Product datasheet

Specifications

To be discontinued

Standard control unit, TeSys Ultra, 3P, 3 to 12A, 690VAC, magnetic protection, 48 to 72VAC/DC coil

LUCL12ES

Discontinued on: 1 Dec 2024

Main

Range	TeSys
Range of product	TeSys Ultra
Product name	TeSys Ultra
Device short name	LUCL
Product or component type	Magnetic control unit
Device application	Motor control Motor protection
Product specific application	Protection of variable speed drive or soft startsoft stop unit
main function available	Short-circuit protection Manual reset
Product compatibility	Power base LUB12 Power base LUB32 Power base LUB38 Power base LUB120 Power base LUB320 Power base LUB380 Reversing contactor breaker LU2B12ES Reversing contactor breaker LU2B32ES
[Ue] rated operational voltage	690 V AC
Network frequency	40...60 Hz
Load type	3-phase motor - cooling: self-cooled
Utilisation category	AC-41 AC-43 AC-44
Motor power kW	5.5 kW at 400...440 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 9 kW at 690 V AC 50/60 Hz
rated motor current adjustment range	3…12 A
Tripping threshold	14.2 x Ir +/- 20 %
[Uc] control circuit voltage	48 V AC 48...72 V DC

Complementary

Control circuit voltage limits	38.5...72 V for AC circuit 48 V in operation 38.5...93 V for DC circuit 48...72 V in operation 29 V for AC circuit 48 V drop-out 29 V for DC circuit 48...72 V drop-out

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

Typical current consumption	280 mA at 48 V AC I maximum while closing with LUB12 280 mA at 48 V AC I maximum while closing with LUB32 280 mA at 48 V AC I maximum while closing with LUB38 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 280 mA at 48...72 V DC I maximum while closing with LUB38 35 mA at 48 V AC I rms sealed with LUB12 45 mA at 48 V AC I rms sealed with LUB32 45 mA at 48 V AC I rms sealed with LUB38 35 mA at 48...72 V DC I rms sealed with LUB12 45 mA at 48...72 V DC I rms sealed with LUB32 45 mA at 48...72 V DC I rms sealed with LUB38
Heat dissipation	2 W for control circuit with LUB12 3 W for control circuit with LUB32 3 W for control circuit with LUB38
Operating time	35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 35 ms opening with LUB38 for control circuit 60 ms closing with LUB12 for control circuit 60 ms closing with LUB32 for control circuit 60 ms closing with LUB38 for control circuit
Standards	EN 60947-6-2 IEC 60947-6-2 UL 60947-4-1, with phase barrier CSA C22.2 No 60947-4-1, with phase barrier
Product certifications	CE EAC ATEX
[Ui] rated insulation voltage	690 V conforming to IEC 60947-6-2 600 V conforming to UL 60947-4-1 600 V conforming to CSA C22.2 No 60947-4-1
[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
Fixing mode	Plug-in (front face)
Width	45 mm
Height	66 mm
Depth	60 mm
Net weight	0.135 kg
Compatibility code	LUCL

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…70 °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
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
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 Height	5.2 cm
Package 1 Width	8.0 cm
Package 1 Length	10.0 cm
Package 1 Weight	130.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	23
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.372 kg

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**17 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**1 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**15 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**801f74dc-0e56-49a3-aaeb-b34d99dcea36**
Halogen-free status	**Halogen free plastic parts product**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**56**
End of life manual availability	End of Life Information
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**