Product data sheet
Characteristics

LUCL12ES
magnetic control unit LUCL 3...12 A - 48…72 V - DC

Main

Range	TeSys
Product name	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	LUFC00 LUFN..
Utilisation category	AC-41 AC-43 AC-44
Motor power kW	9 kW at 690 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 5.5 kW at < 400...415 V AC 50/60 Hz
Thermal protection adjustment range	3...12 A
[Uc] control circuit voltage	48 V AC 48...72 V DC
User language	English - setting factory setting English, French, German, Italian, Spanish - setting settable

Complementary

Main function available	Manual reset Short-circuit protection
Mounting mode	Plug-in
Mounting location	Front side
Control circuit voltage limits	29 V for AC circuit 48...72 V drop-out 29 V for DC circuit 48...72 V drop-out 38.5...72 V for AC circuit 48...72 V in operation 38.5...93 V for DC circuit 48...72 V in operation
Typical current consumption	280 mA at 48...72 V AC I maximum while closing with LUB12 280 mA at 48...72 V AC I maximum while closing with LUB32 280 mA at 48...72 V DC I maximum while closing with LUB12 280 mA at 48...72 V DC I maximum while closing with LUB32

	35 mA at 48...72 V AC I rms sealed with LUB12 35 mA at 48...72 V DC I rms sealed with LUB12 45 mA at 48...72 V AC I rms sealed with LUB32 45 mA at 48...72 V DC I rms sealed with LUB32
Operating time	35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 50 ms closing with LUB12 for control circuit 50 ms closing with LUB32 for control circuit 60 ms closing with LUB12 for control circuit 60 ms closing with LUB32 for control circuit 70 ms closing with LUB12 for control circuit 70 ms closing with LUB32 for control circuit
Load type	3-phase motor - cooling: self-cooled - setting factory setting Single-phase motor
Tripping threshold	14.2 x Ir +/- 20 %
Reset	Automatic reset - setting: setting range Manual - setting: factory setting Manual - setting: setting range Remote 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	Average current - setting factory setting Average current - setting settable Cause of last 5 faults - setting settable Current in phase - setting settable Earth leakage current - setting settable Phase imbalance - setting settable Thermal state of motor - setting settable
[Ui] rated insulation voltage	600 V conforming to CSA C22.2 No 14 600 V conforming to UL 508 690 V conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-6-2
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	0.135 kg

Environment

Heat dissipation	2 W for control circuit with LUB12 3 W for control circuit with LUB32
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 EN 60947-6-2 IEC 60947-6-2 UL 508 type E with phase barrier
Product certifications	CE
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...70 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	2000 m
Fire resistance	650 °C conforming to IEC 60695-2-12 960 °C parts supporting live components 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
Non-dissipating shock wave	1 kV serial mode conforming to IEC 60947-6-2 2 kV common 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	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
RoHS (date code: YYWW)	Compliant - since 1015 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End of Life Information

Contractual warranty

Warranty period	18 months