# Product data sheet
## Characteristics

# LUB32
Non reversing power base, TeSys Ultra, 3P, 1NO + 1NC, 32A, 690V



## Main

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|---|---|
| Range | TeSys |
| Product name | TeSys Ultra |
| Device short name | LUB |
| Product or component type | Non reversing power base |
| Device application | Motor control<br>Motor protection |
| 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 | 32 A |
| [Ie] rated operational current | 32 A at <= 440 V<br>23 A at 500 V<br>21 A at 690 V |
| Utilisation category | AC-43<br>AC-44<br>AC-41 |
| [Ics] rated service breaking capacity | 50 KA at 230 V<br>50 KA at 440 V<br>10 KA at 500 V<br>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<br>type mirror contact (1 NC) conforming to IEC 60947-1 |
| [Uc] control circuit voltage | 24 V AC 50/60 Hz<br>24 V DC<br>48...72 V AC 50/60 Hz<br>48...72 V DC<br>110...240 V AC 50/60 Hz<br>110...220 V DC |

## Complementary

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| Typical current consumption | 200 MA at 24 V DC I maximum while closing with LUCM<br>220 MA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>220 MA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>25 MA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>25 MA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>280 MA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>280 MA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>280 MA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>280 MA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>45 MA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>45 MA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>75 MA at 24 V DC I rms sealed with LUCM<br>80 MA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>90 MA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD |
| Heat dissipation | 3 W for control circuit with LUCA, LUCB, LUCC, LUCD<br>1.8 W for control circuit with LUCM |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Operating time | 35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit<br>50 ms at >= 72 V closing with LUCA, LUCB, LUCC, LUCD for control circuit<br>60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit<br>70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit<br>65 ms closing with LUCM for control circuit |
| Mechanical durability | 15 Mcycles |
| Maximum operating rate | 3600 Cyc/H |
| Product certifications | CE[RETURN]UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]ASEFA[RETURN]ATEX[ |
| 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 |
| [Ui] rated insulation voltage | 690 V conforming to IEC 60947-6-2 (pollution degree 3)<br>600 V conforming to UL 60947-4-1<br>600 V conforming to CSA C22.2 No 60947-4-1 |

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| [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 appendix N<br>400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 609 |
| Fixing mode | Clipped (DIN rail)<br>Screw-fixed (plate) |
| Connections - terminals | Control circuit: screw clamp terminals 1 cable(s) 0.34…1.5 mm² flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0.75…1.5 mm² flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0.75…1.5 mm² rigid<br>Control circuit: screw clamp terminals 2 cable(s) 0.34…1.5 mm² flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0.75…1.5 mm² flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0.75…1.5 mm² rigid<br>Power circuit: screw clamp terminals 1 cable(s) 1…10 mm² rigid<br>Power circuit: screw clamp terminals 1 cable(s) 1…6 mm² flexible with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 2.5…10 mm² flexible without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1…6 mm² flexible with cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1…6 mm² rigid<br>Power circuit: screw clamp terminals 2 cable(s) 1.5…6 mm² flexible without cable end |
| Tightening torque | Control circuit: 0.8…1.2 N.m flat screwdriver 5 mm<br>Control circuit: 0.8…1.2 N.m Philips no 1 screwdriver 5 mm<br>Power circuit: 1.9…2.5 N.m flat screwdriver 6 mm<br>Power circuit: 1.9…2.5 N.m Philips No 2 screwdriver 6 mm<br>Power circuit: 1.9…2.5 N.m pozidriv No 2 screwdriver 6 mm |
| Width | 45 Mm |
| Height | 154 Mm |
| Depth | 126 Mm |
| Net weight | 0.9 Kg |
| Compatibility code | LUB |

## Environment

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|---|---|
| IP degree of protection | IP20 conforming to IEC 60947-1 (front panel and wired terminals)<br>IP20 conforming to IEC 60947-1 (other faces)<br>IP40 conforming to IEC 60947-1 (front panel outside connection zone) |
| Protective treatment | TH conforming to IEC 60068 |
| Ambient air temperature for operation | -25…60 °C with LUCM<br>-25…70 °C with LUCA, LUCB, LUCC, LUCD |
| Ambient air temperature for storage | -40…85 °C |
| Fire resistance | 960 °C parts supporting live components conforming to IEC 60695-2-12<br>650 °C conforming to IEC 60695-2-12 |
| Operating altitude | 2000 m |
| 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 (f= 5…300 Hz) power poles open conforming to IEC 60068-2-27<br>4 gn (f= 5…300 Hz) power poles closed conforming to IEC 60068-2-27 |
| 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 24...240 V AC conforming to IEC 60947-6-2<br>1 KV serial mode 48...220 V DC conforming to IEC 60947-6-2<br>2 KV common mode 24...240 V AC conforming to IEC 60947-6-2<br>2 KV common mode 48...220 V DC conforming to IEC 60947-6-2 |
| 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 |
| Resistance to radiated fields | 10 V/M 3 conforming to IEC 61000-4-3 |
| Immunity to radioelectric fields | 10 V conforming to IEC 61000-4-6 |
| Immunity to microbreaks | 3 Ms for control circuit |
| 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 | 5.500 Cm |
| Package 1 Width | 13.800 Cm |
| Package 1 Length | 16.900 Cm |
| Package 1 Weight | 847.000 G |
| Unit Type of Package 2 | S02 |

| | |
|---|---|
| Number of Units in Package 2 | 10 |
| Package 2 Height | 15.000 Cm |
| Package 2 Width | 30.000 Cm |
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 8.740 Kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 160 |
| Package 3 Height | 75.000 Cm |
| Package 3 Width | 60.000 Cm |
| Package 3 Length | 80.000 Cm |
| Package 3 Weight | 147.840 Kg |

## Offer Sustainability

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| Recyclability potential, in % | 56 |
| Total lifecycle Carbon footprint | 29 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 7.905643470652298 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 8 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.4525068805111509 |
| Carbon footprint of the distribution phase [A4] | 0.5 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.06424103668090721 |
| Carbon footprint of the installation phase [A5] | 0.1 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 18.290275694507795 |
| REACh free of SVHC | Yes |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 18 kg CO2 eq. |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| Sustainable packaging | Yes |
| Carbon footprint of the end-of-life phase [C1 to C4] | 2.070974475313299 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 2 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 29 |
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| SCIP Number | 61f5a085-dfde-4214-b2cf-ba3cfe0c33b4 |
| REACh Regulation | Free of Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which |
| Halogen-free status | Product contains halogen above thresholds |
| PVC free | Yes |
| 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 |

## Contractual warranty

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

Product Life Status : Commercialised