

Product data sheet

Specifications



contactor, TeSys K, 4P(4NO), AC-1
≤440V 20A , 230...240V AC coil

LC1K09004U7

Main

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|---------------------------|----------------|
| Range | TeSys |
| Product or component type | Contactor |
| Product name | TeSys K |
| Device short name | LC1K |
| Device application | Control |
| Contactor application | Resistive load |

Complementary

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|---|---|
| Utilisation category | AC-1 |
| Poles description | 4P |
| Power pole contact composition | 4 NO |
| [Ue] rated operational voltage | Power circuit: 690 V AC 50/60 Hz |
| [Ie] rated operational current | 20 A (at <50 °C) at ≤ 440 V AC AC-1 for power circuit 16 A (at <70 °C) at 690 V AC AC-1 for power circuit |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 230...240 V AC 50/60 Hz |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 20 A (at 50 °C) for power 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 |
| 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 |
| [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 |
| Associated fuse rating | 25 A gG at ≤ 440 V for power circuit 25 A aM for power circuit |

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| 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 Power circuit: 600 V conforming to CSA C22.2 No 14 |
| 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: 0.85...1.1 Uc (at <50 °C) Drop-out: 0.2...0.75 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 |
| Signalling circuit frequency | <= 400 Hz |
| Mounting support | Rail Plate |
| 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 |
| Mechanical durability | 10 Mcycles |
| Electrical durability | 0.18 Mcycles 20 A AC-1 at Ue <= 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 | 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 storage | -50...80 °C |
| Operating altitude | 2000 m without derating |

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| Flame retardance | V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102 |
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Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.700 cm |
| Package 1 Width | 6.200 cm |
| Package 1 Length | 6.600 cm |
| Package 1 Weight | 183.000 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 | 9.355 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 800 |
| Package 3 Height | 75.000 cm |
| Package 3 Width | 80.000 cm |
| Package 3 Length | 60.000 cm |
| Package 3 Weight | 158.180 kg |

Offer Sustainability

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|----------------------------|---|
| 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 |
| China RoHS Regulation | China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope) |
| 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 |
| 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 |

Contractual warranty

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| Warranty | 18 months |
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Recommended replacement(s)