type	Phase fault and earth fault trip counters Trip history information Starting current and time Fault recording Waiting time after overload tripping Event recording Motor control command recording Running hours counter/operating time Trip context information Remaining operating time before overload tripping
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 $\leq 15$ mA for 25 ms
Current state 1 guaranteed	Logic input: 79...264 V and $\geq 2$ 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	Average current $I_{avg}$ Earth-fault current Temperature Imbalance current Phase current I1, I2, I3 RMS
Measurement accuracy	5...15 % earth fault current internal measurement (for current $> 0.1$ A) 1 % voltage (100...830 V) 3 % power factor ( $\cos \varphi > 0.6$ ) 5 % earth fault current external measurement ( $< 5$ % or 0.01 A) +/- 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 <sup>2</sup> (AWG 24...AWG 14) flexible with cable end Control circuit: connector 1 cable(s) 0.2...2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible without cable end Control circuit: connector 1 cable(s) 0.25...2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible without cable end Control circuit: connector 1 cable(s) 0.2...2.5 mm <sup>2</sup> (AWG 24...AWG 14) solid without cable end Control circuit: connector 2 cable(s) 0.2...1 mm <sup>2</sup> (AWG 24...AWG 14) flexible with cable end Control circuit: connector 2 cable(s) 0.2...1.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible without cable end Control circuit: connector 2 cable(s) 0.5...1.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible without cable end Control circuit: connector 2 cable(s) 0.2...1 mm <sup>2</sup> (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	UL 508 IEC 60947-4-1 EN 60947-4-1 IACS E10 CSA C22.2 No 14
Product certifications	CSA C-Tick UL CCC LROS (Lloyds register of shipping) NOM ABS GL EAC BV DNV RINA RMRoS ATEX KERI
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	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
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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