

LU2B12FU

Reversing power base, TeSys U, 3P,
12A/690V, coil 110-240V AC/DC



Main

Range	TeSys
Product name	TeSys U
Device short name	LU2B
Product or component type	Reversing power base
Device application	Motor control Motor protection
Product compatibility	Control unit LUC.X6FU Control unit LUC.1XFU Control unit LUC.05FU Control unit LUC.12FU
Poles description	3P
Suitability for isolation	Yes
[Ue] rated operational voltage	690 V AC power circuit
Network frequency	40...60 Hz
[Ith] conventional free air thermal current	12 A
[Ie] rated operational current	12 A ≤ 440 V 12 A 500 V 9 A 690 V
Utilisation category	AC-41 AC-43 AC-44
[Ics] rated service breaking capacity	50 KA 230 V 50 KA 440 V 10 KA 500 V 4 kA 690 V
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Linked contacts 1 NO + 1 NC) IEC 60947-4-1 Mirror contact 1 NC) IEC 60947-1
[Uc] control circuit voltage	110...240 V AC 50/60 Hz 110...220 V DC
Control circuit voltage limits	55 V DC drop-out 55 V AC drop-out 88...242 V DC in operation 88...264 V AC in operation

Complementary

Typical current consumption	1000 mA 110...220 V DC I maximum while closing 1000 mA 110...240 V AC I maximum while closing
Heat dissipation	2 W control circuit with LUCA, LUCB, LUCC, LUCD 1.7 W control circuit with LUCM
Inrush restraint duration	25 Ms AC 50/60 Hz 15 ms DC
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Operating time	150 ms with change of direction power circuit 35 ms opening control circuit 75 ms without change of direction power circuit 50 ms closing 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 IEC 60947-6-2 3) 600 V UL 60947-4-1 600 V CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-6-2
Safe separation of circuit	400 V SELV between the control and auxiliary circuits IEC 60947-1 appendix N 400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1 appendix N
Fixing mode	Clipped DIN rail) Screw-fixed plate)
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.00 in ² (0.34...1.5 mm ²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.00 in ² (0.75...1.5 mm ²) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.00 in ² (0.75...1.5 mm ²) rigid Control circuit screw clamp terminals 2 0.00...0.00 in ² (0.34...1.5 mm ²) flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (0.75...1.5 mm ²) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (0.75...1.5 mm ²) rigid Power circuit screw clamp terminals 1 0.00...0.02 in ² (1...10 mm ²) rigid Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...6 mm ²) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (2.5...10 mm ²) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...6 mm ²) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...6 mm ²) rigid Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²) flexible without cable end
Tightening torque	Control circuit 7.08...10.62 lbf.in (0.8...1.2 N.m) flat 0.20 in (5 mm) Control circuit 7.08...10.62 lbf.in (0.8...1.2 N.m) Philips no 1 0.20 in (5 mm) Power circuit 16.82...22.13 lbf.in (1.9...2.5 N.m) flat 0.24 in (6 mm) Power circuit 16.82...22.13 lbf.in (1.9...2.5 N.m) Philips No 2 0.24 in (6 mm)
Maximum Width	1.77 in (45 mm)
Maximum Height	8.82 in (224 mm)
Maximum Depth	4.96 in (126 mm)
Net Weight	2.80 lb(US) (1.27 kg)
Compatibility code	LU2B

Environment

IP degree of protection	IP20 IEC 60947-1 front panel and wired terminals) IP20 IEC 60947-1 other faces) IP40 IEC 60947-1 front panel outside connection zone)
Protective treatment	TH 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	1760 °F (960 °C) parts supporting live components IEC 60695-2-12 1202 °F (650 °C) IEC 60695-2-12
Operating altitude	6561.68 ft (2000 m)
Shock resistance	10 gn power poles open IEC 60068-2-27 15 gn power poles closed IEC 60068-2-27
Vibration resistance	2 gn 5...300 Hz) power poles open IEC 60068-2-27 4 gn 5...300 Hz) power poles closed IEC 60068-2-27
Resistance to electrostatic discharge	8 KV 3 in open air IEC 61000-4-2 8 kV 4 on contact IEC 61000-4-2
Resistance to radiated fields	9.14 V/m (10 V/m) 3 IEC 61000-4-3

Resistance to fast transients	2 KV 3 serial link IEC 61000-4-4 4 kV 4 all circuits except for serial link IEC 61000-4-4
Non-dissipating shock wave	1 KV serial mode IEC 60947-6-2 2 kV common mode IEC 60947-6-2
Immunity to radioelectric fields	10 V IEC 61000-4-6
Immunity to microbreaks	3 ms control circuit
Immunity to voltage dips	70 % / 500 ms IEC 61000-4-11

Ordering and shipping details

Category	22396 - TESYS U - SELF PRCTCD STARTER (LUB)
Discount Schedule	I11
GTIN	00785901202547
Nbr. of units in pkg.	1
Package weight(Lbs)	2.86 lb(US) (1.30 kg)
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.17 in (5.5 cm)
Package 1 width	6.02 in (15.3 cm)
Package 1 Length	10.04 in (25.5 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	9
Package 2 Weight	27.05 lb(US) (12.268 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

EU RoHS Directive	Compliant  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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