Product data sheet

Specifications



Standard control unit, TeSys Ultra, 1.25A to 5A, class 10, 110 to 220VDC/AC

LUCA05FU

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys
Range of Product	TeSys Ultra
Product name	TeSys Ultra
Device short name	LUCA
Product or Component Type	Standard control unit
Device Application	Motor control Motor protection
Product Specific Application	Basic protection requirements for motor starters: overload and short-circuit
main function available	Protection against phase failure and phase imbalance Protection against overload and short-circuit Manual reset Earth fault protection
Product compatibility	Power base LUB12 Power base LUB32 Power base LUB38 Power base LUB120 Power base LUB320 Power base LUB380 Reversing contactor breaker LU2B12FU Reversing contactor breaker LU2B32FU Reversing contactor breaker LU2B38FU
[Ue] rated operational voltage	690 V AC
Network frequency	40...60 Hz
Load type	3-phase motor self-cooled
Utilisation category	AC-44 AC-41 AC-43
Motor power kW	1.5 kW 400...440 V AC 50/60 Hz 2.2 kW 500 V AC 50/60 Hz 3 kW 690 V AC 50/60 Hz
rated motor current adjustment range	1.25…5 A
Thermal overload class	Class 10 40…60 Hz -13…158 °F (-25…70 °C) IEC 60947-6-2 Class 10 40…60 Hz -13…158 °F (-25…70 °C) UL 508
Tripping threshold	14.2 x Ir +/- 20 %
Phase failure sensitivity	Yes
[Uc] control circuit voltage	110...240 V AC 110...220 V DC

Complementary

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Control circuit voltage limits	88...264 V AC 110...240 V in operation 88...242 V DC 110...220 V in operation 55 V AC 110...240 V drop-out 55 V DC 110...220 V drop-out
Typical current consumption	280 mA 110...240 V AC I maximum while closing with LUB12 280 mA 110...240 V AC I maximum while closing with LUB32 280 mA 110...240 V AC I maximum while closing with LUB38 280 mA 110...220 V DC I maximum while closing with LUB12 280 mA 110...220 V DC I maximum while closing with LUB32 280 mA 110...220 V DC I maximum while closing with LUB38 35 mA 110...240 V AC I rms sealed with LUB12 25 mA 110...240 V AC I rms sealed with LUB32 25 mA 110...240 V AC I rms sealed with LUB38 35 mA 110...220 V DC I rms sealed with LUB12 25 mA 110...220 V DC I rms sealed with LUB32 25 mA 110...220 V DC I rms sealed with LUB38
Heat dissipation	2 W control circuit with LUB12 3 W control circuit with LUB32 3 W control circuit with LUB38
Operating time	35 ms opening with LUB12 control circuit 35 ms opening with LUB32 control circuit 35 ms opening with LUB38 control circuit 50 ms closing with LUB12 control circuit 50 ms closing with LUB32 control circuit 50 ms closing with LUB38 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 UL CSA CCC EAC ASEFA ATEX Marine
[Ui] rated insulation voltage	690 V IEC 60947-6-2 600 V UL 60947-4-1 600 V CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-6-2
Safe separation of circuit	400 V SELV between the control and auxiliary circuits IEC 60947-1 400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1
Fixing mode	Plug-in (front face)
Width	1.8 in (45 mm)
Height	2.6 in (66 mm)
Depth	2.4 in (60 mm)
Product Weight	0.298 lb(US) (0.135 kg)
Compatibility code	LUCA

Environment

IP degree of protection	IP20 front panel and wired terminals IEC 60947-1 IP20 other faces IEC 60947-1 IP40 front panel outside connection zone IEC 60947-1
Protective treatment	TH IEC 60068
Ambient air temperature for operation	-13…158 °F (-25…70 °C)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Operating altitude	6561.68 ft (2000 m)

Fire resistance	1760 °F (960 °C) parts supporting live components IEC 60695-2-12 1202 °F (650 °C) IEC 60695-2-12
Shock resistance	10 gn power poles open IEC 60068-2-27 15 gn power poles closed IEC 60068-2-27
Vibration resistance	2 gn 5…300 Hz power poles open IEC 60068-2-6 4 gn 5…300 Hz power poles closed IEC 60068-2-6
Resistance to electrostatic discharge	8 kV 3 in open air IEC 61000-4-2 8 kV 4 on contact IEC 61000-4-2
Non-dissipating shock wave	1 kV serial mode IEC 60947-6-2 2 kV common mode IEC 60947-6-2
Resistance to radiated fields	9.1 V/m (10 V/m) 3 IEC 61000-4-3
Resistance to fast transients	2 kV 3 serial link IEC 61000-4-4 4 kV 4 all circuits except for serial link IEC 61000-4-4
Immunity to radioelectric fields	10 V IEC 61000-4-6
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % / 500 ms IEC 61000-4-11

Ordering and shipping details

Category	US10I1122397
Discount Schedule	0I11
GTIN	3389110364026
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.969 in (5.000 cm)
Package 1 Width	3.228 in (8.200 cm)
Package 1 Length	3.543 in (9.000 cm)
Package weight(Lbs)	4.056 oz (115.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	23
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	6.512 lb(US) (2.954 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	**19 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]	**18 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**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
California proposition 65	**WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**
POP Directive	No POPs
Halogen content performance	**Halogen free plastic parts product**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**56**
Circularity Profile	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.