Product datasheet

Specifications

Power base, TeSys U, 3P, 12A/690V

LUB12

Main

Range	TeSys
Product name	TeSys Ultra
Device short name	LUB
Product or component type	Non reversing power base
Device application	Motor control Motor protection
Poles description	3P
Suitability for isolation	Yes
[Ue] rated operational voltage	690 V AC for power circuit
Network frequency	40...60 Hz
[Ith] conventional free air thermal current	12 A
[Ie] rated operational current	12 A at <= 440 V 12 A at 500 V 9 A at 690 V
Utilisation category	AC-43 AC-44 AC-41
[Ics] rated service breaking capacity	50 kA at 230 V 50 kA at 440 V 10 kA at 500 V 4 kA at 690 V
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) conforming to IEC 60947-1
[Uc] control circuit voltage	24 V AC 50/60 Hz 24 V DC 48...72 V AC 50/60 Hz 48...72 V DC 110...240 V AC 50/60 Hz 110...220 V DC

Complementary

Typical current consumption	130 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 140 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD 150 mA at 24 V DC I maximum while closing with LUCM 280 mA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 280 mA at 110...240 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 280 mA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD 35 mA at 110...220 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

	35 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 35 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 60 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD 70 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD 70 mA at 24 V DC I rms sealed with LUCM
Heat dissipation	2 W for control circuit with LUCA, LUCB, LUCC, LUCD 1.7 W for control circuit 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	35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit 50 ms at >= 72 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit 75 ms closing with LUCM for control circuit
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h
Product certifications	CE UL CSA CCC EAC ASEFA ATEX Marine
Standards	EN 60947-6-2 IEC 60947-6-2 UL 60947-4-1, with phase barrier CSA C22.2 No 60947-4-1, with phase barrier
[Ui] rated insulation voltage	690 V conforming to IEC 60947-6-2 (pollution degree 3) 600 V conforming to UL 60947-4-1 600 V conforming to CSA C22.2 No 60947-4-1
[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
Fixing mode	Clipped (DIN rail) Screw-fixed (plate)
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 0.34…1.5 mm² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 0.75…1.5 mm² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 0.75…1.5 mm² rigid Control circuit: screw clamp terminals 2 cable(s) 0.34…1.5 mm² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 0.75…1.5 mm² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 0.75…1.5 mm² rigid Power circuit: screw clamp terminals 1 cable(s) 1…10 mm² rigid Power circuit: screw clamp terminals 1 cable(s) 1…6 mm² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 2.5…10 mm² flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1…6 mm² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1…6 mm² rigid Power circuit: screw clamp terminals 2 cable(s) 1.5…6 mm² flexible without cable end
Tightening torque	Control circuit: 0.8…1.2 N.m flat screwdriver 5 mm Control circuit: 0.8…1.2 N.m Philips no 1 screwdriver 5 mm Power circuit: 1.9…2.5 N.m flat screwdriver 6 mm Power circuit: 1.9…2.5 N.m Philips No 2 screwdriver 6 mm Power circuit: 1.9…2.5 N.m pozidriv No 2 screwdriver 6 mm
Width	45 mm
Height	154 mm
Depth	126 mm
Net weight	0.9 kg
Compatibility code	LUB

Environment

IP degree of protection	IP20 conforming to IEC 60947-1 (front panel and wired terminals) IP20 conforming to IEC 60947-1 (other faces) IP40 conforming to IEC 60947-1 (front panel outside connection zone)
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	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	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 (f= 5…300 Hz) power poles open conforming to IEC 60068-2-27 4 gn (f= 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
Immunity to microbreaks	3 ms for control circuit
Immunity to voltage dips	70 % / 500 ms conforming to IEC 61000-4-11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.200 cm
Package 1 Width	13.500 cm
Package 1 Length	17.000 cm
Package 1 Weight	842.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.698 kg
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	147.668 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration

Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Recommended replacement(s)