

# Product data sheet

## Characteristics

# LTMR27PBD

motor controller LTMR TeSys T - 24 V DC 27 A  
for Profibus DP



### 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	24 V DC
Current consumption	56...127 mA
Supply voltage limits	20.4...26.24 V DC
Communication port protocol	Profibus DP
Bus type	Profibus DP polarised 2-wire RS485 1...125 9.6 kbit/s...12 Mbit/s, SUB-D 9 2 shielded twisted pairs, type A Profibus DP polarised 2-wire RS485 1...125 9.6 kbit/s...12 Mbit/s, terminal block 2 shielded twisted pairs, type A

### Complementary

[Ui] rated insulation voltage	690 V EN/IEC 60947-1 690 V CSA C22.2 No 14 690 V UL 508
[Uimp] rated impulse withstand voltage	6 KV current or voltage measurement circuit EN/IEC 60947-4-1 0.8 KV communication circuit EN/IEC 60947-4-1 0.8 KV supply, inputs and outputs EN/IEC 60947-4-1
Short-circuit withstand	100 kA EN/IEC 60947-4-1
Associated fuse rating	4 A gG output 0.5 A gG control circuit
Protection type	Overload Thermal protection Power factor variation Overload (long time) Phase failure Load fluctuation Phase unbalance Locked rotor Earth-leakage protection Thermal overload protection Reverse polarity protection
Network and machine diagnosis type	Starting current and time Fault recording Remaining operating time before overload tripping Motor control command recording Running hours counter/operating time Trip context information Trip history information Phase fault and earth fault trip counters Event recording Waiting time after overload tripping
Logic input number	6
Input current	7 mA
Current state 0 guaranteed	Logic input < 5 V <= 15 mA 5 ms
Current state 1 guaranteed	Logic input < 15 V 2...15 mA 15 ms
Maximum output switching frequency	2 Hz

Load current	5 A 250 V AC logic output 5 A 30 V DC logic output
Permissible power	480 VA AC-15), Ie = 2 A, 500000 cycles output) 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 3 NO
Metering type	Average current Iavg Temperature Imbalance current Phase current I1, I2, I3 RMS Earth-fault current
Measurement accuracy	5...15 % earth fault current internal measurement for current > 0.2 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
Oversupply category	III
Connection pitch	0.20 in (5.08 mm)
Connections - terminals	Control circuit connector 1 0.00...0.00 in <sup>2</sup> (0.25...2.5 mm <sup>2</sup> ) AWG 24...AWG 14)flexible with cable end Control circuit connector 1 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> ) AWG 24...AWG 14)flexible without cable end Control circuit connector 1 0.00...0.00 in <sup>2</sup> (0.25...2.5 mm <sup>2</sup> ) AWG 24...AWG 14)flexible without cable end Control circuit connector 1 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> ) AWG 24...AWG 14)solid without cable end Control circuit connector 2 0.00...0.00 in <sup>2</sup> (0.2...1 mm <sup>2</sup> ) AWG 24...AWG 14)flexible with cable end Control circuit connector 2 0.00...0.00 in <sup>2</sup> (0.2...1.5 mm <sup>2</sup> ) AWG 24...AWG 14)flexible without cable end Control circuit connector 2 0.00...0.00 in <sup>2</sup> (0.5...1.5 mm <sup>2</sup> ) AWG 24...AWG 14)flexible without cable end Control circuit connector 2 0.00...0.00 in <sup>2</sup> (0.2...1 mm <sup>2</sup> ) AWG 24...AWG 14)solid without cable end
Tightening torque	Control circuit 4.43...5.31 lbf.in (0.5...0.6 N.m) flat 0.12 in (3 mm)
Pollution degree	3
Electromagnetic compatibility	Electrostatic discharge, 3.8 kV air, 6 kV contact)EN/IEC 61000-4-2) Radiated RF fields, 3.10 V/m)EN/IEC 61000-4-3) Fast transients immunity test, level 3.2 kV)EN/IEC 61000-4-4) Fast transients immunity test, level 4.4 kV)EN/IEC 61000-4-4) Voltage dips and interruptions immunity test 70 %, 500 ms)EN/IEC 61000-4-11) Conducted RF disturbances 10 V)EN/IEC 61000-4-6) Surges 0.5 kV)EN/IEC 61000-4-5) Surges 1 kV)EN/IEC 61000-4-5) Surges 1 kV)EN/IEC 61000-4-5) Surges 1 kV)EN/IEC 61000-4-5) Surges 2 kV)EN/IEC 61000-4-5) Surges 2 kV)EN/IEC 61000-4-5) Surges 4 kV)EN/IEC 61000-4-5)
Width	3.58 in (91 mm)
Height	2.40 in (61 mm)
Depth	4.82 in (122.5 mm)
Net weight	1.17 lb(US) (0.53 kg)
Web services	Web server
Compatibility code	LTMR

## Environment

Standards	UL 508 IACS E10 EN 60947-4-1 IEC 60947-4-1 CSA C22.2 No 14
Product certifications	C-Tick CCC ABS NOM LROS (Lloyds register of shipping) EAC RINA ATEX GL KERI DNV UL CSA RMRoS BV
Protective treatment	12 x 24 hour cycles EN/IEC 60068-2-30 48 h EN/IEC 60070-2-11 TH EN/IEC 60068
Fire resistance	1202 °F (650 °C) EN/IEC 60695-2-12 1760 °F (960 °C) UL 94
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Ambient air temperature for storage	-40...176 °F (-40...80 °C)
Operating altitude	<= 6561.68 ft (2000 m) without derating
Mechanical robustness	Vibrations mounted on symmetrical rail1 Gn, 5...300 Hz EN/IEC 60068-2-6 Vibrations plate mounted4 Gn, 5...300 Hz EN/IEC 60068-2-6 Shocks half sine wave acceleration15 Gn for 11 ms EN/IEC 60068-2-27
IP degree of protection	IP20

## Ordering and shipping details

Category	22338 - SOLID STATE OVERLOAD RELAYS
Discount Schedule	I12
GTIN	00785901502241
Returnability	No
Country of origin	CN

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<input checked="" type="checkbox"/> REACH Declaration
EU RoHS Directive	Compliant <input checked="" type="checkbox"/> EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration
Environmental Disclosure	<input checked="" type="checkbox"/> Product Environmental Profile
Circularity Profile	<input checked="" type="checkbox"/> 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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