## Product data sheet Characteristics

## LUCL12ES

## magnetic control unit LUCL 3...12 A - 48...72 V - DC



Main	
Commercial Status	Commercialised
Range of product	TeSys U
Device short name	LUCL
Product or component type	Magnetic control unit
Product specific application	Protection of variable speed drive or soft startsoft stop unit
Product compatibility	ASILUFC5 ASILUFC51 LUFC00 LULC031 LULC033 LULC07 LULC08 LULC08 LULC09
Utilisation category	AC-41 AC-43 AC-44
Motor power kW	5.5 kW at < 400415 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 9 kW at 690 V AC 50/60 Hz
Thermal protection adjustment range	312 A
[Uc] control circuit voltage	4872 V DC 48 V AC
Language	English, French, German, Italian, Spanish - setting settable English - setting factory setting

## Complementary

Main function available	Manual reset
iviain function available	Short-circuit protection
	•
Mounting mode	Plug-in
Mounting location	Front side
Control circuit voltage limits	38.593 V for DC circuit 4872 V in operation 38.572 V for AC circuit 4872 V in operation 29 V for DC circuit 4872 V drop-out 29 V for AC circuit 4872 V drop-out
Typical current consumption	45 mA at 4872 V DC I rms sealed with LUB32 45 mA at 4872 V AC I rms sealed with LUB32 35 mA at 4872 V DC I rms sealed with LUB12 35 mA at 4872 V AC I rms sealed with LUB12 280 mA at 4872 V DC I maximum while closing with LUB32 280 mA at 4872 V DC I maximum while closing with LUB12 280 mA at 4872 V AC I maximum while closing with LUB32 280 mA at 4872 V AC I maximum while closing with LUB32 280 mA at 4872 V AC I maximum while closing with LUB12
Operating time	70 ms closing with LUB32 for control circuit 70 ms closing with LUB12 for control circuit 60 ms closing with LUB32 for control circuit 60 ms closing with LUB32 for control circuit 50 ms closing with LUB32 for control circuit 50 ms closing with LUB32 for control circuit 50 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	Single-phase motor 3-phase motor - cooling: self-cooled - setting factory setting
Tripping threshold	14.2 x lr +/- 20 %

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 11000 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 settable
[Ui] 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
[Uimp] 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	0.135 kg
Cavironment	
Environment Heat dissipation	3 W for control circuit with LUB32 2 W for control circuit with LUB12
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	CE
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	-2570 °C with LUCA, LUCB, LUCC, LUCD -2560 °C with LUCM
Ambient air temperature for storage	-4085 °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 5300 Hz power poles closed conforming to IEC 60068-2-6 2 gn 5300 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
Non-dissipating shock wave	2 kV common mode conforming to IEC 60947-6-2 1 kV serial mode conforming to IEC 60947-6-2
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
DoUC compliance	
RoHS compliance RoHS EUR status	Compliant
RoHS EUR status  RoHS EUR conformity date(YYWW)	1015
	1010
TOTO LON Comornity date(117777)	
Contractual warranty	

