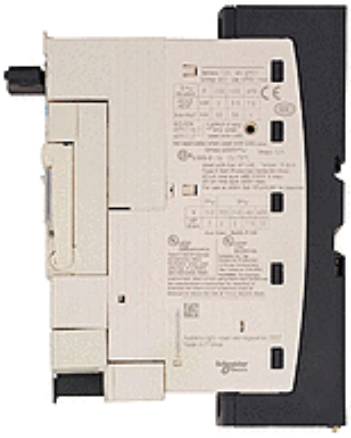
Product datasheet
Characteristics

LUB12
power base - TeSys U - 12 A - screw clamps control



Main

Range of product	TeSys U
Range	TeSys
Product name	TeSys U
Device short name	LUB
Product or component type	Non reversing power base
Poles description	3P
Suitability for isolation	Yes
[Ith] conventional free air thermal current	12 A
Utilisation category	AC-43 AC-44 AC-41
Control circuit voltage	110...240 V AC 50/60 Hz 48...72 V DC 110...220 V DC 48 V AC 50/60 Hz 24 V DC 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	500 V 230 V 690 V 440 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	50 kA 230 V

	50 kA 440 V 10 kA 500 V 4 kA 690 V
Typical current consumption	140 mA at 24 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 70 mA at 24 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 130 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 35 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 280 mA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 70 mA at 24 V DC I rms sealed with LUCM 60 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 150 mA at 24 V DC I maximum while closing with LUCM 280 mA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD
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	60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 50 ms at >= 72 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 75 ms closing with LUCM for control circuit 70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit
Mechanical durability	15000000 cycles
Operating rate	60 cyc/mn
[Ui] rated insulation voltage	690 V conforming to IEC 60947-1 3 600 V conforming to CSA C22.2 No 14 600 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 or auxiliary circuit and the main circuit conforming to IEC 60947-1 appendix N 400 V SELV between the control and auxiliary circuits 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 Power circuit : screw clamp terminals 2 cable 1...6 mm² - cable stiffness: rigid - without cable end Control circuit : screw clamp terminals 2 cable 0.75...1.5 mm² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 1 cable 2.5...10 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable 0.34...1.5 mm² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable 1...10 mm² - cable stiffness: rigid - without cable end Power circuit : screw clamp terminals 2 cable 1...6 mm² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable 1...6 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 2 cable 0.75...1.5 mm² - cable stiffness: rigid - without 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
Tightening torque	Power circuit : 1.9...2.5 N.m - with screwdriver 6 mm flat Control circuit : 0.8...1.2 N.m - with screwdriver 5 mm Philips no 1 Control circuit : 0.8...1.2 N.m - with screwdriver 5 mm flat Power circuit : 1.9...2.5 N.m - with screwdriver 6 mm Philips No 2
Width	45 mm
Height	145 mm
Depth	126 mm
Product weight	0.9 kg
Compatibility code	LUB

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 CSA BV UL CCC ATEX GL GOST DNV LROS (Lloyds register of shipping)
Standards	IEC 60947-6-2 UL 508 type E with phase barrier EN 60947-6-2 CSA C22.2 No 14 type E
IP degree of protection	IP20 other faces conforming to IEC 60947-1 IP40 front panel outside connection zone conforming to IEC 60947-1 IP20 front panel and wired terminals conforming to IEC 60947-1
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-25...70 °C with LUCA, LUCB, LUCC, LUCD -25...60 °C with LUCM
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	15 gn power poles closed conforming to IEC 60068-2-27 10 gn power poles open 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	2 kV common mode 24...240 V AC conforming to IEC 60947-6-2 1 kV serial 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 1 kV serial mode 48...220 V DC conforming to IEC 60947-6-2
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6

Contractual warranty

Warranty period	18 months