



**Main**

Range	TeSys
Product name	TeSys U
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	40...60 Hz
[Ith] conventional free air thermal current	38 A
[Ie] rated operational current	35 A at <= 440 V 28 A at 500 V 24 A at 690 V
Utilisation category	AC-43 AC-41
[Ics] rated service breaking capacity	25 kA at 230 V 25 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 48...72 V AC 50/60 Hz 48...72 V DC 110...240 V AC 50/60 Hz 110...220 V DC

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

## Complementary

Typical current consumption	200 mA at 24 V DC I maximum while closing with LUCM 220 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 220 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 25 mA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 25 mA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 280 mA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 45 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 45 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 75 mA at 24 V DC I rms sealed with LUCM 80 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 90 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD
Heat dissipation	3 W for control circuit with LUCA, LUCB, LUCC, LUCD 1.8 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 $\geq$ 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 65 ms closing with LUCM for control circuit
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h
Product certifications	CE UL CSA CCC EAC
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	Control circuit: screw clamp terminals 1 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm <sup>2</sup> rigid Control circuit: screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 1 cable(s) 1...10 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 1 cable(s) 1...6 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 2.5...10 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1...6 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1...6 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm <sup>2</sup> flexible without cable end
Tightening torque	Control circuit: 0.8...1.2 N.m flat screwdriver 5 mm Control circuit: 0.8...1.2 N.m Philips no 1 screwdriver 5 mm Power circuit: 1.9...2.5 N.m flat screwdriver 6 mm Power circuit: 1.9...2.5 N.m Philips No 2 screwdriver 6 mm
Width	45 mm
Height	154 mm
Depth	126 mm
Net weight	0.9 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	-25...60 °C with LUCM -25...70 °C with LUCA, LUCB, LUCC, LUCD
Ambient air temperature for storage	-40...85 °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= 5...300 Hz) power poles open conforming to IEC 60068-2-27 4 gn (f= 5...300 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
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
Non-dissipating shock wave	1 kV serial mode 24...240 V AC conforming to IEC 60947-6-2 1 kV serial mode 48...220 V DC conforming to IEC 60947-6-2 2 kV common mode 24...240 V AC conforming to IEC 60947-6-2 2 kV common mode 48...220 V DC conforming to IEC 60947-6-2
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

## Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes