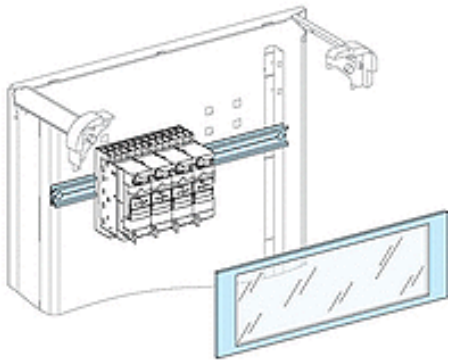
Product datasheet
Characteristics

LU2B12B
power base - TeSys U - 12 A - 24 V AC screw clamps control



Main

Range	TeSys
Product name	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-43 AC-41 AC-44
Control circuit voltage	24 V AC 50/60 Hz

Complementary

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) state of the power conforming to draft IEC 60947-1
[Ue] rated operational voltage	230 V 440 V 500 V 690 V
Network frequency	40...60 Hz
[Ie] rated operational current	12 A at <= 440 V 12 A at 500 V 9 A at 690 V
[Ics] 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 20...26.5 V 24 V AC in operation

Typical current consumption	2360 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 conforming to EN/ISO 13849-1 B10d 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Operating time	150 ms with change of direction for power circuit 35 ms opening for control circuit 70 ms closing for control 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 14 600 V conforming to UL 508 690 V conforming to IEC 60947-1 3
[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	Power circuit : screw clamp terminals 2 cable 1.5...6 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable 0.34...1.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable 0.75...1.5 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable 0.75...1.5 mm² - cable stiffness: rigid - without cable end Control circuit : screw clamp terminals 2 cable 0.34...1.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 2 cable 0.75...1.5 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable 0.75...1.5 mm² - cable stiffness: rigid - without cable end Power circuit : screw clamp terminals 1 cable 1...10 mm² - cable stiffness: rigid - without cable end Power circuit : screw clamp terminals 1 cable 1...6 mm² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable 2.5...10 mm² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable 1...6 mm² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable 1...6 mm² - cable stiffness: rigid - without cable end
Tightening torque	Control circuit : 0.8...1.2 N.m - with screwdriver 5 mm flat Control circuit : 0.8...1.2 N.m - with screwdriver 5 mm Philips no 1 Power circuit : 1.9...2.5 N.m - with screwdriver 6 mm flat Power circuit : 1.9...2.5 N.m - with screwdriver 6 mm Philips No 2
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	GL BV ATEX ABS CCC ASEFA GOST UL DNV CSA LROS (Lloyds register of shipping)
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 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

Contractual warranty

Warranty period	18 months