Product datasheet
Characteristics

LUB32
power base - TeSys U - 32 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	32 A
Utilisation category	AC-41 AC-43 AC-44
Control circuit voltage	110...240 V AC 50/60 Hz 48 V AC 50/60 Hz 24 V AC 50/60 Hz 48...72 V DC 110...220 V DC 24 V DC

Complementary

Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Type mirror contact (1 NC) state of the power conforming to draft IEC 60947-1 Type linked contacts (1 NO + 1 NC) conforming to IEC 60947-4-1
[Ue] rated operational voltage	440 V 230 V 690 V 500 V
Network frequency	40...60 Hz
[Ie] rated operational current	21 A at 690 V 32 A at <= 440 V 23 A at 500 V
[Ics] rated service breaking capacity	50 kA 230 V

	4 kA 690 V 10 kA 500 V 50 kA 440 V
Typical current consumption	25 mA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 280 mA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 220 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 220 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 75 mA at 24 V DC I rms sealed with LUCM 280 mA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 25 mA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 80 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 45 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 280 mA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 45 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 90 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 200 mA at 24 V DC I maximum while closing with LUCM
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 65 ms closing with LUCM for control circuit 35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit 70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit
Mechanical durability	15000000 cycles
Operating rate	60 cyc/mn
[Ui] rated insulation voltage	600 V conforming to UL 508 600 V conforming to CSA C22.2 No 14 690 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 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	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 1...6 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 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 2.5...10 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 Control circuit : screw clamp terminals 2 cable 0.34...1.5 mm² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable 1.5...6 mm² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable 1...6 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 0.34...1.5 mm² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable 1...6 mm² - cable stiffness: flexible - with 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 Power circuit : 1.9...2.5 N.m - with screwdriver 6 mm Philips No 2 Control circuit : 0.8...1.2 N.m - with screwdriver 5 mm flat
Width	45 mm
Height	145 mm
Depth	126 mm
Product weight	0.9 kg
Compatibility code	LUB

Environment

Heat dissipation	1.8 W for control circuit with LUCM 3 W for control circuit with LUCA, LUCB, LUCC, LUCD
Immunity to microbreaks	3 ms

Immunity to voltage dips	70 % 500 ms conforming to IEC 61000-4-11
Product certifications	ASEFA LROS (Lloyds register of shipping) CSA CCC BV UL ABS DNV GL GOST ATEX
Standards	IEC 60947-6-2 CSA C22.2 No 14 type E UL 508 type E with phase barrier EN 60947-6-2
IP degree of protection	IP20 front panel and wired terminals conforming to IEC 60947-1 IP40 front panel outside connection zone conforming to IEC 60947-1 IP20 other faces 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	15 gn power poles closed conforming to IEC 60068-2-27 10 gn power poles open conforming to IEC 60068-2-27
Vibration resistance	4 gn 5...300 Hz power poles closed conforming to IEC 60068-2-27 2 gn 5...300 Hz power poles open 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	4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4 2 kV class 3 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 48...220 V DC conforming to IEC 60947-6-2 2 kV common mode 48...220 V DC conforming to IEC 60947-6-2 1 kV serial mode 24...240 V AC conforming to IEC 60947-6-2
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6

Contractual warranty

Warranty period	18 months