



## Main

Range of product	TeSys U
Device short name	LU2B
Product or component type	Reversing power base
Poles description	3P
Suitability for isolation	Yes
[I <sub>th</sub> ] conventional free air thermal current	12 A
Utilisation category	AC-41 AC-43 AC-44
[U <sub>c</sub> ] control circuit voltage	24 V DC with LUCM 24...220 V DC with LUCA, LUCB, LUCC, LUCD 24...240 V AC 50/60 Hz with LUCA, LUCB, LUCC, LUCD

## 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
[U <sub>e</sub> ] rated operational voltage	230 V 440 V 500 V 690 V
Network frequency	40...60 Hz
[I <sub>e</sub> ] rated operational current	12 A at ≤ 440 V 12 A at 500 V 9 A at 690 V
[I <sub>cs</sub> ] rated service breaking capacity	10 kA 500 V 4 kA 690 V 50 kA 230 V 50 kA 440 V
Control circuit voltage limits	14.5 V 24 V AC drop-out with LUCA, LUCB, LUCC, LUCD 14.5 V 24 V DC drop-out with LUCA, LUCB, LUCC, LUCD, LUCM 20...26.5 V 24 V AC in operation with LUCA, LUCB, LUCC, LUCD 20...27 V 24 V DC in operation with LUCA, LUCB, LUCC, LUCD 20...28 V 24 V DC in operation with LUCM 29 V 48...72 V AC drop-out with LUCA, LUCB, LUCC, LUCD 29 V 48...72 V DC drop-out with LUCA, LUCB, LUCC, LUCD 38.5...72 V 48...72 V AC in operation with LUCA, LUCB, LUCC, LUCD 38.5...93 V 48...72 V DC in operation with LUCA, LUCB, LUCC, LUCD 55 V 110...220 V DC drop-out with LUCA, LUCB, LUCC, LUCD 55 V 110...240 V AC drop-out with LUCA, LUCB, LUCC, LUCD 88...242 V 110...220 V DC in operation with LUCA, LUCB, LUCC, LUCD 88...264 V 110...240 V AC in operation with LUCA, LUCB, LUCC, LUCD

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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>
Duration of inrush phase	<p>15 ms for DC network</p> <p>25 ms for AC network 50/60 Hz</p>
Safety reliability level	<p>B10d 1369863 cycles contactor with nominal load EN/ISO 13849-1</p> <p>B10d 20000000 cycles contactor with mechanical load EN/ISO 13849-1</p>
Operating time	<p>150 ms with change of direction for power circuit</p> <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> <p>75 ms without change of direction for power circuit</p>
Mechanical durability	15000000 cycles
Operating rate	60 cyc/mn
[Ui] rated insulation voltage	<p>600 V conforming to CSA C22-2 No 14</p> <p>600 V conforming to UL 508</p> <p>690 V conforming to IEC 60947-1 3</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>
Connections - terminals	<p>Control circuit: screw clamp terminals 1 cable 0.34...1.5 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Control circuit: screw clamp terminals 1 cable 0.75...1.5 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Control circuit: screw clamp terminals 1 cable 0.75...1.5 mm<sup>2</sup> - cable stiffness: rigid - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable 0.34...1.5 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Control circuit: screw clamp terminals 2 cable 0.75...1.5 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable 0.75...1.5 mm<sup>2</sup> - cable stiffness: rigid - without cable end</p> <p>Power circuit: screw clamp terminals 1 cable 1...10 mm<sup>2</sup> - cable stiffness: rigid - without cable end</p> <p>Power circuit: screw clamp terminals 1 cable 1...6 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 1 cable 2.5...10 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable 1...6 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 2 cable 1...6 mm<sup>2</sup> - cable stiffness: rigid - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable 1.5...6 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p>
Tightening torque	<p>Control circuit: 0.8...1.2 N.m - with screwdriver 5 mm flat</p> <p>Control circuit: 0.8...1.2 N.m - with screwdriver 5 mm Philips no 1</p> <p>Power circuit: 1.9...2.5 N.m - with screwdriver 6 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	2 W for control circuit with LUCA, LUCB, LUCC, LUCD 1.7 W for control circuit with LUCM
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % 500 ms conforming to IEC 61000-4-11
Product certifications	ABS ASEFA ATEX BV CCC CSA DNV (Det Norske Veritas) GL GOST LROS (Lloyds register of shipping) UL
Standards	CSA C22-2 No 14 type E EN 60947-6-2 IEC 60947-6-2 UL 508 type E with phase barrier
IP degree of protection	IP20 front panel and wired terminals conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 IP40 front panel outside connection zone conforming to IEC 60947-1
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	650 °C conforming to IEC 60695-2-12 960 °C parts supporting live components 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 5...300 Hz power poles open conforming to IEC 60068-2-27 4 gn 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