# **Product datasheet**

Specifications





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

LUB120

#### 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 for power circuit	
Network frequency	4060 Hz	
[Ith] conventional free air thermal current	12 A	
[le] rated operational current	12 A at <= 440 V 12 A at 500 V 9 A at 690 V	
Utilisation category	AC-43 AC-44 AC-41	
[Ics] rated service breaking capacity	50 kA at 230 V 50 kA at 440 V 10 kA at 500 V 4 kA at 690 V	
Auxiliary contact composition	1 NO + 1 NC	
Auxiliary contacts type	type linked contacts (1 NO + 1 NC) conforming to IEC 60947-4-1 type mirror contact (1 NC) conforming to IEC 60947-1	
[Uc] control circuit voltage	24 V AC 50/60 Hz 24 V DC 4872 V AC 50/60 Hz 4872 V DC 110240 V AC 50/60 Hz 110220 V DC	

# Complementary

Typical current consumption	130 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 140 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD
	150 mA at 24 V DC I maximum while closing with LUCM 280 mA at 110220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 110240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 4872 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 4872 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 4872 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 35 mA at 110220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA at 110240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD
	35 mA at 4872 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA at 4872 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 60 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 70 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 70 mA at 24 V DC I rms sealed with LUCM
Heat dissipation	2 W for control circuit with LUCA, LUCB, LUCC, LUCD 1.7 W for control circuit with LUCM
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Operating time	35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit 50 ms at >= 72 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 75 ms closing with LUCM for 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 conforming to IEC 60947-6-2 (pollution degree 3) 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 appendix N 400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 appendix N
Fixing mode	Clipped (DIN rail) Screw-fixed (plate)
Connections - terminals	Power circuit: screw clamp terminals 1 cable(s) 110 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 1 cable(s) 16 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 2.510 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 16 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 16 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 2 cable(s) 16 mm <sup>2</sup> flexible without cable end Control circuit: without connection
Tightening torque	Control circuit: 0.81.2 N.m flat screwdriver 5 mm Control circuit: 0.81.2 N.m Philips no 1 screwdriver 5 mm Power circuit: 1.92.5 N.m flat screwdriver 6 mm Power circuit: 1.92.5 N.m Philips No 2 screwdriver 6 mm Power circuit: 1.92.5 N.m pozidriv No 2 screwdriver 6 mm
Width	45 mm
Height	154 mm

Depth	126 mm
net weight	0.865 kg
Compatibility code	LUB

#### Environment

IP degree of protection	IP20 conforming to IEC 60947-1 (front panel and wired terminals) IP20 conforming to IEC 60947-1 (other faces) IP40 conforming to IEC 60947-1 (front panel outside connection zone)	
Protective treatment	TH conforming to IEC 60068	
Ambient air temperature for operation	-2560 °C with LUCM -2570 °C with LUCA, LUCB, LUCC, LUCD	
Ambient air temperature for storage	-4085 °C	
Fire resistance	960 °C parts supporting live components conforming to IEC 60695-2-12 650 °C conforming to IEC 60695-2-12	
Operating altitude	2000 m	
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 (f= 5300 Hz) power poles open conforming to IEC 60068-2-27 4 gn (f= 5300 Hz) power poles closed conforming to IEC 60068-2-27	
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 24240 V AC conforming to IEC 60947-6-2 1 kV serial mode 48220 V DC conforming to IEC 60947-6-2 2 kV common mode 24240 V AC conforming to IEC 60947-6-2 2 kV common mode 48220 V DC conforming to IEC 60947-6-2	
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	
Resistance to radiated fields	10 V/m 3 conforming to IEC 61000-4-3	
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6	
Immunity to microbreaks	3 ms for control circuit	
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	5.200 cm
Package 1 Width	13.500 cm
Package 1 Length	16.700 cm
Package 1 Weight	817.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.417 kg
Unit Type of Package 3	P06

Number of Units in Package 3	160
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	141.000 kg

### Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information