

Product datasheet

Specifications



TeSys LC1K Contactor, 3P, AC-3/ AC-3e,440V 9A, 1NO aux, 220...230V AC coil

LC1K09103M7

Main

| | |
|---------------------------|---------------------------------|
| Range | TeSys |
| Product or component type | Contactor |
| Device application | Control |
| Contactor application | Motor control Resistive load |

Complementary

| | |
|---|---|
| Utilisation category | AC-3 AC-3e AC-1 AC-4 |
| 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 | 9 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 9 A (at <60 °C) at ≤ 440 V AC AC-3e for power circuit 20 A (at <60 °C) at ≤ 690 V AC AC-1 for power circuit |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 220...230 V AC 50/60 Hz |
| Motor power kW | 2.2 kW at 220...230 V AC 50/60 Hz AC-3 4 kW at 380...415 V AC 50/60 Hz AC-3 4 kW at 440/690 V AC 50/60 Hz AC-3 2.2 kW at 220...230 V AC 50/60 Hz AC-3e 4 kW at 380...415 V AC 50/60 Hz AC-3e 4 kW at 440/690 V AC 50/60 Hz AC-3e 2.2 kW at 220...230 V AC 50/60 Hz AC-4 4 kW at 380...415 V AC 50/60 Hz AC-4 4 kW at 440/690 V AC 50/60 Hz AC-4 |
| Auxiliary contact composition | 1 NO |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overtoltage category | III |
| [Ith] conventional free air thermal current | 16 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit |
| Irms rated making capacity | 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 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 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 70 A at 660...690 V conforming to IEC 60947 |

| | |
|--|---|
| [I_{cw}] 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 16 A 50 Hz for power circuit |
| 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: >= 0.20 U _c (at <50 °C) |
| Connections - terminals | Spring terminals 1 cable(s) 0.75...1.5 mm ² solid Spring terminals 1 cable(s) 0.75...1.5 mm ² flexible without cable end Spring terminals 2 cable(s) 0.75...1.5 mm ² flexible without cable end |
| Maximum operating rate | 3600 cyc/h |
| Coil technology | Without built-in suppressor module |
| 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 |
| 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 9 A AC-3 at U _e <= 440 V 1.3 Mcycles 9 A AC-3e at U _e <= 440 V 0.16 Mcycles 20 A AC-1 at U _e <= 690 V 0.02 Mcycles 54 A AC-4 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 |

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 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ |
| Product certifications | CB Scheme CCC UL CSA EAC CE UKCA |
| Protective treatment | TC conforming to IEC 60068 TC conforming to DIN 50016 |
| 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 Height | 4.800 cm |
| Package 1 Width | 6.200 cm |
| Package 1 Length | 6.900 cm |
| Package 1 Weight | 182.000 g |

Contractual warranty

| | |
|-----------------------------|----|
| 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 | 99 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 0.9 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.4 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 98 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.3 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |

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 % | 63 |
| 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

Technical Benefits



- Built-in in all 3 pole versions: 1NO or 1NC
- Up to 4 more by add-on blocks
- Up to 16 A for motor control (AC3/ AC3E) and 20A for resistive load control (AC1)
- Available as single contactors, star-delta, and reversing combos, with a wealth of options and accessories
- Control Options:
 - AC: 24 to 660/690 V, standard or low-noise versions
 - DC: 12 to 250V, standard or low consumption (1.8 W) versions
- Thermal protection relays
- It Features specific versions for railway (TeSys S207) and electrodomeestic (TeSys S335) applications

Offer Marketing Illustration

Product benefits / Features

TeSys K 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



Technical Illustration

Assembly's dimensions

