Product data sheet

Specifications



Advanced power base, TeSys Ultra, 3P, 12A/690V

LUB120

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys
Product name	TeSys Ultra
Device short name	LUB
Product or Component Type	Non reversing power base
Device Application	Motor control Motor protection
Poles description	3P
Suitability for isolation	Yes
[Ue] rated operational voltage	690 V AC power circuit
Network frequency	40...60 Hz
[Ith] conventional free air thermal current	12 A
[Ie] rated operational current	12 A <= 440 V 12 A 500 V 9 A 690 V
Utilisation category	AC-43 AC-44 AC-41
[Ics] rated service breaking capacity	50 kA 230 V 50 kA 440 V 10 kA 500 V 4 kA 690 V
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Linked contacts 1 NO + 1 NC) IEC 60947-4-1 Mirror contact 1 NC) IEC 60947-1
[Uc] control circuit voltage	24 V AC 50/60 Hz 24 V DC 48...72 V AC 50/60 Hz 48...72 V DC 110...240 V AC 50/60 Hz 110...220 V DC

Complementary

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

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

Typical current consumption	130 mA 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 140 mA 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 150 mA 24 V DC I maximum while closing with LUCM 280 mA 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 35 mA 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 60 mA 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 70 mA 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 70 mA 24 V DC I rms sealed with LUCM
Heat dissipation	2 W control circuit with LUCA, LUCB, LUCC, LUCD 1.7 W control circuit with LUCM
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Operating time	35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM control circuit 50 ms >= 72 V closing with LUCA, LUCB, LUCC, LUCD control circuit 60 ms 48 V closing with LUCA, LUCB, LUCC, LUCD control circuit 70 ms 24 V closing with LUCA, LUCB, LUCC, LUCD control circuit 75 ms closing with LUCM control circuit
Mechanical durability	15 Mcycles
maximum operating rate	3600 cyc/h
Product Certifications	CE UL CSA CCC EAC ASEFA ATEX Marine
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
[Ui] rated insulation voltage	690 V IEC 60947-6-2 3) 600 V UL 60947-4-1 600 V CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	6 kVIEC 60947-6-2
Safe separation of circuit	400 V SELV between the control and auxiliary circuits IEC 60947-1 appendix N 400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1 appendix N
Fixing mode	Clipped (DIN rail) Screw-fixed (plate)
Connections - terminals	Power circuit: screw clamp terminals 1 cable(s) 0.002…0.02 in² (1…10 mm²) rigid Power circuit: screw clamp terminals 1 cable(s) 0.002…0.009 in² (1…6 mm²) flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 0.004…0.02 in² (2.5…10 mm²) flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 0.002…0.009 in² (1…6 mm²) flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 0.002…0.009 in² (1…6 mm²) rigid Power circuit: screw clamp terminals 2 cable(s) 0.002…0.009 in² (1.5…6 mm²) flexible without cable end Control circuit: without connection
Tightening torque	Control circuit: 7.08…10.6 lbf.in (0.8…1.2 N.m) flat screwdriver 0.2 in (5 mm) Control circuit: 7.08…10.6 lbf.in (0.8…1.2 N.m) Philips no 1 screwdriver 0.2 in (5 mm) Power circuit: 16.8…22.1 lbf.in (1.9…2.5 N.m) flat screwdriver 0.2 in (6 mm) Power circuit: 16.8…22.1 lbf.in (1.9…2.5 N.m) Philips No 2 screwdriver 0.2 in (6 mm) Power circuit: 16.8…22.1 lbf.in (1.9…2.5 N.m) pozidriv No 2 screwdriver 0.2 in (6 mm)
Width	1.8 in (45 mm)

Height	6.06 in (154 mm)
Depth	5.0 in (126 mm)
Net Weight	1.907 lb(US) (0.865 kg)
Compatibility code	LUB

Environment

IP degree of protection	IP20 IEC 60947-1 front panel and wired terminals) IP20 IEC 60947-1 other faces) IP40 IEC 60947-1 front panel outside connection zone)
Protective treatment	TH IEC 60068
Ambient air temperature for operation	-13…140 °F (-25…60 °C) with LUCM -13…158 °F (-25…70 °C) with LUCA, LUCB, LUCC, LUCD
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Fire resistance	1760 °F (960 °C) parts supporting live components IEC 60695-2-12 1202 °F (650 °C) IEC 60695-2-12
Operating altitude	6561.68 ft (2000 m)
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 60068-2-27 4 gn 5…300 Hz) power poles closed IEC 60068-2-27
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 24...240 V AC IEC 60947-6-2 1 kV serial mode 48...220 V DC IEC 60947-6-2 2 kV common mode 24...240 V AC IEC 60947-6-2 2 kV common mode 48...220 V DC IEC 60947-6-2
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
Resistance to radiated fields	9.1 V/m (10 V/m) 3 IEC 61000-4-3
Immunity to radioelectric fields	10 V IEC 61000-4-6
Immunity to microbreaks	3 ms control circuit
Immunity to voltage dips	70 % / 500 ms IEC 61000-4-11

Ordering and shipping details

Category	US1CTR121254
Discount Schedule	CTR1
GTIN	3389110362794
Returnability	Yes

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.047 in (5.200 cm)
Package 1 Width	5.315 in (13.500 cm)
Package 1 Length	6.575 in (16.700 cm)
Package weight(Lbs)	28.783 oz (816.000 g)
Unit Type of Package 2	S02

Number of Units in Package 2	10
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	18.598 lb(US) (8.436 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	310.852 lb(US) (141.000 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	**25 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**8 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.4 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.1 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]	**2 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	**61f5a085-dfde-4214-b2cf-ba3cfe0c33b4**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of 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/or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**
Halogen content performance	**Product contains halogen above thresholds**
PVC free	**Yes**

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.**