

LUCMT1BL

Multifunction control unit, TeSys U, 0.35-1.05A, 1P/3P motors, protection & diagnostic, class 5-30, coil 24V DC



Main

Range	TeSys
Range of product	TeSys U
Device short name	LUCM
Product or component type	Multifunction control unit
Device application	Motor control Motor protection
Product specific application	Most sophisticated control and protection requirements, with display
Main function available	Overload, no-load running Protection against phase failure and phase imbalance Protection against overload and short-circuit Manual or automatic reset Earth fault protection Log function Differentiation of thermal overload and magnetic fault Protection function alarm Monitoring function, indication of main motor parameters
Product compatibility	Power base LUTM
Network frequency	40...60 Hz
Load type	3-phase motor - cooling: self-cooled - setting factory setting 3-phase motor - cooling: self-cooled, force cooled - setting settable Single-phase motor - cooling: self-cooled, force cooled - setting settable
Utilisation category	AC-41 AC-44 AC-43
Rated motor current adjustment range	0.35...1.05 A
Thermal overload class	Class 5...30 - frequency limit: 50...60 Hz - temperature compensation: -25...55 °C conforming to IEC 60947-6-2 Class 5...30 - frequency limit: 50...60 Hz - temperature compensation: -25...55 °C conforming to UL 508
Tripping threshold	14.2 x I _r +/- 20 %
Phase failure sensitivity	Yes
[Uc] control circuit voltage	24 V DC

Complementary

Control circuit voltage limits	20...28 V for DC circuit 24 V in operation 14.5 V for DC circuit 24 V drop-out
Typical current consumption	130 mA at 24 V DC I maximum while closing 60 mA at 24 V DC I rms sealed
Heat dissipation	2 W for control circuit
Operating time	35 ms opening for control circuit 70 ms closing for control circuit
Physical interface	RS485 multidrop - connector(s): RJ45 - location: front panel - communication protocol: Modbus RTU 19200 bit/s

Return time	<= 200 ms
Messages display capacity	2 lines of 12 characters - display LCD - English - accuracy +/- 5 % - resolution 1 % of Ir 2 lines of 12 characters - display LCD - French - accuracy +/- 5 % - resolution 1 % of Ir 2 lines of 12 characters - display LCD - German - accuracy +/- 5 % - resolution 1 % of Ir 2 lines of 12 characters - display LCD - Italian - accuracy +/- 5 % - resolution 1 % of Ir 2 lines of 12 characters - display LCD - Spanish - accuracy +/- 5 % - resolution 1 % of Ir
Reset	Automatic reset - setting: setting range Manual - setting: factory setting Manual - setting: setting range Remote reset - setting: setting range
Time before reset	1...1000 S - reset manual or automatic reset - setting settable 120 s - reset manual - setting factory setting
User language	English - setting factory setting English, French, German, Italian, Spanish - setting settable
Information displayed	Average current (factory setting) Average current (settable) Cause of last 5 faults (settable) Current in phase (settable) Earth leakage current (settable) Phase imbalance (settable) Thermal state of motor (settable)
Standards	EN 60947-6-2 IEC 60947-6-2 UL 508 CSA C22.2 No 14
Product certifications	UL CSA
[Ui] rated insulation voltage	250 V conforming to IEC 60947-6-2 250 V conforming to UL 60947-4-1 250 V conforming to CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	4 kV IEC 60947-6-2
Fixing mode	Plug-in (front face)
Width	45 mm
Height	66 mm
Depth	60 mm
Net weight	0.175 kg
Compatibility code	LUCM

Environment

IP degree of protection	IP20 front panel and wired terminals conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 IP40 front panel outside connection zone conforming to IEC 60947-1
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	2000 m
Fire resistance	960 °C parts supporting live components conforming to IEC 60695-2-12 650 °C conforming to IEC 60695-2-12
Shock resistance	10 gn power poles open conforming to IEC 60068-2-27 15 gn power poles closed conforming to IEC 60068-2-27
Vibration resistance	2 gn, 5...300 Hz, power poles open conforming to IEC 60068-2-6 4 gn, 5...300 Hz, power poles closed conforming to IEC 60068-2-6
Resistance to electrostatic discharge	8 KV level 3 in open air conforming to IEC 61000-4-2 8 kV level 4 on contact conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/m 3 conforming to IEC 61000-4-3
Resistance to fast transients	2 KV class 3 serial link conforming to IEC 61000-4-4 4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % / 500 ms conforming to IEC 61000-4-11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	171.9 g
Package 1 Height	5.5 cm
Package 1 width	8 cm
Package 1 Length	10.2 cm

Offer Sustainability

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
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