

# Product datasheet

Specifications



## TeSys K reversing contactor , 3P , AC-3 <= 440 V 9 A , 1 NO , 12 V DC coil

LP2K0910JD

⚠ Discontinued on: 1 Nov 2020

⚠ Discontinued

### Main

|                                             |                                                                                                                                                                                                      |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                |
| Product name                                | TeSys K                                                                                                                                                                                              |
| Product or component type                   | Reversing contactor                                                                                                                                                                                  |
| Device short name                           | LP2K                                                                                                                                                                                                 |
| Device application                          | Control                                                                                                                                                                                              |
| Contactor application                       | Motor control<br>Resistive load                                                                                                                                                                      |
| Utilisation category                        | AC-3<br>AC-4<br>AC-1                                                                                                                                                                                 |
| Device presentation                         | Preassembled with reversing power busbar                                                                                                                                                             |
| Poles description                           | 3P                                                                                                                                                                                                   |
| power pole contact composition              | 3 NO                                                                                                                                                                                                 |
| [Ue] rated operational voltage              | Power circuit: 690 V AC 50/60 Hz<br>Signalling 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<br>16 A (at <70 °C) at 690 V AC AC-1 for power circuit<br>9 A at <= 440 V AC AC-3 for power circuit                                           |
| Motor power kW                              | 2.2 kW at 220...230 V AC 50/60 Hz<br>4 kW at 380...415 V AC 50/60 Hz<br>4 kW at 440 V AC 50/60 Hz<br>4 kW at 480 V AC 50/60 Hz<br>4 kW at 500...600 V AC 50/60 Hz<br>4 kW at 660...690 V AC 50/60 Hz |
| Control circuit type                        | DC standard                                                                                                                                                                                          |
| [Uc] control circuit voltage                | 12 V DC                                                                                                                                                                                              |
| Auxiliary contact composition               | 1 NO                                                                                                                                                                                                 |
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                                                                 |
| Overvoltage category                        | III                                                                                                                                                                                                  |
| [Ith] conventional free air thermal current | 20 A (at 50 °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 NF C 63-110<br>110 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947                                |

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

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated breaking capacity                  | 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>110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>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<br>85 A 50 °C - 5 s for power circuit<br>80 A 50 °C - 10 s for power circuit<br>60 A 50 °C - 30 s for power circuit<br>45 A 50 °C - 1 min for power circuit<br>40 A 50 °C - 3 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<br>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<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 conforming to UL 508<br>Power circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-5-1<br>Signalling circuit: 600 V conforming to UL 508<br>Power circuit: 600 V conforming to CSA C22.2 No 14<br>Signalling circuit: 600 V conforming to CSA C22.2 No 14                               |
| Electrical durability                    | 0.18 Mcycles 20 A AC-1 at Ue <= 440 V<br>1.3 Mcycles 9 A AC-3 at Ue <= 440 V                                                                                                                                                                                                                                                                                                                                     |
| Interlocking type                        | Mechanical                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mounting support                         | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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                                                                                                                                                                                                                                                                                                                      |
| Product certifications                   | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                                                                                                                                                                                                                                                               |
| Connections - terminals                  | Screw clamp terminals 1 cable(s) 1.5...4 mm²solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm²flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34...2.5 mm²flexible with cable end<br>Screw clamp terminals 2 cable(s) 1.5...4 mm²solid<br>Screw clamp terminals 2 cable(s) 0.75...4 mm²flexible without cable end<br>Screw clamp terminals 2 cable(s) 0.34...1.5 mm²flexible with cable end |
| Tightening torque                        | 0.8...1.3 N.m - on screw clamp terminals Philips No 2<br>0.8...1.3 N.m - on screw clamp terminals flat Ø 6 mm                                                                                                                                                                                                                                                                                                    |
| 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 conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                             |
| Mechanical durability                    | 5 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maximum operating rate                   | 3600 cyc/h                                                                                                                                                                                                                                                                                                                                                                                                       |

## Complementary

|                                |                                                                               |
|--------------------------------|-------------------------------------------------------------------------------|
| Control circuit voltage limits | Operational: 0.8...1.15 Uc (at <50 °C)<br>Drop-out: 0.1...0.75 Uc (at <50 °C) |
| Inrush power in W              | 3 W (at 20 °C)                                                                |
| Hold-in power consumption in W | 3 W at 20 °C                                                                  |
| Heat dissipation               | 3 W                                                                           |
| Auxiliary contacts type        | type instantaneous 1 NO                                                       |
| Minimum switching current      | 5 mA for signalling circuit                                                   |
| Minimum switching voltage      | 17 V for signalling circuit                                                   |
| Non overlap distance           | 0.5 mm                                                                        |
| Insulation resistance          | > 10 MOhm for signalling circuit                                              |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection               | IP20 conforming to VDE 0106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protective treatment                  | TC conforming to IEC 60068<br>TC conforming to DIN 50016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ambient air temperature for operation | -25...50 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Ambient air temperature for storage   | -50...80 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Operating altitude                    | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mechanical robustness                 | Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Y axis: 6 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on X axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 |
| Height                                | 58 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Width                                 | 90 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Depth                                 | 57 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Net weight                            | 0.48 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Packing Units

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Height             | 6.5 cm |
| Package 1 Width              | 9.5 cm |
| Package 1 Length             | 6 cm   |
| Package 1 Weight             | 452 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

Environmental Disclosure

[Product Environmental Profile](#)

## Use Better



### Materials and Substances

[EU RoHS Directive](#)

Compliant

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins