

Main

Commercial Status	Commercialised
Range of product	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	ASILUFC5 ASILUFC51 L UFC00 LUFN.. LUFV2 LULC031 LULC033 LULC07 LULC08 LULC09 LULC15
Utilisation category	AC-41 AC-43 AC-44
Motor power kW	5.5 kW at 500 V AC 50/60 Hz 5.5 kW at 400...440 V AC 50/60 Hz 9 kW at 690 V AC 50/60 Hz
Thermal protection adjustment range	3...12 A
[Uc] control circuit voltage	24 V DC
Overload tripping class	Class 5...30 - frequency limit: 50...60 Hz - temperature compensation: -25...55 °C - conforming to UL 508 Class 5...30 - frequency limit: 50...60 Hz - temperature compensation: -25...55 °C - conforming to IEC 60947-6-2
Language	English, French, German, Italian, Spanish - setting settable English - setting factory setting

Complementary

Main function available	Differentiation of thermal overload and magnetic fault Earth fault protection Log function Manual or automatic reset Monitoring function, indication of main motor parameters Overload, no-load running Protection against overload and short-circuit Protection against phase failure and phase imbalance Protection function alarm
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	75 mA at 24 V DC I rms sealed 70 mA at 24 V DC I rms sealed with LUB12 200 mA at 24 V DC I maximum while closing with LUB32 150 mA at 24 V DC I maximum while closing with LUB12
Operating time	75 ms closing with LUB12 for control circuit 65 ms closing with LUB32 for control circuit 35 ms opening with LUB32 for control circuit 35 ms opening with LUB12 for control circuit

Load type	3-phase motor - cooling: self-cooled, force cooled - setting settable Single-phase motor - cooling: self-cooled, force cooled - setting settable
Tripping threshold	14.2 x I _r +/- 20 %
Physical interface	RS485 multidrop - connector(s): RJ45 - location: front panel - communication protocol: Modbus RTU 19200 bit/s
Return time	<= 200 ms
Display	2 lines of 12 characters - display LCD - Spanish - accuracy +/- 5 % - resolution 1 % of I _r 2 lines of 12 characters - display LCD - Italian - accuracy +/- 5 % - resolution 1 % of I _r 2 lines of 12 characters - display LCD - German - accuracy +/- 5 % - resolution 1 % of I _r 2 lines of 12 characters - display LCD - French - accuracy +/- 5 % - resolution 1 % of I _r 2 lines of 12 characters - display LCD - English - accuracy +/- 5 % - resolution 1 % of I _r
Reset	Remote reset - setting: setting range Manual - setting: setting range Manual - setting: factory setting Automatic reset - setting: setting range
Time before reset	120 s - reset manual - setting factory setting 1...1000 s - reset manual or automatic reset - setting settable
Information displayed	Thermal state of motor - setting settable Phase imbalance - setting settable Earth leakage current - setting settable Current in phase - setting settable Cause of last 5 faults - setting settable Average current - setting settable Average current - setting factory setting
[U _i] rated insulation voltage	600 V conforming to CSA C22.2 No 14 690 V conforming to IEC 60947-1 600 V conforming to UL 508
[U _{imp}] rated impulse withstand voltage	6 kV conforming to IEC 60947-6-2
Safe separation of circuit	400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1
Product weight	0.175 kg

Environment

Heat dissipation	1.8 W for control circuit with LUB32 1.7 W for control circuit with LUB12 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	CSA C22.2 No 14 type E UL 508 type E with phase barrier IEC 60947-6-2 EN 60947-6-2
Product certifications	ABS ASEFA ATEX BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) UL
IP degree of protection	IP40 front panel outside connection zone conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 IP20 front panel and wired terminals conforming to IEC 60947-1
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-25...70 °C with LUCA, LUCB, LUCC, LUCD -25...60 °C with LUCM
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	15 gn power poles closed conforming to IEC 60068-2-27 10 gn power poles open conforming to IEC 60068-2-27
Vibration resistance	4 gn 5...300 Hz power poles closed conforming to IEC 60068-2-6 2 gn 5...300 Hz power poles open conforming to IEC 60068-2-6
Resistance to electrostatic discharge	8 kV level 4 on contact conforming to IEC 61000-4-2 8 kV level 3 in open air conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/m 3 conforming to IEC 61000-4-3
Resistance to fast transients	4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4 2 kV class 3 serial link conforming to IEC 61000-4-4
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6

RoHS compliance

RoHS EUR status	Compliant
RoHS EUR conformity date(YYYW)	1015

Contractual warranty

Period	18 months
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