Product datasheet
Characteristics

LUCM05BL
multifunction control unit LUCM - class 5...30 - 1.25...5 A - 24 V DC

Green Premium™

Price* : 258.62 GBP

Main

Range	TeSys
Product name	TeSys U
Device short name	LUCM
Product or component type	Multifunction control unit
Product specific application	Most sophisticated control and protection requirements, with display
Product compatibility	ASILUFC51 LUFN.. LULC07 LULC033 LULC031 LULC15 ASILUFC5 LULC08 LUFC00 LULC09 LUFV2
Utilisation category	AC-41 AC-44 AC-43
Motor power kW	3 kW at 690 V AC 50/60 Hz 1.5 kW at 400...440 V AC 50/60 Hz 2.2 kW at 500 V AC 50/60 Hz
Thermal protection adjustment range	1.25…5 A
[Uc] control circuit voltage	24 V DC
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
User language	English - setting factory setting English, French, German, Italian, Spanish - setting settable

Complementary

Main function available	Protection function alarm Earth fault protection Protection against phase failure and phase imbalance Manual or automatic reset Log function Protection against overload and short-circuit Differentiation of thermal overload and magnetic fault Overload, no-load running Monitoring function, indication of main motor parameters
Mounting mode	Plug-in
Mounting location	Front side
Control circuit voltage limits	20...28 V for DC circuit 24 V in operation
Typical current consumption	150 mA at 24 V DC I maximum while closing with LUB12 200 mA at 24 V DC I maximum while closing with LUB32 70 mA at 24 V DC I rms sealed with LUB12 75 mA at 24 V DC I rms sealed
Operating time	35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 65 ms closing with LUB32 for control circuit 75 ms closing with LUB12 for control circuit
Load type	Single-phase motor - cooling: self-cooled, force cooled - setting settable 3-phase motor - cooling: self-cooled, force cooled - setting settable
Tripping threshold	14.2 x Ir +/- 20 %
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
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)
[Ui] rated insulation voltage	600 V conforming to UL 508 690 V conforming to IEC 60947-1 600 V conforming to CSA C22.2 No 14
[Uimp] rated impulse withstand voltage	IEC 60947-6-2 6 kV
Safe separation of circuit	400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1
Product weight	0.175 kg

Environment

Heat dissipation	1.7 W for control circuit with LUB12 1.8 W for control circuit with LUB32 0.8 W for external auxiliary circuit
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % / 500 ms conforming to IEC 61000-4-11
Standards	UL 508 type E, with phase barrier EN 60947-6-2 IEC 60947-6-2 CSA C22.2 No 14 type E

Product certifications	GOST ATEX UL CCC ASEFA GL LROS (Lloyds register of shipping) DNV CSA BV ABS
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

Offer Sustainability

Sustainable offer status	Green Premium product
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

Warranty	18 months