

Product datasheet

Specifications



Reversing contactor, TeSys K, 3P, AC-3/AC-3e, <= 440V 16A, 1NO, 24V AC coil

LC2K1610B7

Main

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|---|--|
| Range | TeSys |
| Product name | TeSys K |
| Product or component type | Reversing contactor |
| Device short name | LC2K |
| Device application | Control |
| Contactors application | Motor control |
| Utilisation category | AC-3 AC-3e AC-4 |
| Device presentation | Preassembled with reversing power busbar |
| Poles description | 3P |
| power pole contact composition | 3 NO |
| [Ue] rated operational voltage | Power circuit: 690 V AC 50/60 Hz Signalling circuit: <= 690 V AC 50/60 Hz |
| [Ie] rated operational current | 16 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 16 A (at <60 °C) at <= 440 V AC AC-3e for power circuit |
| Motor power kW | 4 kW at 220...230 V AC 50/60 Hz 7.5 kW at 380...415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz 4 kW at 690 V AC 50/60 Hz |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 24 V AC 50/60 Hz |
| Auxiliary contact composition | 1 NO |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 20 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit |
| Irms rated making capacity | 160 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947 |
| Rated breaking capacity | 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947 |

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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|---|--|
| [Icw] rated short-time withstand current | 115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 25 A 50 °C - >= 15 min for power circuit 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit |
| Associated fuse rating | 25 A gG at <= 440 V for power circuit 25 A aM for power circuit 10 A gG for signalling circuit conforming to IEC 60947 10 A gG for signalling circuit conforming to VDE 0660 |
| Average impedance | 3 mOhm - lth 20 A 50 Hz for power circuit |
| [Ui] rated insulation voltage | Power circuit: 600 V conforming to UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-5-1 Signalling circuit: 600 V conforming to UL 508 Power circuit: 600 V conforming to CSA C22.2 No 14 Signalling circuit: 600 V conforming to CSA C22.2 No 14 |
| Electrical durability | 1.3 Mcycles 16 A AC-3 at Ue <= 440 V 1.3 Mcycles 16 A AC-3e at Ue <= 440 V |
| Interlocking type | Mechanical |
| Mounting support | Rail Plate |
| Standards | EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1 |
| Product certifications | CB Scheme CCC UL CSA EAC CE UKCA |
| Connections - terminals | Screw clamp terminals 1 cable(s) 1.5...4 mm ² solid Screw clamp terminals 1 cable(s) 0.75...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm ² solid Screw clamp terminals 2 cable(s) 0.75...4 mm ² flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm ² flexible with cable end |
| Tightening torque | 0.8...1.3 N.m - on screw clamp terminals Philips No 2 0.8...1.3 N.m - on screw clamp terminals flat Ø 6 mm 0.8...1.3 N.m - on screw clamp terminals pozidriv No 2 |
| Operating time | 10...20 ms coil energisation and NO closing 10...20 ms coil de-energisation and NO opening |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 5 Mcycles |
| Maximum operating rate | 3600 cyc/h |
| Complementary | |
| Control circuit voltage limits | Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: 0.2...0.75 Uc (at <50 °C) |
| Inrush power in VA | 30 VA (at 20 °C) |
| Hold-in power consumption in VA | 4.5 VA (at 20 °C) |

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|------------------------------|----------------------------------|
| Heat dissipation | 1.3 W |
| Auxiliary contacts type | type instantaneous 1 NO |
| Signalling circuit frequency | <= 400 Hz |
| Minimum switching current | 5 mA for signalling circuit |
| Minimum switching voltage | 17 V for signalling circuit |
| Non overlap distance | 0.5 mm |
| Insulation resistance | > 10 MOhm for signalling circuit |

Environment

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|---------------------------------------|---|
| IP degree of protection | IP20 conforming to VDE 0106 |
| Protective treatment | TC conforming to IEC 60068 TC conforming to DIN 50016 |
| Ambient air temperature for operation | -25...50 °C |
| Ambient air temperature for storage | -50...80 °C |
| Operating altitude | 2000 m without derating |
| Flame retardance | V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102 |
| Mechanical robustness | Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 |
| Height | 58 mm |
| Width | 90 mm |
| Depth | 57 mm |
| Net weight | 0.39 kg |

Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.000 cm |
| Package 1 Width | 6.500 cm |
| Package 1 Length | 9.000 cm |
| Package 1 Weight | 366.000 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 25 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 9.394 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 400 |

| | |
|-------------------------|------------|
| Package 3 Height | 75.000 cm |
| Package 3 Width | 60.000 cm |
| Package 3 Length | 80.000 cm |
| Package 3 Weight | 158.304 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

| | |
|--|----------------|
| Total lifecycle Carbon footprint | 136 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 2 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.2 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 133 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.6 kg CO2 eq. |

Use Better



Materials and Substances

| | |
|--|---|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| EU RoHS Directive | Compliant |
| REACH Regulation | Free of Substances of Very High Concern above the threshold |

Use Longer




Lifetime extension

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

Use Again



Repack and remanufacture

| | |
|---------------------------------|---|
| Recyclability potential, in % | 64 |
| 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 never end up in rubbish bins |

Offer Marketing Illustration

Product benefits / Features

TeSys K Reversing contactors



Flexibility

Designed with control voltages, low consumption, minimal noise levels, robust power connections, and a range of auxiliaries, and application-specific variants to meet diverse needs.



Safety

It provide ultimate protection with IP20 finger-safe terminals, built-in NO/NC auxiliary contacts, and IEC-certified mirror and mechanically linked contacts for safety applications.



Compact size

Up to 50% less volume is captured in your panels. One of the smallest contactors offerings in the market



Offer Marketing Illustration

Product benefits / Features

TeSys K Technical Benefits



- Preassembled with reversing power busbar
- Built-in in all 3 pole versions: 1NO or 1NC
- Up to 4 more by add-on blocks
- Wide variety of coil voltage and terminal connection options
- Delivers strong performance for its compact size and promises seamless integration in all applications and use
- Pre-wired power circuit connections as standard on screw clamp versions.
- It Features specific versions for railway (TeSys S207) and electrodomestic (TeSys S335) applications

Technical Illustration

Assembly's dimensions

