# Product data sheet

Specifications




## Standard control unit, TeSys Ultra, 0.35A to 1.4A, 3P motors, thermal magnetic protection, class 10, coil 24VAC

LUCA1XB

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Range of Product** | TeSys Ultra |
| **Product name** | TeSys Ultra |
| **Device short name** | LUCA |
| **Product or Component Type** | Standard control unit |
| **Device Application** | Motor control<br>Motor protection |
| **Product Specific Application** | Basic protection requirements for motor starters: overload and short-circuit |
| **main function available** | Protection against phase failure and phase imbalance<br>Earth fault protection<br>Protection against overload and short-circuit<br>Manual reset |
| **Product compatibility** | Power base LUB12<br>Power base LUB32<br>Power base LUB38<br>Power base LUB120<br>Power base LUB320<br>Power base LUB380<br>Reversing contactor breaker LU2B12B<br>Reversing contactor breaker LU2B32B |
| **[Ue] rated operational voltage** | 690 V AC |
| **Network frequency** | 40...60 Hz |
| **Load type** | 3-phase motor self-cooled |
| **Utilisation category** | AC-43<br>AC-44<br>AC-41 |
| **Motor power kW** | 0.25 kW 400...440 V AC 50/60 Hz |
| **rated motor current adjustment range** | 0.35…1.4 A |
| **Thermal overload class** | Class 10 40…60 Hz -13…158 °F (-25…70 °C) IEC 60947-6-2<br>Class 10 40…60 Hz -13…158 °F (-25…70 °C) UL 508 |
| **Tripping threshold** | 14.2 x Ir +/- 20 % |
| **Phase failure sensitivity** | Yes |
| **[Uc] control circuit voltage** | 24 V AC |

## Complementary

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|---|---|
| **Control circuit voltage limits** | 20...26.5 V AC 24 V in operation<br>14.5 V AC 24 V drop-out |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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|---|---|
| **Typical current consumption** | 140 mA 24 V AC I maximum while closing with LUB12<br>220 mA 24 V AC I maximum while closing with LUB32<br>220 mA 24 V AC I maximum while closing with LUB38<br>70 mA 24 V AC I rms sealed with LUB12<br>90 mA 24 V AC I rms sealed with LUB32<br>90 mA 24 V AC I rms sealed with LUB38 |
| **Heat dissipation** | 2 W control circuit with LUB12<br>3 W control circuit with LUB32<br>3 W control circuit with LUB38 |
| **Operating time** | 35 ms opening with LUB12 control circuit<br>35 ms opening with LUB32 control circuit<br>35 ms opening with LUB38 control circuit<br>70 ms closing with LUB12 control circuit<br>70 ms closing with LUB32 control circuit<br>70 ms closing with LUB38 control circuit |
| **Standards** | EN 60947-6-2<br>IEC 60947-6-2<br>UL 60947-4-1, with phase barrier<br>CSA C22.2 No 60947-4-1, with phase barrier |
| **Product Certifications** | CE<br>UL<br>CSA<br>CCC<br>EAC<br>ASEFA<br>ATEX<br>Marine |
| **[Ui] rated insulation voltage** | 690 V IEC 60947-6-2<br>600 V UL 60947-4-1<br>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<br>400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1 |
| **Fixing mode** | Plug-in (front face) |
| **Width** | 1.8 in (45 mm) |
| **Height** | 2.6 in (66 mm) |
| **Depth** | 2.4 in (60 mm) |
| **Product Weight** | 0.298 lb(US) (0.135 kg) |
| **Compatibility code** | LUCA |

# Environment

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|---|---|
| **IP degree of protection** | IP20 front panel and wired terminals IEC 60947-1<br>IP20 other faces IEC 60947-1<br>IP40 front panel outside connection zone IEC 60947-1 |
| **Protective treatment** | TH IEC 60068 |
| **Ambient air temperature for operation** | -13…158 °F (-25…70 °C) |
| **Ambient Air Temperature for Storage** | -40…185 °F (-40…85 °C) |
| **Operating altitude** | 6561.68 ft (2000 m) |
| **Fire resistance** | 1760 °F (960 °C) parts supporting live components IEC 60695-2-12<br>1202 °F (650 °C) IEC 60695-2-12 |
| **Shock resistance** | 10 gn power poles open IEC 60068-2-27<br>15 gn power poles closed IEC 60068-2-27 |
| **Vibration resistance** | 2 gn 5…300 Hz power poles open IEC 60068-2-6<br>4 gn 5…300 Hz power poles closed IEC 60068-2-6 |
| **Resistance to electrostatic discharge** | 8 kV 3 in open air IEC 61000-4-2<br>8 kV 4 on contact IEC 61000-4-2 |

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|---|---|
| **Non-dissipating shock wave** | 1 kV serial mode IEC 60947-6-2<br>2 kV common mode IEC 60947-6-2 |
| **Resistance to radiated fields** | 9.1 V/m (10 V/m) 3 IEC 61000-4-3 |
| **Resistance to fast transients** | 2 kV 3 serial link IEC 61000-4-4<br>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 |
| **Immunity to voltage dips** | 70 % / 500 ms IEC 61000-4-11 |

## Ordering and shipping details

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|---|---|
| **Category** | US10I1122397 |
| **Discount Schedule** | 0I11 |
| **GTIN** | 3389110363890 |
| **Returnability** | Yes |
| **Country of origin** | FR |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 4.06 in (10.3 cm) |
| **Package 1 Width** | 2.2 in (5.5 cm) |
| **Package 1 Length** | 3.3 in (8.5 cm) |
| **Package weight(Lbs)** | 4.2 oz (118.0 g) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 23 |
| **Package 2 Height** | 5.9 in (15.0 cm) |
| **Package 2 Width** | 11.8 in (30.0 cm) |
| **Package 2 Length** | 15.7 in (40.0 cm) |
| **Package 2 Weight** | 6.671 lb(US) (3.026 kg) |

## Contractual warranty

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|---|---|
| **Warranty (in months)** | 18 |

## 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

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|---|---|
| Total lifecycle Carbon footprint | **19 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **1 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.1 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **18 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **0.3 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** |
| SCIP Number | **801f74dc-0e56-49a3-aaeb-b34d99dcea36** |
| EU RoHS Directive | Compliant By Exemption |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| California proposition 65 | **WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov** |
| Halogen content performance | **Halogen free plastic parts product** |
| PVC free | **Yes** |

## Use Longer

### Lifetime extension

| | |
|---|---|
| Repair | **No** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **56** |
| Circularity Profile | End of Life Information |
| Take-back | **No** |

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