



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	12 A
[Ie] rated operational current	12 A at <= 440 V 12 A at 500 V 9 A at 690 V
Utilisation category	AC-44 AC-43 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 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	<p>130 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>140 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>150 mA at 24 V DC I maximum while closing with LUCM</p> <p>280 mA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>35 mA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>35 mA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>35 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>35 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>60 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>70 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>70 mA at 24 V DC I rms sealed with LUCM</p>
Heat dissipation	<p>2 W for control circuit with LUCA, LUCB, LUCC, LUCD</p> <p>1.7 W for control circuit with LUCM</p>
Safety reliability level	<p>B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1</p> <p>B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1</p>
Operating time	<p>35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit</p> <p>50 ms at <math>\geq 72</math> V closing with LUCA, LUCB, LUCC, LUCD for control circuit</p> <p>60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit</p> <p>70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit</p> <p>75 ms closing with LUCM for control circuit</p>
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h
Product certifications	<p>CE</p> <p>UL</p> <p>CSA</p> <p>CCC</p> <p>EAC</p> <p>ASEFA</p> <p>ATEX</p> <p>Marine</p>
Standards	<p>EN 60947-6-2</p> <p>IEC 60947-6-2</p> <p>UL 60947-4-1, with phase barrier</p> <p>CSA C22.2 No 60947-4-1, with phase barrier</p>
[Ui] rated insulation voltage	<p>690 V conforming to IEC 60947-6-2 (pollution degree 3)</p> <p>600 V conforming to UL 60947-4-1</p> <p>600 V conforming to CSA C22.2 No 60947-4-1</p>
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-6-2
Safe separation of circuit	<p>400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 appendix N</p> <p>400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 appendix N</p>
Fixing mode	<p>Clipped (DIN rail)</p> <p>Screw-fixed (plate)</p>
Connections - terminals	<p>Control circuit: screw clamp terminals 1 cable(s) 0.34...1.5 mm<sup>2</sup> flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm<sup>2</sup> flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm<sup>2</sup> rigid</p> <p>Control circuit: screw clamp terminals 2 cable(s) 0.34...1.5 mm<sup>2</sup> flexible with cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm<sup>2</sup> flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm<sup>2</sup> rigid</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...10 mm<sup>2</sup> rigid</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...6 mm<sup>2</sup> flexible with cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 2.5...10 mm<sup>2</sup> flexible without cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...6 mm<sup>2</sup> flexible with cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...6 mm<sup>2</sup> rigid</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm<sup>2</sup> flexible without cable end</p>
Tightening torque	<p>Control circuit: 0.8...1.2 N.m flat screwdriver 5 mm</p> <p>Control circuit: 0.8...1.2 N.m Philips no 1 screwdriver 5 mm</p> <p>Power circuit: 1.9...2.5 N.m flat screwdriver 6 mm</p> <p>Power circuit: 1.9...2.5 N.m Philips No 2 screwdriver 6 mm</p>
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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	847 g
Package 1 Height	5.2 cm
Package 1 width	14 cm
Package 1 Length	17 cm
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Weight	8.999 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Weight	86.604 kg
Package 3 Height	80 cm
Package 3 width	80 cm
Package 3 Length	60 cm

## 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

**Contractual warranty**

Warranty	18 months
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