



## Main

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

## 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
System 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
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
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 control circuit 50 ms at >= 72 V closing with LUCA, LUCB, LUCC, LUCD control circuit 60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD control circuit 70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD control circuit 75 ms closing with LUCM control 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 0...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable 0...0 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable 0...0 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable 0...0 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) - cable stiffness: rigid - without cable end Control circuit: screw clamp terminals 2 cable 0...0 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable 0...0 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable 0...0 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) - cable stiffness: rigid - without cable end Power circuit: screw clamp terminals 1 cable 0...0.02 in <sup>2</sup> (1...10 mm <sup>2</sup> ) - cable stiffness: rigid - without cable end Power circuit: screw clamp terminals 1 cable 0...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable 0...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable 0...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable 0...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) - cable stiffness: rigid - without cable end
Tightening torque	Control circuit: 7.08...10.62 lbf.in (0.8...1.2 N.m) - with screwdriver 0.2 in (5 mm) flat Control circuit: 7.08...10.62 lbf.in (0.8...1.2 N.m) - with screwdriver 0.2 in (5 mm) Philips no 1 Power circuit: 16.81...22.12 lbf.in (1.9...2.5 N.m) - with screwdriver 0.24 in (6 mm) flat Power circuit: 16.81...22.12 lbf.in (1.9...2.5 N.m) - with screwdriver 0.24 in (6 mm) Philips No 2
Width	1.77 in (45 mm)
Height	5.71 in (145 mm)
Depth	4.96 in (126 mm)
Product weight	1.98 lb(US) (0.9 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 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	-13...140 °F (-25...60 °C) with LUCM -13...158 °F (-25...70 °C) with LUCA, LUCB, LUCC, LUCD
Ambient air temperature for storage	-40...185 °F (-40...85 °C)
Fire resistance	1202 °F (650 °C) conforming to IEC 60695-2-12 1760 °F (960 °C) parts supporting live components conforming to IEC 60695-2-12
Operating altitude	6561.68 ft (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	9.14 V/yd (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

## Ordering and shipping details

Category	22396 - TESYS U - SELF PRCTCTD STARTER (LUB)
Discount Schedule	I11
GTIN	00785901222248
Nbr. of units in pkg.	1
Package weight(Lbs)	1.8600000000000001
Returnability	Y
Country of origin	FR

## Contractual warranty

Warranty period	18 months
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