



Main

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| 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 | 24 V DC |
| Current consumption | 56...127 mA |
| Supply voltage limits | 20.4...26.24 V DC |
| 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

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| [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 | Phase unbalance Locked rotor Power factor variation Load fluctuation Overload Overload (long time) Phase failure |

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

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| | Thermal protection Thermal overload protection Earth-leakage protection Reverse polarity protection |
| Network and machine diagnosis type | Running hours counter/operating time Trip history information Phase fault and earth fault trip counters Fault recording Waiting time after overload tripping Remaining operating time before overload tripping Trip context information Starting current and time Event recording Motor control command recording |
| 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 2...15 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), 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 Phase current I ₁ , I ₂ , I ₃ RMS Imbalance current Temperature |
| Measurement accuracy | 5...15 % earth fault current internal measurement (for current > 0.1 A) 1 % voltage (100...830 V) 3 % power factor (cos φ > 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 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 Control circuit: surges (common 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 |
| Width | 91 mm |
| Height | 61 mm |

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| Depth | 122.5 mm |
| Net weight | 0.53 kg |
| Web services | Web server |
| Compatibility code | LTMR |

Environment

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| Standards | IACS E10 EN 60947-4-1 UL 508 CSA C22.2 No 14 IEC 60947-4-1 |
| Product certifications | DNV EAC ABS BV CSA UL RINA RMRoS CCC GL KERI LROS (Lloyds register of shipping) NOM ATEX 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

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| 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

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| Warranty | 18 months |
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