

# Product datasheet

Specifications



## Reversing power base, TeSys Ultra, 3P, 1NO + 1NC, 12A, 690VAC, 48 to 72VAC/DC coil

LU2B12ES

### 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.X6ES Control unit LUC.1XES Control unit LUC.05ES Control unit LUC.12ES
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	48...72 V AC 50/60 Hz 48...72 V DC
Control circuit voltage limits	29 V AC drop-out 29 V DC drop-out 38.5...72 V AC in operation 38.5...93 V DC in operation

### Complementary

Typical current consumption	2300 mA at 48...72 V DC I maximum while closing 2300 mA at 48...72 V AC I maximum while closing
Heat dissipation	3 W for control circuit with LUCA, LUCB, LUCC, LUCD 1.8 W for control circuit with LUCM

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

<b>Inrush restraint duration</b>	25 ms AC 50/60 Hz 15 ms DC
<b>Safety reliability level</b>	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
<b>Operating time</b>	150 ms with change of direction for power circuit 35 ms opening for control circuit 75 ms without change of direction for power circuit 60 ms closing for control circuit
<b>Mechanical durability</b>	15 Mcycles
<b>maximum operating rate</b>	3600 cyc/h
<b>Product certifications</b>	CE UL CSA CCC EAC ASEFA ATEX Marine
<b>Standards</b>	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
<b>[Ui] rated insulation voltage</b>	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
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947-6-2
<b>Safe separation of circuit</b>	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
<b>Fixing mode</b>	Clipped (DIN rail) Screw-fixed (plate)
<b>Connections - terminals</b>	Control circuit: screw clamp terminals 1 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm <sup>2</sup> rigid Control circuit: screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 1 cable(s) 1...10 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 1 cable(s) 1...6 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 2.5...10 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1...6 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1...6 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm <sup>2</sup> flexible without cable end
<b>Tightening torque</b>	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
<b>Width</b>	45 mm
<b>Height</b>	224 mm
<b>Depth</b>	126 mm
<b>Net weight</b>	1.27 kg
<b>Compatibility code</b>	LU2B

## Environment

<b>IP degree of protection</b>	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)
<b>Protective treatment</b>	TH conforming to IEC 60068
<b>Ambient air temperature for operation</b>	-25...60 °C with LUCM -25...70 °C with LUCA, LUCB, LUCC, LUCD
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Fire resistance</b>	960 °C parts supporting live components conforming to IEC 60695-2-12 650 °C conforming to IEC 60695-2-12
<b>Operating altitude</b>	2000 m
<b>Shock resistance</b>	10 gn power poles open conforming to IEC 60068-2-27 15 gn power poles closed conforming to IEC 60068-2-27
<b>Vibration resistance</b>	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
<b>Resistance to electrostatic discharge</b>	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
<b>Non-dissipating shock wave</b>	1 kV serial mode conforming to IEC 60947-6-2 2 kV common mode conforming to IEC 60947-6-2
<b>Resistance to fast transients</b>	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
<b>Resistance to radiated fields</b>	10 V/m 3 conforming to IEC 61000-4-3
<b>Immunity to radioelectric fields</b>	10 V conforming to IEC 61000-4-6
<b>Immunity to microbreaks</b>	3 ms for control circuit
<b>Immunity to voltage dips</b>	70 % / 500 ms conforming to IEC 61000-4-11

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.5 cm
<b>Package 1 Width</b>	15.0 cm
<b>Package 1 Length</b>	25.2 cm
<b>Package 1 Weight</b>	1.293 kg
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	9
<b>Package 2 Height</b>	30.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	12.181 kg

## Contractual warranty

<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Total lifecycle Carbon footprint 28 kg CO2 eq.

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number 19d2f48a-9308-42e2-8a8a-e2be758e3b3a

REACH Regulation [REACH Declaration](#)

Halogen-free status Product contains halogen above thresholds

## Use Longer

### Lifetime extension

Repair No

## Use Again

### Repack and remanufacture

End of life manual availability [End of Life Information](#)

Take-back No

WEEE Label The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Technical Illustration

Assembly's dimensions

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