

# Product data sheet

Specifications



## Changeover contactor, TeSys K, 4P, AC-1, lt or eq to 440V 10A, 72VDC coil

LP2K090045SD

! Discontinued

### Main

|                                             |                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                                                                                                                                                             |
| Product name                                | TeSys K                                                                                                                                                                                                                                                                                                                                           |
| Product or Component Type                   | Changeover contactor                                                                                                                                                                                                                                                                                                                              |
| Device short name                           | LP2K                                                                                                                                                                                                                                                                                                                                              |
| Device Application                          | Control                                                                                                                                                                                                                                                                                                                                           |
| Contactor application                       | Resistive load                                                                                                                                                                                                                                                                                                                                    |
| Utilisation category                        | AC-1                                                                                                                                                                                                                                                                                                                                              |
| Device presentation                         | Preassembled with reversing power busbar                                                                                                                                                                                                                                                                                                          |
| 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 <122 °F (50 °C)) at <= 440 V AC AC-1 for power circuit<br>16 A (at <158 °F (70 °C)) at 690 V AC AC-1 for power circuit                                                                                                                                                                                                                   |
| Control circuit type                        | DC standard                                                                                                                                                                                                                                                                                                                                       |
| [Uc] control circuit voltage                | 72 V DC                                                                                                                                                                                                                                                                                                                                           |
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                                                                                                                                                                                                              |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                                                                               |
| [Ith] conventional free air thermal current | 20 A (at 122 °F (50 °C)) for power 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                                                                                                                                                                                                                                        |
| 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 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 |
| 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                                                                                                                                                                                                                                                                                                         |

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

|                               |                                                                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage | Power circuit 600 V UL 508<br>Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V CSA C22.2 No 14                                   |
| Electrical durability         | 0.18 Mcycles 20 A AC-1 <= 440 V                                                                                                          |
| Interlocking type             | Mechanical                                                                                                                               |
| Mounting Support              | Plate<br>Rail                                                                                                                            |
| Standards                     | IEC 60947<br>BS 5424<br>VDE 0660<br>NF C 63-110                                                                                          |
| Product Certifications        | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                       |
| Connections - terminals       | solder pins 1.5 x 0.9 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 EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load 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 <122 °F (50 °C))<br>Drop-out: 0.1...0.75 Uc (at <122 °F (50 °C)) |
| Inrush power in W              | 3 W 68 °F (20 °C))                                                                              |
| Hold-in power consumption in W | 3 W 68 °F (20 °C)                                                                               |
| Heat dissipation               | 3 W                                                                                             |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection               | IP20 VDE 0106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protective treatment                  | TC IEC 60068<br>TC DIN 50016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mechanical robustness                 | Shocks contactor closed, on Z axis15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Z axis10 Gn for 11 ms IEC 60068-2-27<br>Vibrations contactor closed4 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations contactor opened2 Gn, 5...300 Hz IEC 60068-2-6<br>Shocks contactor opened, on X axis10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Y axis6 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on X axis15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Y axis10 Gn for 11 ms IEC 60068-2-27 |
| Height                                | 2.3 in (58 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Width                                 | 3.5 in (90 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|            |                       |
|------------|-----------------------|
| Depth      | 2.2 in (57 mm)        |
| Net Weight | 1.06 lb(US) (0.48 kg) |

## Ordering and shipping details

|                   |                              |
|-------------------|------------------------------|
| Category          | 22322-CTR,K-LINE,DC,OPEN,REV |
| Discount Schedule | I12                          |
| GTIN              | 3389110498011                |
| Returnability     | No                           |

## Packing Units

|                        |     |
|------------------------|-----|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg.  | 1   |

## 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 >](#)

### 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. |