

# Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3, It or eq to 440V 9A, 1 NO aux., 48VAC coil

LC1K0910E7

**Product availability:** Stock - Normally stocked in distribution facility

## Main

Range	TeSys
Product or Component Type	Contactor
Device short name	LC1K
Device Application	Control
Contactor application	Resistive load Motor control

## Complementary

Utilisation category	AC-3 AC-3e AC-1 AC-4
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC <= 400 Hz Signalling circuit <= 690 V AC <= 400 Hz
[Ie] rated operational current	9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit 20 A (at <140 °F (60 °C)) at <= 690 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Motor power kW	2.2 kW 220...230 V AC 50/60 Hz AC-3 4 kW 380...415 V AC 50/60 Hz AC-3 4 kW 440/690 V AC 50/60 Hz AC-3 2.2 kW 220...230 V AC 50/60 Hz AC-3e 4 kW 380...415 V AC 50/60 Hz AC-3e 4 kW 440/690 V AC 50/60 Hz AC-3e 2.2 kW 220...230 V AC 50/60 Hz AC-4 4 kW 380...415 V AC 50/60 Hz AC-4 4 kW 440/690 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NO
[Uiimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 140 °F (60 °C)) for power circuit 10 A (at 122 °F (50 °C)) for signalling circuit
Irms rated making capacity	110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Rated breaking capacity</b>	110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 110 A at 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	90 A 122 °F (50 °C) - 1 s for power circuit 85 A 122 °F (50 °C) - 5 s for power circuit 80 A 122 °F (50 °C) - 10 s for power circuit 60 A 122 °F (50 °C) - 30 s for power circuit 45 A 122 °F (50 °C) - 1 min for power circuit 40 A 122 °F (50 °C) - 3 min for power circuit 20 A 122 °F (50 °C) - >= 15 min for power circuit 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit
<b>Associated fuse rating</b>	25 A gG at <= 440 V for power circuit 25 A aM for power circuit 10 A gG for signalling circuit conforming to IEC 60947 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>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Inrush power in VA</b>	30 VA (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	4.5 VA (at 68 °F (20 °C))
<b>Heat dissipation</b>	1.3 W
<b>Control circuit voltage limits</b>	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: >= 0.20 Uc (at <122 °F (50 °C))
<b>Connections - terminals</b>	screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid screw clamp terminals 1 0.001...0.006 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end screw clamp terminals 1 0.0005...0.004 in <sup>2</sup> (0.34...2.5 mm <sup>2</sup> )flexible with cable end screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid screw clamp terminals 2 0.001...0.006 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end screw clamp terminals 2 0.0005...0.002 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> )flexible with cable end
<b>Maximum operating rate</b>	3600 cyc/h
<b>Auxiliary contacts type</b>	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>Operating time</b>	10...20 ms coil de-energisation and NO opening 10...20 ms coil energisation and NO closing
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Non overlap distance</b>	0.02 in (0.5 mm)
<b>Mechanical durability</b>	10 Mcycles
<b>Electrical durability</b>	1.3 Mcycles 9 A AC-3 <= 440 V 1.3 Mcycles 9 A AC-3e <= 440 V 0.16 Mcycles 20 A AC-1 <= 690 V 0.02 Mcycles 54 A AC-4 <= 440 V
<b>Mechanical robustness</b>	Shocks contactor closed, on X axis10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened2 Gn, 5...300 Hz IEC 60068-2-6
<b>Height</b>	2.3 in (58 mm)
<b>Width</b>	1.8 in (45 mm)

Depth	2.2 in (57 mm)
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## Environment

Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ
Product Certifications	CB Scheme CCC UL CSA EAC CE UKCA
Protective treatment	TC IEC 60068 TC DIN 50016
Operating altitude	6561.68 ft (2000 m) without derating
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

## Ordering and shipping details

Category	US10I1222326
Discount Schedule	0I12
GTIN	3389110374766
Returnability	Yes
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.60 in (6.6 cm)
Package 1 Width	1.89 in (4.8 cm)
Package 1 Length	2.44 in (6.2 cm)
Package weight(Lbs)	6.3 oz (179 g)
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	20.83 lb(US) (9.45 kg)

## Contractual warranty

Warranty	18 months
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## 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

Carbon footprint (kg CO<sub>2</sub> eq, Total Life cycle) **54**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **Yes**

[EU RoHS Directive](#) **Compliant**

REACH Regulation [REACH Declaration](#)

California proposition 65  
WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](#)

## Use Again

### Repack and remanufacture

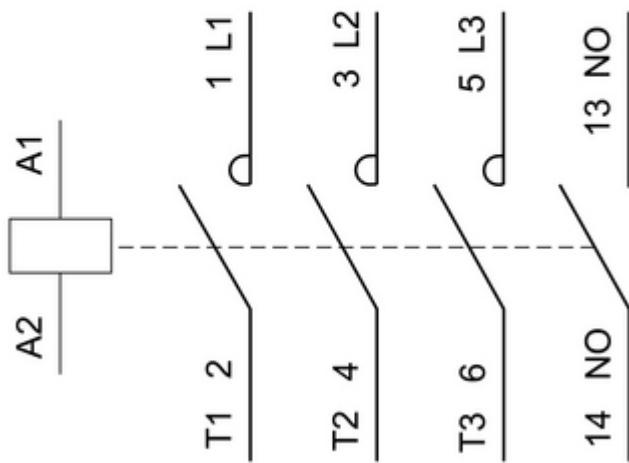
Circularity Profile [End of Life Information](#)

Take-back **No**

## Technical Illustration

## Wiring diagram

3P NO



## Offer Marketing Illustration

## Product benefits / Features

## TeSys K Contactors

### Flexibility



Designed with control voltages, low consumption, minimal noise levels, robust power connections, and a range of auxiliaries, and application-specific variants to meet diverse needs.

### Safety



It provides ultimate protection with IP20 finger-safe terminals, built-in NO/NC auxiliary contacts, and IEC-certified mirror and mechanically linked contacts for safety applications.



### Compact size



Up to 50% less volume is captured in your panels. One of the smallest contactors offerings in the market.

## Offer Marketing Illustration

## Product benefits / Features



## TeSys K

### Technical Benefits

- Built-in in all 3 pole versions: 1NO or 1NC
- Up to 4 more by add-on blocks
- Up to 16 A for motor control (AC3/ AC3E) and 20A for resistive load control (AC1)
- Available as single contactors, star-delta, and reversing combos, with a wealth of options and accessories
- Control Options:
  - AC: 24 to 660/690 V, standard or low-noise versions
  - DC: 12 to 250V, standard or low consumption (1.8 W) versions
- Thermal protection relays
- It Features specific versions for railway (TeSys S207) and electrodomestic (TeSys S335) applications

## Technical Illustration

## Assembly's dimensions

