



Main

Range of product	TeSys U
Device short name	LU2B
Product or component type	Reversing power base
Poles description	3P
Suitability for isolation	Yes
[Ith] conventional free air thermal current	12 A
Utilisation category	AC-41 AC-44 AC-43
[Uc] control circuit voltage	24 V AC 50/60 Hz

Complementary

Auxiliary contact composition	2 NO
Auxiliary contacts type	Type linked contacts (1 NO + 1 NC) conforming to IEC 60947-4-1 Type mirror contact (1 NC) state of the power conforming to draft IEC 60947-1
[Ue] rated operational voltage	690 V 230 V 440 V 500 V
Network frequency	40...60 Hz
[Ie] rated operational current	12 A at 500 V 12 A at ≤ 440 V 9 A at 690 V
[Ics] rated service breaking capacity	50 kA 440 V 10 kA 500 V 4 kA 690 V 50 kA 230 V
Control circuit voltage limits	20...26.5 V 24 V AC in operation 14.5 V 24 V AC drop-out
Typical current consumption	90 mA at 24 V AC I rms sealed 220 mA at 24 V AC I maximum while closing
Duration of inrush phase	25 ms for AC network 50/60 Hz
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	70 ms closing for control circuit 35 ms opening for control circuit 150 ms with change of direction for power circuit 75 ms without change of direction for power circuit
Mechanical durability	15000000 cycles
Operating rate	60 cyc/mn
[Ui] rated insulation voltage	600 V conforming to CSA C22-2 No 14 690 V conforming to IEC 60947-1 3 600 V conforming to UL 508
[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

Connections - terminals	<p>Control circuit: screw clamp terminals 1 cable 0.75...1.5 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable 0.34...1.5 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 1 cable 1...6 mm² - cable stiffness: flexible - with cable end</p> <p>Control circuit: screw clamp terminals 1 cable 0.34...1.5 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 1 cable 2.5...10 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable 1...6 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 2 cable 1.5...6 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable 1...6 mm² - cable stiffness: rigid - without cable end</p> <p>Control circuit: screw clamp terminals 1 cable 0.75...1.5 mm² - cable stiffness: rigid - without cable end</p> <p>Power circuit: screw clamp terminals 1 cable 1...10 mm² - cable stiffness: rigid - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable 0.75...1.5 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable 0.75...1.5 mm² - cable stiffness: rigid - without cable end</p>
Tightening torque	<p>Power circuit: 1.9...2.5 N.m - with screwdriver 6 mm flat</p> <p>Control circuit: 0.8...1.2 N.m - with screwdriver 5 mm Philips no 1</p> <p>Control circuit: 0.8...1.2 N.m - with screwdriver 5 mm flat</p> <p>Power circuit: 1.9...2.5 N.m - with screwdriver 6 mm Philips No 2</p>
Width	45 mm
Height	224 mm
Depth	126 mm
Product weight	1.27 kg

Environment

Heat dissipation	<p>1.7 W for control circuit with LUCM</p> <p>2 W for control circuit with LUCA, LUCB, LUCC, LUCD</p>
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % 500 ms conforming to IEC 61000-4-11
Product certifications	<p>ABS</p> <p>GL</p> <p>ATEX</p> <p>DNV (Det Norske Veritas)</p> <p>BV</p> <p>CCC</p> <p>ASEFA</p> <p>GOST</p> <p>LROS (Lloyds register of shipping)</p> <p>CSA</p> <p>UL</p>
Standards	<p>IEC 60947-6-2</p> <p>UL 508 type E with phase barrier</p> <p>EN 60947-6-2</p> <p>CSA C22-2 No 14 type E</p>
IP degree of protection	<p>IP20 front panel and wired terminals conforming to IEC 60947-1</p> <p>IP40 front panel outside connection zone conforming to IEC 60947-1</p> <p>IP20 other faces conforming to IEC 60947-1</p>
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	<p>-25...70 °C with LUCA, LUCB, LUCC, LUCD</p> <p>-25...60 °C with LUCM</p>
Ambient air temperature for storage	-40...85 °C
Fire resistance	<p>960 °C parts supporting live components conforming to IEC 60695-2-12</p> <p>650 °C conforming to IEC 60695-2-12</p>
Operating altitude	2000 m
Shock resistance	<p>10 gn power poles open conforming to IEC 60068-2-27</p> <p>15 gn power poles closed conforming to IEC 60068-2-27</p>
Vibration resistance	<p>4 gn 5...300 Hz power poles closed conforming to IEC 60068-2-27</p> <p>2 gn 5...300 Hz power poles open conforming to IEC 60068-2-27</p>
Resistance to electrostatic discharge	<p>8 kV level 4 on contact conforming to IEC 61000-4-2</p> <p>8 kV level 3 in open air conforming to IEC 61000-4-2</p>
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 conforming to IEC 60947-6-2 2 kV common mode conforming to IEC 60947-6-2
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6