

LUCA05FU

Standard control unit, TeSys Ultra, 3P, 1.25 to 5A, 690VAC, thermal magnetic protection, class 10, 110 to 240VAC/DC coil



Main

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| 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 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 Protection against overload and short-circuit Manual reset Earth fault protection |
| Product compatibility | Power base LUB12 Power base LUB32 Power base LUB38 Power base LUB120 Power base LUB320 Power base LUB380 Reversing contactor breaker LU2B12FU Reversing contactor breaker LU2B32FU Reversing contactor breaker LU2B38FU |
| [Ue] rated operational voltage | 690 V AC |
| Network frequency | 40...60 Hz |
| Load type | 3-phase motor - cooling: self-cooled |
| Utilisation category | AC-44 AC-41 AC-43 |
| Motor power kW | 1.5 kW at 400...440 V AC 50/60 Hz 2.2 kW at 500 V AC 50/60 Hz 3 kW at 690 V AC 50/60 Hz |
| Rated motor current adjustment range | 1.25...5 A |
| Thermal overload class | Class 10 - frequency limit: 40...60 Hz - temperature compensation: -25...70 °C conforming to IEC 60947-6-2 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 | 110...240 V AC 110...220 V DC |

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Complementary

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| Control circuit voltage limits | 88...264 V for AC circuit 110...240 V in operation 88...242 V for DC circuit 110...220 V in operation 55 V for AC circuit 110...240 V drop-out 55 V for DC circuit 110...220 V drop-out |
| Typical current consumption | 280 mA at 110...240 V AC I maximum while closing with LUB12 280 mA at 110...240 V AC I maximum while closing with LUB32 280 mA at 110...240 V AC I maximum while closing with LUB38 280 mA at 110...220 V DC I maximum while closing with LUB12 280 mA at 110...220 V DC I maximum while closing with LUB32 280 mA at 110...220 V DC I maximum while closing with LUB38 35 mA at 110...240 V AC I rms sealed with LUB12 25 mA at 110...240 V AC I rms sealed with LUB32 25 mA at 110...240 V AC I rms sealed with LUB38 35 mA at 110...220 V DC I rms sealed with LUB12 25 mA at 110...220 V DC I rms sealed with LUB32 25 mA at 110...220 V DC I rms sealed with LUB38 |
| Heat dissipation | 2 W for control circuit with LUB12 3 W for control circuit with LUB32 3 W for control circuit with LUB38 |
| Operating time | 35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 35 ms opening with LUB38 for control circuit 50 ms closing with LUB12 for control circuit 50 ms closing with LUB32 for control circuit 50 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 |
| [Ui] 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 |
| [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 60947-1 400 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

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| 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 |

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| 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 |
| Non-dissipating shock wave | 1 kV serial mode conforming to IEC 60947-6-2 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 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 | 8.8 cm |
| Package 1 Width | 8.2 cm |
| Package 1 Length | 5.2 cm |
| Package 1 Weight | 114.0 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 | 2.97 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 368 |
| Package 3 Height | 77.0 cm |
| Package 3 Width | 80.0 cm |
| Package 3 Length | 60.0 cm |
| Package 3 Weight | 56.02 kg |

Offer Sustainability

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| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| 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

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| Warranty | 18 months |
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