

# Product datasheet

Specifications



## Contacteur, TeSys K, 3P, AC-3/ AC-3e, <=440V 12A , aux. 1NC, 42V AC coil

LC1K1201D7

### Main

Range	TeSys
Product or component type	Contacteur
Device short name	LC1K
Device application	Control
Contacteur application	Motor control Resistive load

### 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	12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 12 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 20 A (at <60 °C) at <= 690 V AC AC-1 for power circuit
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	42 V AC 50/60 Hz
Motor power kW	3 kW at 220...230 V AC 50/60 Hz AC-3 5.5 kW at 380...415 V AC 50/60 Hz AC-3 5.5 kW at 440 V AC 50/60 Hz AC-3 4 kW at 690 V AC 50/60 Hz AC-3 3 kW at 220...230 V AC 50/60 Hz AC-3e 5.5 kW at 380...415 V AC 50/60 Hz AC-3e 5.5 kW at 440 V AC 50/60 Hz AC-3e 4 kW at 690 V AC 50/60 Hz AC-3e 3 kW at 220...230 V AC 50/60 Hz AC-4 5.5 kW at 380...415 V AC 50/60 Hz AC-4 5.5 kW at 440 V AC 50/60 Hz AC-4 4 kW at 690 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit
Irms rated making capacity	144 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

<b>Rated breaking capacity</b>	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>	115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 25 A 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 - lth 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 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 U <sub>c</sub> (at <50 °C) Drop-out: >= 0.20 U <sub>c</sub> (at <50 °C)
<b>Connections - terminals</b>	Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> solid Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> solid Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible 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 NC
<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 conforming to EN/ISO 13849-1 B10d = 20000000 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 12 A AC-3 at U <sub>e</sub> <= 440 V 1.3 Mcycles 12 A AC-3e at U <sub>e</sub> <= 440 V 0.3 Mcycles 20 A AC-1 at U <sub>e</sub> <= 690 V 0.02 Mcycles 72 A AC-4 at U <sub>e</sub> <= 440 V
<b>Mechanical robustness</b>	Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6
<b>Height</b>	58 mm
<b>Width</b>	45 mm

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Depth	57 mm
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## Environment

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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
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Product certifications	CB Scheme CCC UL CSA EAC CE UKCA
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Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
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Operating altitude	2000 m without derating
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Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	4.900 cm
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Package 1 Width	6.200 cm
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Package 1 Length	6.700 cm
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Package 1 Weight	180.000 g
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## Contractual warranty

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Warranty (in months)	18
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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

Total lifecycle Carbon footprint	59 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	58 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Compliant
REACH Regulation	<a href="#">REACH Declaration</a>

## Use Longer




### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

Recyclability potential, in %	64
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

Offer Marketing Illustration

Product benefits / Features

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## 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 provide 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

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## 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 electrodomeestic (TeSys S335) applications

Technical Illustration

Assembly's dimensions

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