

# LU2B12BL

Reversing power base, TeSys Ultra, 3P,  
12A/690V, coil 24VDC



## Main

Range	TeSys
Product name	TeSys Ultra
Device short name	LU2B
Product or Component Type	Reversing power base
Device Application	Motor control Motor protection
Product compatibility	Control unit LUC.X6BL Control unit LUC.1XBL Control unit LUC.05BL Control unit LUC.12BL
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-43 AC-44 AC-41
[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	24 V DC
Control circuit voltage limits	14.5 V DC drop-out 20...27 V DC in operation

## Complementary

Typical current consumption	120 mA 24 V DC I maximum while closing 120 mA 24 V DC I rms sealed
Heat dissipation	2 W control circuit with LUCA, LUCB, LUCC, LUCD 1.7 W control circuit with LUCM
Inrush restraint duration	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 75 ms without change of direction power circuit 35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM control circuit 75 ms closing with LUCM control circuit 70 ms closing with LUCA, LUCB, LUCC, LUCD control circuit
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h

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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 <sup>2</sup> (0.34...1.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) rigid Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (0.75...1.5 mm <sup>2</sup> ) rigid Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (1...10 mm <sup>2</sup> ) rigid Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> ) rigid Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> ) 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) Power circuit 16.82...22.13 lbf.in (1.9...2.5 N.m) pozidriv No 2 0.24 in (6 mm)
Width	1.77 in (45 mm)
Height	8.82 in (224 mm)
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
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 PRCTD STARTER (LUB)
Discount Schedule	I11
GTIN	3389110362930
Returnability	Yes
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.84 in (25.000 cm)
Package 1 Width	2.17 in (5.500 cm)
Package 1 Length	5.79 in (14.700 cm)
Package 1 Weight	2.87 lb(US) (1.300 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	9
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	27.00 lb(US) (12.245 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	72
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	242.73 lb(US) (110.100 kg)

## Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
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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