

Product data sheet

Characteristics

LC1K0601B7

TeSys K contactor - 3P - AC-3 \leq 440 V 6 A - 1 NC aux. - 24 V AC coil



Main

| | |
|---------------------------|---------------|
| Range | TeSys |
| Product or component type | Contacteur |
| Product name | TeSys K |
| Device short name | LC1K |
| Device application | Control |
| Contacteur application | Motor control |

Complementary

| | |
|---|--|
| Utilisation category | AC-4 AC-3 |
| Poles description | 3P |
| Power pole contact composition | 3 NO |
| [Ue] rated operational voltage | Power circuit: 690 V AC 50/60 Hz Signalling circuit: \leq 690 V AC 50/60 Hz |
| [Ie] rated operational current | 6 A at \leq 440 V AC AC-3 for power circuit |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 24 V AC 50/60 Hz |
| Motor power kW | 1.5 KW at 220...230 V AC 50/60 Hz AC-3 2.2 KW at 380...415 V AC 50/60 Hz AC-3 3 KW at 440 V AC 50/60 Hz AC-3 3 KW at 480 V AC 50/60 Hz AC-3 3 KW at 500...600 V AC 50/60 Hz AC-3 3 KW at 660...690 V AC 50/60 Hz AC-3 1.5 kW at 400 V AC 50/60 Hz AC-4 |
| Auxiliary contact composition | 1 NC |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 20 A (at 50 °C) for power circuit 10 A (at 50 °C) for signalling circuit |
| Irms rated making capacity | 110 A AC for power circuit conforming to NF C 63-110 110 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 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| | |
|--|---|
| [Icw] rated short-time withstand current | 90 A 50 °C - 1 s for power circuit 85 A 50 °C - 5 s for power circuit 80 A 50 °C - 10 s for power circuit 60 A 50 °C - 30 s for power circuit 45 A 50 °C - 1 min for power circuit 40 A 50 °C - 3 min for power circuit 20 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 |
| 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 U _c (at <50 °C) Drop-out: 0.2...0.75 U _c (at <50 °C) |
| 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 |
| Maximum operating rate | 3600 cyc/h |
| Auxiliary contacts type | Type instantaneous 1 NC |
| 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 | 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm |
| 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 6 A AC-3 at U _e <= 440 V |
| 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

| | |
|-------------------------------------|--|
| Standards | BS 5424 IEC 60947 NF C 63-110 VDE 0660 |
| Product certifications | UL CSA |
| 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 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 |

Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 178.933 g |
| Package 1 Height | 4.8 cm |
| Package 1 width | 6.2 cm |
| Package 1 Length | 6.5 cm |
| Unit Type of Package 2 | P06 |
| Number of Units in Package 2 | 400 |
| Package 2 Weight | 83.34 kg |
| Package 2 Height | 45 cm |
| Package 2 width | 80 cm |
| Package 2 Length | 60 cm |
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 50 |
| Package 3 Weight | 9.207 kg |
| Package 3 Height | 15 cm |
| Package 3 width | 30 cm |
| Package 3 Length | 40 cm |

Offer Sustainability

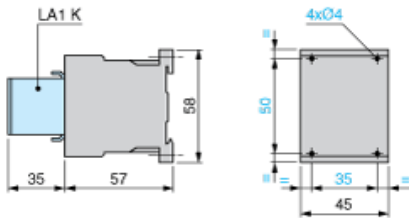
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| 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 |

Contractual warranty

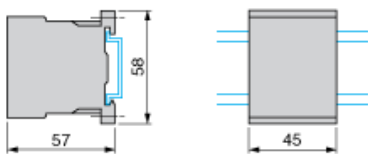
| | |
|----------|-----------|
| Warranty | 12 months |
|----------|-----------|

Dimensions

Contactors LC1 K, LP1 K, LP4 K: Mounting on Panel

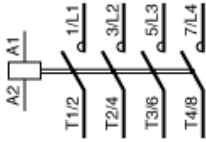


Contactors LC1 K, LP1 K, LP4 K: Mounting on Rail AM1 DP200 or AM1 DE200 (35 mm)



Wiring

3-Pole Contactors: 3P + N/O



3-Pole Contactors: 3P + N/C

