

# Product data sheet

Specifications



## TeSys K contactor , 3P , AC-3 <= 440 V 9 A , 1 NC aux. , 24 V AC coil

LC7K09017B7

⚠ Discontinued on: Aug 30, 2023

⚠ End-of-service on: Dec 31, 2023

⚠ Discontinued

### Main

|                                |                                                                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product               | TeSys K                                                                                                                                                                      |
| Range                          | TeSys                                                                                                                                                                        |
| Product name                   | TeSys K                                                                                                                                                                      |
| Device application             | Control                                                                                                                                                                      |
| Product or component type      | Contactor                                                                                                                                                                    |
| Device short name              | LC7K                                                                                                                                                                         |
| Utilisation category           | AC-3<br>AC-1<br>AC-4                                                                                                                                                         |
| Poles description              | 3P                                                                                                                                                                           |
| Pole contact composition       | 3 NO                                                                                                                                                                         |
| [Ie] rated operational current | 20 A (at <122 °F (50 °C)) at <= 440 V AC AC-1 for power circuit<br>9 A at <= 440 V AC AC-3 for power circuit<br>16 A (at <158 °F (70 °C)) at 690 V AC AC-1 for power circuit |
| [Uc] control circuit voltage   | Instantaneous 1 NC                                                                                                                                                           |
| Signalling circuit frequency   | <= 400 Hz                                                                                                                                                                    |
| Non overlap distance           | 0.02 in (0.5 mm)                                                                                                                                                             |

### Complementary

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contactor application          | Motor control<br>Resistive load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Auxiliary contact composition  | 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control circuit voltage limits | Operational: 0.85...1.1 Uc (at <122 °F (50 °C))<br>Drop-out: 0.1...0.75 Uc (at <122 °F (50 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Control circuit type           | AC 50/60 Hz silent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [Uc] control circuit voltage   | 24 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Connections - terminals        | Faston terminals 2 2.8 mm<br>Faston terminals 1 6.35 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Electrical durability          | 0.18 Mcycles 20 A AC-1 <= 440 V<br>1.3 Mcycles 9 A AC-3 <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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 |

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

|                                                    |                                                                                                                                                                                                                                                                           |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standards</b>                                   | 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                                                                                                                                                                               |
| <b>IP degree of protection</b>                     | IP2X VDE 0106                                                                                                                                                                                                                                                             |
| <b>Protective treatment</b>                        | TC IEC 60068<br>TC DIN 50016                                                                                                                                                                                                                                              |
| <b>[Ui] rated insulation voltage</b>               | 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 |
| <b>[Uimp] rated impulse withstand voltage</b>      | 8 kV                                                                                                                                                                                                                                                                      |
| <b>Overvoltage category</b>                        | III                                                                                                                                                                                                                                                                       |
| <b>Mounting support</b>                            | Rail<br>Plate                                                                                                                                                                                                                                                             |
| <b>Product certifications</b>                      | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                                                                                                                        |
| <b>Ambient air temperature for storage</b>         | -58...176 °F (-50...80 °C)                                                                                                                                                                                                                                                |
| <b>Operating altitude</b>                          | 2000 m without derating                                                                                                                                                                                                                                                   |
| <b>[Ue] rated operational voltage</b>              | Power circuit 690 V AC 50/60 Hz<br>Signalling circuit ≤ 690 V AC 50/60 Hz                                                                                                                                                                                                 |
| <b>[Ith] conventional free air thermal current</b> | 20 A (at 122 °F (50 °C)) for power circuit<br>10 A (at 122 °F (50 °C)) for signalling circuit                                                                                                                                                                             |
| <b>Irms rated making capacity</b>                  | 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                                                                                                     |
| <b>Rated breaking capacity</b>                     | 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  |
| <b>Associated fuse rating</b>                      | 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                                                                                      |
| <b>Average impedance</b>                           | 3 mOhm - Ith 20 A 50 Hz for power circuit                                                                                                                                                                                                                                 |
| <b>Inrush power in VA</b>                          | 3 VA (at 68 °F (20 °C))                                                                                                                                                                                                                                                   |
| <b>Hold-in power consumption in VA</b>             | 3 VA (at 68 °F (20 °C))                                                                                                                                                                                                                                                   |
| <b>Operating time</b>                              | 30...40 ms coil energisation and NO closing<br>30 ms coil de-energisation and NO opening                                                                                                                                                                                  |
| <b>Safety reliability level</b>                    | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1                                                                                                                                  |
| <b>Mechanical durability</b>                       | 10 Mcycles                                                                                                                                                                                                                                                                |
| <b>Maximum operating rate</b>                      | 3600 cyc/h                                                                                                                                                                                                                                                                |
| <b>Minimum switching current</b>                   | 5 mA for signalling circuit                                                                                                                                                                                                                                               |
| <b>Minimum switching voltage</b>                   | 17 V for signalling circuit                                                                                                                                                                                                                                               |

|                       |                                  |
|-----------------------|----------------------------------|
| Insulation resistance | > 10 MOhm for signalling circuit |
| Height                | 2.3 in (58 mm)                   |
| Width                 | 1.8 in (45 mm)                   |
| Depth                 | 2.2 in (57 mm)                   |
| Net weight            | 0.496 lb(US) (0.225 kg)          |
| Compatibility code    | LC7K                             |

## Environment

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor power kW                                        | 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<br>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                                                                                                                                                                                                                                                                                      |
| [Ic <sub>w</sub> ] 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 |
| Heat dissipation                                      | 3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Flame retardance                                      | V1 UL 94<br>Requirement 2 NF F 16-101<br>Requirement 2 NF F 16-102                                                                                                                                                                                                                                                                                                                                                                                                      |

## 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 |