# Product data sheet

Specifications




## Contactor, TeSys K, 3P, AC-3, lt or eq to 440V, 9A, 1 NO aux, 24VDC coil

LP1K0910BD3

**Product availability: Stock - Normally stocked in distribution facility**

## Main

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|---|---|
| **Range** | TeSys |
| **Product or Component Type** | Contactor |
| **Device short name** | LP1K |
| **Contactor application** | Resistive load<br>Motor control |

## Complementary

| | |
|---|---|
| **Utilisation category** | AC-3<br>AC-3e<br>AC-1<br>AC-4 |
| **Poles description** | 3P |
| **power pole contact composition** | 3 NO |
| **[Ue] rated operational voltage** | Power circuit <= 690 V AC <= 400 Hz<br>Signalling circuit <= 690 V AC <= 400 Hz |
| **[Ie] rated operational current** | 9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit<br>20 A (at <140 °F (60 °C)) at <= 690 V AC AC-1 for power circuit |
| **Control circuit type** | DC standard |
| **[Uc] control circuit voltage** | 24 V DC |
| **Motor power kW** | 2.2 kW 220...230 V AC 50/60 Hz AC-3<br>4 kW 380...415 V AC 50/60 Hz AC-3<br>4 kW 440/690 V AC 50/60 Hz AC-3<br>2.2 kW 220...230 V AC 50/60 Hz AC-3e<br>4 kW 380...415 V AC 50/60 Hz AC-3e<br>4 kW 440/690 V AC 50/60 Hz AC-3e<br>2.2 kW 220...230 V AC 50/60 Hz AC-4<br>4 kW 380...415 V AC 50/60 Hz AC-4<br>4 kW 440/690 V AC 50/60 Hz AC-4 |
| **Auxiliary contact composition** | 1 NO |
| **[Uimp] rated impulse withstand voltage** | 8 kV |
| **Overvoltage category** | III |
| **[Ith] conventional free air thermal current** | 20 A (at 140 °F (60 °C)) for power circuit<br>10 A (at 122 °F (50 °C)) for signalling circuit |
| **Irms rated making capacity** | 110 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947 |
| **Rated breaking capacity** | 110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>110 A at 415 V conforming to IEC 60947<br>110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>70 A at 660...690 V conforming to IEC 60947 |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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** | 90 A 122 °F (50 °C) - 1 s for power circuit<br>85 A 122 °F (50 °C) - 5 s for power circuit<br>80 A 122 °F (50 °C) - 10 s for power circuit<br>60 A 122 °F (50 °C) - 30 s for power circuit<br>45 A 122 °F (50 °C) - 1 min for power circuit<br>40 A 122 °F (50 °C) - 3 min for power circuit<br>20 A 122 °F (50 °C) - >= 15 min for power circuit<br>80 A - 1 s for signalling circuit<br>90 A - 500 ms for signalling circuit<br>110 A - 100 ms for signalling circuit |
| **Associated fuse rating** | 25 A gG at <= 440 V for power circuit<br>25 A aM for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947<br>10 A gG for signalling circuit conforming to VDE 0660 |
| **Average impedance** | 3 mOhm - Ith 20 A 50 Hz for power circuit |
| **[Ui] rated insulation voltage** | Power circuit 600 V UL 508<br>Power circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-5-1<br>Signalling circuit 600 V UL 508<br>Power circuit 600 V CSA C22.2 No 14<br>Signalling circuit 600 V CSA C22.2 No 14 |
| **Insulation resistance** | > 10 MOhm for signalling circuit |
| **Inrush power in W** | 3 W 68 °F (20 °C)) |
| **Hold-in power consumption in W** | 3 W 68 °F (20 °C) |
| **Heat dissipation** | 1.3 W |
| **Control circuit voltage limits** | Operational: 0.8...1.15 Uc (at <122 °F (50 °C))<br>Drop-out: >= 0.10 Uc (at <122 °F (50 °C)) |
| **Connections - terminals** | screw clamp terminals 1 0.002…0.006 in² (1.5…4 mm²)solid<br>screw clamp terminals 1 0.001…0.006 in² (0.75…4 mm²)flexible without cable end<br>screw clamp terminals 1 0.0005…0.004 in² (0.34…2.5 mm²)flexible with cable end<br>screw clamp terminals 2 0.002…0.006 in² (1.5…4 mm²)solid<br>screw clamp terminals 2 0.001…0.006 in² (0.75…4 mm²)flexible without cable end<br>screw clamp terminals 2 0.0005…0.002 in² (0.34…1.5 mm²)flexible with cable end<br>Power circuit screw clamp terminals 2 0.002 in² (1.5 mm²)flexible with cable end |
| **Maximum operating rate** | 3600 cyc/h |
| **Coil technology** | With integral suppression device |
| **Auxiliary contacts type** | Instantaneous 1 NO |
| **Minimum switching current** | 5 mA for signalling circuit |
| **Minimum switching voltage** | 17 V for signalling circuit |
| **Mounting Support** | Plate<br>Rail |
| **Tightening torque** | 7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals Philips No 2<br>7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals flat Ø 6 mm<br>7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals pozidriv No 2 |
| **Operating time** | 30...40 ms coil energisation and NO closing<br>10 ms coil de-energisation and NO opening |
| **Safety reliability level** | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| **Mechanical durability** | 10 Mcycles |
| **Electrical durability** | 1.3 Mcycles 9 A AC-3 <= 440 V<br>1.3 Mcycles 9 A AC-3e <= 440 V<br>0.16 Mcycles 20 A AC-1 <= 690 V<br>0.02 Mcycles 54 A AC-4 <= 440 V |
| **Height** | 2.3 in (58 mm) |
| **Width** | 1.8 in (45 mm) |
| **Depth** | 2.2 in (57 mm) |

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| **Net Weight** | 0.496 lb(US) (0.225 kg) |

## Environment

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|---|---|
| **Standards** | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>UL 60947-5-1<br>CSA C22.2 No 60947-4-1<br>CSA C22.2 No 60947-5-1<br>GB/T 14048.4 |
| **Product Certifications** | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA |
| **IP degree of protection** | IP2X |
| **Ambient air temperature for operation** | -13…122 °F (-25…50 °C) |
| **Ambient Air Temperature for Storage** | -58…176 °F (-50…80 °C) |
| **Operating altitude** | 6561.68 ft (2000 m) without derating |
| **Flame retardance** | V1 conforming to UL 94<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102 |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US1CTR221256 |
| **Discount Schedule** | CTR2 |
| **GTIN** | 3389110428513 |
| **Returnability** | Yes |
| **Country of origin** | ID |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 2.598 in (6.600 cm) |
| **Package 1 Width** | 1.890 in (4.800 cm) |
| **Package 1 Length** | 2.441 in (6.200 cm) |
| **Package weight(Lbs)** | 7.901 oz (224.000 g) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 40 |
| **Package 2 Height** | 5.906 in (15.000 cm) |
| **Package 2 Width** | 11.811 in (30.000 cm) |
| **Package 2 Length** | 15.748 in (40.000 cm) |
| **Package 2 Weight** | 20.620 lb(US) (9.353 kg) |
| **Unit Type of Package 3** | P06 |
| **Number of Units in Package 3** | 320 |
| **Package 3 Height** | 17.717 in (45.000 cm) |

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|---|---|
| **Package 3 Width** | 23.622 in (60.000 cm) |
| **Package 3 Length** | 31.496 in (80.000 cm) |
| **Package 3 Weight** | 182.675 lb(US) (82.860 kg) |

## Contractual warranty

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|---|---|
| **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

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|---|---|
| Total lifecycle Carbon footprint | **119 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **1 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] | **117 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 |
| 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 and/or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **63** |
| Circularity Profile | 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.** |