# Product datasheet

Specifications

![Green Premium logo]
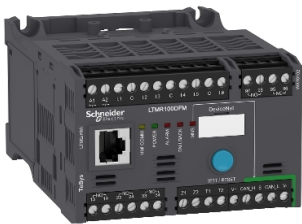
Motor controller, TeSys T, Motor Management, DeviceNet, 6 logic inputs, 3 relay logic outputs, 5 to 100A, 100 to 240VAC

LTMR100DFM

## 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** | DeviceNet |
| **Bus type** | DeviceNet ISO 1198 interface, addressing 1...64, transmission rate 125...500 kbit/s, terminal block with 4 twisted shielded pairs cable |

## Complementary

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|---|---|
| **[Ui] rated insulation voltage** | 690 V conforming to EN/IEC 60947-1<br>690 V conforming to CSA C22.2 No 14<br>690 V conforming to UL 508 |
| **[Uimp] rated impulse withstand voltage** | 4 kV supply, inputs and outputs conforming to EN/IEC 60947-4-1<br>6 kV current or voltage measurement circuit conforming to EN/IEC 60947-4-1<br>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<br>0.5 A gG for control circuit |
| **Protection type** | Phase failure<br>Overload (long time)<br>Load fluctuation<br>Thermal overload protection<br>Power factor variation<br>Overload<br>Locked rotor<br>Thermal protection<br>Earth-leakage protection<br>Phase unbalance<br>Reverse polarity protection |
| **Network and machine diagnosis type** | Motor control command recording<br>Trip history information<br>Running hours counter/operating time<br>Phase fault and earth fault trip counters<br>Remaining operating time before overload tripping<br>Fault recording<br>Trip context information<br>Event recording<br>Starting current and time<br>Waiting time after overload tripping |

| | |
|---|---|
| **Logic input number** | 6 |
| **Input current** | 3.1 mA at 100 V<br>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<br>5 A at 30 V DC for logic output |
| **Permissible power** | 480 VA (AC-15), Ie = 2 A, 500000 cycles (output)<br>30 W (DC-13), Ie = 1.25 A, 500000 cycles (output) |
| **Maximum operating rate** | 1800 cyc/h |
| **Contacts type and composition** | 1 NO + 1 NC fault signal<br>3 NO |
| **Metering type** | Imbalance current<br>Temperature<br>Average current Iavg<br>Earth-fault current<br>Phase current I1, I2, I3 RMS |
| **Measurement accuracy** | 5...15 % earth fault current internal measurement<br>1 % voltage (100...830 V)<br>3 % power factor<br>5 % earth fault current external measurement<br>+/- 30 min/year internal clock<br>0,02 temperature<br>5 % active and reactive power<br>0,02 current |
| **Overvoltage category** | III |
| **Connection pitch** | 5.08 mm |
| **Connections - terminals** | Control circuit: connector 1 cable(s) 0.25…2.5 mm² (AWG 24...AWG 14) flexible with cable end<br>Control circuit: connector 1 cable(s) 0.2…2.5 mm² (AWG 24...AWG 14) flexible without cable end<br>Control circuit: connector 1 cable(s) 0.25…2.5 mm² (AWG 24...AWG 14) flexible without cable end<br>Control circuit: connector 1 cable(s) 0.2…2.5 mm² (AWG 24...AWG 14) solid without cable end<br>Control circuit: connector 2 cable(s) 0.2…1 mm² (AWG 24...AWG 14) flexible with cable end<br>Control circuit: connector 2 cable(s) 0.2…1.5 mm² (AWG 24...AWG 14) flexible without cable end<br>Control circuit: connector 2 cable(s) 0.5…1.5 mm² (AWG 24...AWG 14) flexible without cable end<br>Control circuit: connector 2 cable(s) 0.2…1 mm² (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 |

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| 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 |
|---|---|
| | UL 508 |
| | IEC 60947-4-1 |
| | CSA C22.2 No 14 |
| | IACS E10 |
| **Product certifications** | CSA |
| | DNV |
| | LROS (Lloyds register of shipping) |
| | RINA |
| | EAC |
| | GL |
| | UL |
| | ATEX |
| | BV |
| | CCC |
| | RMRoS |
| | KERI |
| | ABS |
| | NOM |
| | 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** | 7.0 cm |
| **Package 1 Width** | 10.0 cm |
| **Package 1 Length** | 13.5 cm |
| **Package 1 Weight** | 524.0 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** | 5.626 kg |

# Contractual warranty

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|---|---|
| **Warranty** | 18 months |

# Sustainability ![Green Premium]

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ 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<br>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 |