

# Product data sheet

Specifications



## TeSys K reversing contactor , 3P , AC-3 <= 440 V 9 A , 1 NO , 110 V AC coil

LC2K09107F72

⚠ Discontinued on: Aug 30, 2023

⚠ End-of-service on: Dec 31, 2023

⚠ Discontinued

### Main

|                                             |                                                                                                                                                                                    |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                              |
| Product name                                | TeSys K                                                                                                                                                                            |
| Product or component type                   | Reversing contactor                                                                                                                                                                |
| Device short name                           | LC2K                                                                                                                                                                               |
| Device application                          | Control                                                                                                                                                                            |
| Contactor application                       | Motor control<br>Resistive load                                                                                                                                                    |
| Utilisation category                        | AC-1<br>AC-4<br>AC-3                                                                                                                                                               |
| 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 <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<br>9 A at <= 440 V AC AC-3 for power circuit       |
| Motor power kW                              | 2.2 kW 220...230 V AC 50/60 Hz<br>4 kW 380...415 V AC 50/60 Hz<br>4 kW 440 V AC 50/60 Hz<br>4 kW 480 V AC 50/60 Hz<br>4 kW 500...600 V AC 50/60 Hz<br>4 kW 660...690 V AC 50/60 Hz |
| Control circuit type                        | AC 50/60 Hz                                                                                                                                                                        |
| [Uc] control circuit voltage                | 110 V AC 50/60 Hz                                                                                                                                                                  |
| Auxiliary contact composition               | 1 NO                                                                                                                                                                               |
| [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<br>10 A (at 122 °F (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 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>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 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<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 - lth 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                                                                                                                                                                                               |
| Electrical durability                    | 0.18 Mcycles 20 A AC-1 <= 440 V<br>1.3 Mcycles 9 A AC-3 <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                        |
| Interlocking type                        | Mechanical                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Mounting support                         | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Standards                                | VDE 0660<br>IEC 60947<br>BS 5424<br>NF C 63-110                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Product certifications                   | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Connections - terminals                  | Faston terminals 2 2.8 mm<br>Faston terminals 1 6.35 mm                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Operating time                           | 10...20 ms coil energisation and NO closing<br>10...20 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

|                                 |                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------|
| Coil technology                 | Built-in bidirectional peak limiting diode suppressor                                           |
| Control circuit voltage limits  | Operational: 0.8...1.15 Uc (at <122 °F (50 °C))<br>Drop-out: 0.2...0.75 Uc (at <122 °F (50 °C)) |
| Inrush power in VA              | 30 VA (at 68 °F (20 °C))                                                                        |
| Hold-in power consumption in VA | 4.5 VA (at 68 °F (20 °C))                                                                       |
| Heat dissipation                | 1.3 W                                                                                           |

|                              |                                  |
|------------------------------|----------------------------------|
| Auxiliary contacts 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      |
| Non overlap distance         | 0.02 in (0.5 mm)                 |
| Insulation resistance        | > 10 MOhm for signalling circuit |

## 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                    | 2000 m without derating                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Flame retardance                      | V1 UL 94<br>Requirement 2 NF F 16-101<br>Requirement 2 NF F 16-102                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Mechanical robustness                 | Shocks contactor closed, on X axis10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Y axis15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Z axis15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on X axis6 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Y axis10 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 |
| Height                                | 2.3 in (58 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Width                                 | 3.5 in (90 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Depth                                 | 2.2 in (57 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Net weight                            | 0.86 lb(US) (0.39 kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type of Package 1       | PCE |
| Number of Units in Package 1 | 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 |