

# Product datasheet

Specifications



## TeSys K contactor - 3P - AC-3 <= 440 V 6 A - 1 NO aux. - 24 V AC coil

Local distributor code:

21146558

LC1K0610B7

EAN Code: 3389110365139

### Main

|                           |               |
|---------------------------|---------------|
| Range                     | TeSys         |
| Product or component type | Contactor     |
| Device short name         | LC1K          |
| Device application        | Control       |
| Contactor application     | Motor control |

### Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Utilisation category                        | AC-3<br>AC-3e<br>AC-4                                                                                                                                                                                                                                                                                                                                                         |
| Poles description                           | 3P                                                                                                                                                                                                                                                                                                                                                                            |
| power pole contact composition              | 3 NO                                                                                                                                                                                                                                                                                                                                                                          |
| [Ue] rated operational voltage              | Power circuit: <= 690 V AC <= 400 Hz<br>Signalling circuit: <= 690 V AC <= 400 Hz                                                                                                                                                                                                                                                                                             |
| [Ie] rated operational current              | 6 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>6 A (at <60 °C) at <= 440 V AC AC-3e for power circuit                                                                                                                                                                                                                                                               |
| Control circuit type                        | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                |
| [Uc] control circuit voltage                | 24 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                              |
| Motor power kW                              | 1.5 kW at 220...230 V AC 50/60 Hz AC-3<br>2.2 kW at 380...415 V AC 50/60 Hz AC-3<br>3 kW at 440/690 V AC 50/60 Hz AC-3<br>1.5 kW at 220...230 V AC 50/60 Hz AC-3e<br>2.2 kW at 380...415 V AC 50/60 Hz AC-3e<br>3 kW at 440/690 V AC 50/60 Hz AC-3e<br>1.5 kW at 220...230 V AC 50/60 Hz AC-4<br>2.2 kW at 380...415 V AC 50/60 Hz AC-4<br>3 kW at 440/690 V AC 50/60 Hz AC-4 |
| Auxiliary contact composition               | 1 NO                                                                                                                                                                                                                                                                                                                                                                          |
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                                                                                                                                                                                                                                          |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                                                                                                           |
| [Ith] conventional free air thermal current | 20 A (at 60 °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 IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947                                                                                                                                                                                                                                                                 |
| Rated breaking capacity                     | 110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>110 A at 415 V conforming to IEC 60947<br>110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>70 A at 660...690 V conforming to IEC 60947                                                                                                      |

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>[Icw] rated short-time withstand current</b> | 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>20 A 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         |
| <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 - lth 20 A 50 Hz for power circuit                                                                                                                                                                                                                                                                                                                                                                        |
| <b>[Ui] rated insulation voltage</b>            | 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                               |
| <b>Insulation resistance</b>                    | > 10 MOhm for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Inrush power in VA</b>                       | 30 VA (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Hold-in power consumption in VA</b>          | 4.5 VA (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Heat dissipation</b>                         | 1.3 W                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Control circuit voltage limits</b>           | Operational: 0.8...1.15 Uc (at <50 °C)<br>Drop-out: >= 0.20 Uc (at <50 °C)                                                                                                                                                                                                                                                                                                                                       |
| <b>Connections - terminals</b>                  | 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 |
| <b>Maximum operating rate</b>                   | 3600 cyc/h                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Coil technology</b>                          | Without built-in suppressor module                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Auxiliary contacts type</b>                  | type instantaneous 1 NO                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Signalling circuit frequency</b>             | <= 400 Hz                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Minimum switching current</b>                | 5 mA for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Minimum switching voltage</b>                | 17 V for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Mounting support</b>                         | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Tightening torque</b>                        | 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>1.3 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2                                                                                                                                                                                                     |
| <b>Operating time</b>                           | 10...20 ms coil de-energisation and NO opening<br>10...20 ms coil energisation and NO closing                                                                                                                                                                                                                                                                                                                    |
| <b>Safety reliability level</b>                 | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                              |
| <b>Non overlap distance</b>                     | 0.5 mm                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Mechanical durability</b>                    | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Electrical durability</b>                    | 1.3 Mcycles 6 A AC-3 at Ue <= 440 V<br>1.3 Mcycles 6 A AC-3e at Ue <= 440 V<br>0.05 Mcycles 36 A AC-4 at Ue <= 440 V                                                                                                                                                                                                                                                                                             |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical robustness | Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Y axis: 10 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 |
| Height                | 58 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Width                 | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Depth                 | 57 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Product weight        | 0.18 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Environment

|                                     |                                                                                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>IEC 60335-1:Clause 30.2<br>IEC 60335-2-40:Annex JJ<br>UL 60335-2-40:Annex JJ |
| Product certifications              | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                          |
| IP degree of protection             | IP2X conforming to VDE 0106                                                                                                                                                 |
| Protective treatment                | TC conforming to IEC 60068<br>TC conforming to DIN 50016                                                                                                                    |
| 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                                                                |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 6.600 cm  |
| Package 1 Width              | 4.800 cm  |
| Package 1 Length             | 6.200 cm  |
| Package 1 Weight             | 176.000 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 50        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 9.166 kg  |
| Unit Type of Package 3       | P06       |

|                              |           |
|------------------------------|-----------|
| Number of Units in Package 3 | 400       |
| Package 3 Height             | 45.000 cm |
| Package 3 Width              | 60.000 cm |
| Package 3 Length             | 80.000 cm |
| Package 3 Weight             | 83.340 kg |

## Logistical informations

|                   |    |
|-------------------|----|
| Country of origin | FR |
|-------------------|----|

## 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

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                       | 58 kg CO2 eq.                                 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 0.9 kg CO2 eq.                                |
| Carbon footprint of the distribution phase [A4]        | 0.4 kg CO2 eq.                                |
| Carbon footprint of the installation phase [A5]        | 0 kg CO2 eq.                                  |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 57 kg CO2 eq.                                 |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 0.3 kg CO2 eq.                                |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

## Use Better



### Materials and Substances

|                                        |                                                                             |
|----------------------------------------|-----------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                         |
| Packaging without single use plastic   | Yes                                                                         |
| EU RoHS Directive                      | <a href="#">Compliant</a>                                                   |
| REACH Regulation                       | <a href="#">Free of Substances of Very High Concern above the threshold</a> |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



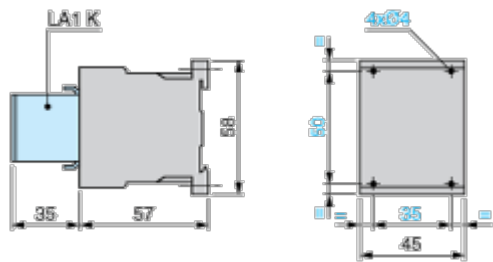
### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 63                                                                                                                                                                                                              |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

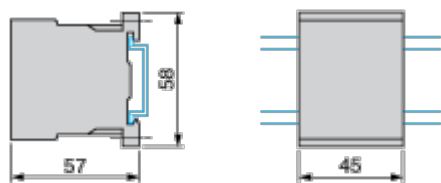
Dimensions Drawings

Dimensions

Contactors LC1 K, LP1 K, LP4 K: Mounting on Panel



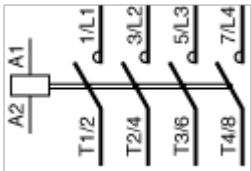
Contactors LC1 K, LP1 K, LP4 K: Mounting on Rail AM1 DP200 or AM1 DE200 (35 mm)



Connections and Schema

Wiring

3-Pole Contactors: 3P + N/O



3-Pole Contactors: 3P + N/C

