# Product datasheet

Specifications

Green Premium™

## Advanced control unit, TeSys Ultra, 3P, 0.35 to 1.4A, 690VAC, protection & diagnostic, class 10, 24VAC coil

LUCB1XB

## Main

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|---|---|
| **Range** | TeSys |
| **Range Of Product** | TeSys Ultra |
| **Product Name** | TeSys Ultra |
| **Device Short Name** | LUCB |
| **Product Or Component Type** | Advanced control unit |
| **Device Application** | Motor control<br>Motor protection |
| **Product Specific Application** | Basic protection and advanced functions, communication |
| **Main Function Available** | Protection against overload and short-circuit<br>Protection against phase failure and phase imbalance<br>Earth fault protection<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 - cooling: self-cooled |
| **Utilisation Category** | AC-41<br>AC-44<br>AC-43 |
| **Motor Power Kw** | 0.25 kW at 400...440 V AC 50/60 Hz |
| **Rated Motor Current Adjustment Range** | 0.35…1.4 A |
| **Thermal Overload Class** | Class 10 - frequency limit: 40…60 Hz - temperature compensation: -25…70 °C conforming to IEC 60947-6-2<br>Class 10 - frequency limit: 40…60 Hz - temperature compensation: -25…70 °C conforming to 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 for AC circuit 24 V in operation<br>14.5 V for AC circuit 24 V drop-out |

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 at 24 V AC I maximum while closing with LUB12<br>220 mA at 24 V AC I maximum while closing with LUB32<br>220 mA at 24 V AC I maximum while closing with LUB38<br>70 mA at 24 V AC I rms sealed with LUB12<br>90 mA at 24 V AC I rms sealed with LUB32<br>90 mA at 24 V AC I rms sealed with LUB38 |
| **Heat Dissipation** | 2 W for control circuit with LUB12<br>3 W for control circuit with LUB32<br>3 W for control circuit with LUB38 |
| **Operating Time** | 35 ms opening with LUB12 for control circuit<br>35 ms opening with LUB32 for control circuit<br>35 ms opening with LUB38 for control circuit<br>70 ms closing with LUB12 for control circuit<br>70 ms closing with LUB32 for control circuit<br>70 ms closing with LUB38 for control circuit |
| **Reset** | Manual reset |
| **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 conforming to IEC 60947-6-2<br>600 V conforming to UL 60947-4-1<br>600 V conforming to CSA C22.2 No 60947-4-1 |
| **[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<br>400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 |
| **Fixing Mode** | Plug-in (front face) |
| **Width** | 45 mm |
| **Height** | 66 mm |
| **Depth** | 60 mm |
| **Compatibility Code** | LUCB |

# Environment

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| **Ip Degree Of Protection** | IP20 front panel and wired terminals conforming to IEC 60947-1<br>IP20 other faces conforming to IEC 60947-1<br>IP40 front panel outside connection zone conforming to IEC 60947-1 |
| **Protective Treatment** | TH conforming to IEC 60068 |
| **Ambient Air Temperature For Operation** | -25…70 °C |
| **Ambient Air Temperature For Storage** | -40…85 °C |
| **Operating Altitude** | 2000 m |
| **Fire Resistance** | 960 °C parts supporting live components conforming to IEC 60695-2-12<br>650 °C conforming to IEC 60695-2-12 |
| **Shock Resistance** | 10 gn power poles open conforming to IEC 60068-2-27<br>15 gn power poles closed conforming to IEC 60068-2-27 |
| **Vibration Resistance** | 2 gn, 5…300 Hz, power poles open conforming to IEC 60068-2-6<br>4 gn, 5…300 Hz, power poles closed conforming to IEC 60068-2-6 |

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| **Resistance To Electrostatic Discharge** | 8 kV level 3 in open air conforming to IEC 61000-4-2<br>8 kV level 4 on contact conforming to IEC 61000-4-2 |
| **Non-Dissipating Shock Wave** | 1 kV serial mode conforming to IEC 60947-6-2<br>2 kV common mode conforming to IEC 60947-6-2 |
| **Resistance To Radiated Fields** | 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<br>4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4 |
| **Immunity To Radioelectric Fields** | 10 V conforming to IEC 61000-4-6 |
| **Immunity To Microbreaks** | 3 ms |
| **Immunity To Voltage Dips** | 70 % / 500 ms conforming to IEC 61000-4-11 |

## Packing Units

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| **Unit Type Of Package 1** | PCE |
| **Number Of Units In Package 1** | 1 |
| **Package 1 Height** | 5.4 cm |
| **Package 1 Width** | 8.5 cm |
| **Package 1 Length** | 10.3 cm |
| **Package 1 Weight** | 119.0 g |
| **Unit Type Of Package 2** | S02 |
| **Number Of Units In Package 2** | 23 |
| **Package 2 Height** | 15.0 cm |
| **Package 2 Width** | 30.0 cm |
| **Package 2 Length** | 40.0 cm |
| **Package 2 Weight** | 3.108 kg |

## Contractual warranty

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| **Warranty** | 18 months |

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

## Well-being performance

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| Mercury Free | |
| Rohs Exemption Information | Yes |
| Pvc Free | |
| Halogen Free Plastic Parts Product | |

## Certifications & Standards

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| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Compliant with Exemptions |
| **China Rohs Regulation** | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information |
| **Environmental Disclosure** | Product Environmental Profile |
| **Weee** | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| **Circularity Profile** | End of Life Information |