

LUCA18BL

Standard control unit, TeSys U, 4.5-18A, 3P
motors, thermal magnetic protection, class 10, coil
24V DC



Main

| | |
|--------------------------------------|--|
| Range of product | TeSys U |
| Range | TeSys |
| Product name | TeSys U |
| Device short name | LUCA |
| Product or component type | Standard control unit |
| Device application | Motor control Motor protection |
| Product specific application | Basic protection requirements for motor starters: overload and short-circuit |
| Main function available | Manual reset Protection against phase failure and phase imbalance Protection against overload and short-circuit Earth fault protection |
| Product compatibility | Power base LUB32 Power base LUB38 Power base LUB320 Power base LUB380 Reversing contactor breaker LU2B32BL Reversing contactor breaker LU2B38BL |
| [Ue] rated operational voltage | 690 V AC |
| Network frequency | 40...60 Hz |
| Load type | 3-phase motor - cooling: self-cooled |
| Utilisation category | AC-41 AC-44 AC-43 |
| Motor power kW | 7.5 kW at 400...440 V AC 50/60 Hz 9 kW at 500 V AC 50/60 Hz 15 kW at 690 V AC 50/60 Hz |
| Rated motor current adjustment range | 4.5...18 A |
| Thermal overload class | Class 10 - frequency limit: 40...60 Hz - temperature compensation: -25...70 °C conforming to IEC 60947-6-2 |

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

| | |
|---|--------------------------------|
| Tripping threshold | 14.2 x I _r +/- 20 % |
| Phase failure sensitivity | Yes |
| [U _c] control circuit voltage | 24 V DC |

Complementary

| | |
|---|--|
| Control circuit voltage limits | 20...27 V for DC circuit 24 V in operation 14.5 V for DC circuit 24 V drop-out |
| Typical current consumption | 220 mA at 24 V DC I maximum while closing with LUB32 220 mA at 24 V DC I maximum while closing with LUB38 80 mA at 24 V DC I rms sealed with LUB32 80 mA at 24 V DC I rms sealed with LUB38 |
| Heat dissipation | 3 W for control circuit with LUB32 3 W for control circuit with LUB38 |
| Operating time | 35 ms opening with LUB32 for control circuit 35 ms opening with LUB38 for control circuit 70 ms closing with LUB32 for control circuit 70 ms closing with LUB38 for control circuit |
| 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 |
| Product certifications | CE UL CSA CCC EAC ASEFA ATEX Marine |
| [U _i] rated insulation voltage | 690 V conforming to IEC 60947-6-2 600 V conforming to UL 60947-4-1 600 V conforming to CSA C22.2 No 60947-4-1 |
| [U _{imp}] rated impulse withstand voltage | IEC 60947-6-2 6 kV |
| Safe separation of circuit | 400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 400 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 |
| Net weight | 0.135 kg |
| Compatibility code | LUCA |

Environment

| | |
|---------------------------------------|--|
| IP degree of protection | IP20 front panel and wired terminals conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 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 60695-2-12 650 °C conforming to IEC 60695-2-12 |
| Shock resistance | 10 gn power poles open conforming to IEC 60068-2-27 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 4 gn, 5...300 Hz, power poles closed conforming to IEC 60068-2-6 |
| Resistance to electrostatic discharge | 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 |
| 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 |

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

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 120 g |
| Package 1 Height | 5.6 cm |
| Package 1 width | 8.5 cm |
| Package 1 Length | 10.2 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 23 |
| Package 2 Weight | 3.082 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |

Offer Sustainability

| | |
|-----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| PVC free | Yes |
| Halogen content performance | Halogen free plastic parts product |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|