

# TeSys K contactor - 4P (2 NO + 2 NC) - AC-1 <= 440 V 20 A - 120 V AC coil

LC1K09008G7

#### Main

| Range                     | TeSys          |
|---------------------------|----------------|
| Product or component type | Contactor      |
| 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              | 2 NO + 2 NC  |  |
| [Ue] rated operational voltage              | Power circuit: <= 690 V AC <= 400 Hz<br>Signalling circuit: <= 690 V AC <= 400 Hz  |  |
| [le] rated operational current              | 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                | 120 V AC 50/60 Hz  |  |
| [Uimp] rated impulse withstand voltage      | 8 kV   |  |
| Overvoltage category                        | III  |  |
| [lth] conventional free air thermal current | 20 A (at 60 °C) for power circuit<br>10 A (at 50 °C) for signalling circuit  |  |
| Irms rated making capacity                  | 110 A AC for power circuit conforming to IEC 60947   |  |
| Rated breaking capacity                     | 110 A at 220230 V conforming to IEC 60947 110 A at 380400 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 660690 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<br>25 A aM for power circuit   |  |
| Average impedance                           | 3 mOhm - Ith 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: 0.81.15 Uc (at <50 °C)<br>Drop-out: >= 0.20 Uc (at <50 °C)  |
| Connections - terminals           | Screw clamp terminals 1 cable(s) 1.54 mm²solid  Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end  Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end  Screw clamp terminals 2 cable(s) 1.54 mm²solid  Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end  Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end   |
| Maximum operating rate 3600 cyc/h |  |
| Signalling circuit frequency      | <= 400 Hz  |
| Mounting support                  | Rail<br>Plate  |
| Tightening torque                 | 0.81.3 N.m - on screw clamp terminals Philips No 2 0.81.3 N.m - on screw clamp terminals flat Ø 6 mm 0.81.3 N.m - on screw clamp terminals pozidriv No 2   |
| Operating time                    | 1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing 1525 ms coil de-energisation and NC closing 515 ms coil energisation and NC opening   |
| Safety reliability level          | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| Mechanical durability             | 10 Mcycles   |
| Electrical durability             | 0.16 Mcycles 20 A AC-1 at Ue <= 690 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 60068-2-2 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-2 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 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<br>GB/T 14048.4<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1<br>IEC 60335-1:Clause 30.2<br>IEC 60335-2-40:Annex JJ<br>UL 60335-2-40:Annex JJ |
|-------------------------|---|
| Product certifications  | CB Scheme CCC UL CSA EAC CE   |
| 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 | -5080 °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 Height             | 4.600 cm  |
| Package 1 Width              | 6.000 cm  |
| Package 1 Length             | 6.600 cm  |
| Package 1 Weight             | 178.000 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             | 9.246 kg  |

## **Contractual warranty**

Warranty 18 months

# **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.

How this information helps you >

| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | 91                            |
|---|-------------------------------|
| Environmental Disclosure                              | Product Environmental Profile |

#### **Use Better**

| Packaging made with recycled cardboard | Yes                    |
|--|------------------------|
| Packaging without single use plastic   | Yes                    |
| EU RoHS Directive                      | Compliant              |
| REACh Regulation                       | REACh Declaration      |
| China RoHS Regulation                  | China RoHS declaration |

## **Use Again**

| ○ Repack and remanufacture |   |
|----------------------------|---|
| 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 |

Take-back No