

Product data sheet

Specifications



Contactor, TeSys K, 3P, 16A ,AC-3/
AC-3e, <=440V, aux 1NO, coil 24V
50Hz

LC1K1610B5

Main

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| Range | TeSys |
| Product Or Component Type | Contactor |
| Device Short Name | LC1K |
| Device Application | Control |
| Contactor Application | Motor control |

Complementary

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| Utilisation Category | AC-3 AC-3e |
| Poles Description | 3P |
| Power Pole Contact Composition | 3 NO |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC <= 400 Hz Signalling circuit: <= 690 V AC <= 400 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 |
| Control Circuit Type | AC at 50 Hz |
| [Uc] Control Circuit Voltage | 24 V AC 50 Hz |
| Motor Power Kw | 4 kW at 220...230 V AC 50/60 Hz AC-3 7.5 kW at 380...415 V AC 50/60 Hz AC-3 5.5 kW at 440 V AC 50/60 Hz AC-3 4 kW at 690 V AC 50/60 Hz AC-3 4 kW at 220...230 V AC 50/60 Hz AC-3e 7.5 kW at 380...415 V AC 50/60 Hz AC-3e 5.5 kW at 440 V AC 50/60 Hz AC-3e 4 kW at 690 V AC 50/60 Hz AC-3e |
| 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: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V conforming to UL 60947-4-1 Power circuit: 600 V conforming to CSA C22.2 No 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 600 V conforming to UL 60947-4-1 Signalling circuit: 600 V conforming to CSA C22.2 No 60947-4-1 |
| Insulation Resistance | > 10 MOhm for signalling circuit |
| Inrush Power In Va | 30 VA (at 20 °C) |
| Hold-In Power Consumption In Va | 4.5 VA (at 20 °C) |
| Heat Dissipation | 1.3 W |
| Control Circuit Voltage Limits | Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) |
| Connections - Terminals | Screw clamp terminals 1 cable(s) 1.5...4 mm²solid Screw clamp terminals 1 cable(s) 0.75...4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm²solid Screw clamp terminals 2 cable(s) 0.75...4 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm²flexible with cable end |
| Maximum Operating Rate | 3600 cyc/h |
| 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 |
| Mounting Support | Plate Rail |
| 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 de-energisation and NO opening 10...20 ms coil energisation and NO closing |
| 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 |
| Non Overlap Distance | 0.5 mm |
| Mechanical Durability | 10 Mcycles |
| Electrical Durability | 1.3 Mcycles 16 A AC-3 at Ue <= 440 V 1.3 Mcycles 16 A AC-3e at Ue <= 440 V |

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| 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 | 45 mm |
| Depth | 57 mm |
| Net Weight | 0.18 kg |

Environment

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|---------------------------------------|---|
| 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 |
| Ip Degree Of Protection | IP2X 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 |

Packing Units

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| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 4.500 cm |
| Package 1 Width | 6.000 cm |
| Package 1 Length | 6.500 cm |
| Package 1 Weight | 180.300 g |
| Unit Type Of Package 2 | S02 |
| Number Of Units In Package 2 | 50 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 9.274 kg |
| Unit Type Of Package 3 | P06 |
| Number Of Units In Package 3 | 800 |
| Package 3 Height | 75.000 cm |

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| Package 3 Width | 80.000 cm |
| Package 3 Length | 60.000 cm |
| Package 3 Weight | 156.376 kg |

Contractual warranty

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| Warranty | 18 months |
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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-CO₂ 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

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information Yes

Certifications & Standards

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|---------------------------|---|
| Reach Regulation | REACH Declaration |
| Eu Rohs Directive | Compliant EU RoHS Declaration |
| China Rohs Regulation | China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope) |
| 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 |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |