

Product datasheet

Specifications



Contactor, TeSys K, 3 poles, AC-3/AC-3e,440V 9A, coil 24V AC, standard

LC1K0901B7TQ

! Discontinued

Main

Range	TeSys
Product or component type	Contactor
Device short name	LC1K
Contactor 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	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 9 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 standard
[Uc] control circuit voltage	24 V AC 50/60 Hz
Motor power kW	2.2 kW at 220...230 V AC 50/60 Hz AC-3 4 kW at 380...415 V AC 50/60 Hz AC-3 4 kW at 440/690 V AC 50/60 Hz AC-3 2.2 kW at 220...230 V AC 50/60 Hz AC-3e 4 kW at 380...415 V AC 50/60 Hz AC-3e 4 kW at 440/690 V AC 50/60 Hz AC-3e 2.2 kW at 220...230 V AC 50/60 Hz AC-4 4 kW at 380...415 V AC 50/60 Hz AC-4 4 kW at 440/690 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NC
[Uimp] rated impulse withstand voltage	8 kV
[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	110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947
Rated breaking capacity	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

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

[Icw] rated short-time withstand current	90 A 50 °C - 1 s for power circuit 85 A 50 °C - 5 s for power circuit 80 A 50 °C - 10 s for power circuit 60 A 50 °C - 30 s for power circuit 45 A 50 °C - 1 min for power circuit 40 A 50 °C - 3 min for power circuit 20 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
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947 10 A gG for control circuit conforming to VDE 0660 25 A gG at <= 440 V for power circuit
Average impedance	3 mOhm - lth 20 A 50 Hz for power circuit
[Ui] rated insulation voltage	Control circuit: 690 V conforming to BS 5424 Control circuit: 690 V conforming to IEC 60947 Power circuit: 690 V conforming to BS 5424 Power circuit: 690 V conforming to IEC 60947 Power circuit: 690 V conforming to NF C 20-040 Control circuit: 750 V conforming to VDE 0110 group C Power circuit: 750 V conforming to VDE 0110 group C Control circuit: 600 V conforming to CSA C22.2 No 14 Power circuit: 600 V UL 508 certified conforming to CSA C22.2 No 14
Insulation resistance	> 10 MOhm for control circuit
Inrush power in VA	30 VA (at 20 °C)
Hold-in power consumption in VA	4.5 VA 50/60 Hz (at 20 °C)
Control circuit voltage limits	Operational: 0.8...1.15 Uc at 50/60 Hz (at <50 °C) Drop-out: >= 0.20 Uc at 50/60 Hz (at <50 °C)
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm²solid Screw clamp terminals 1 cable(s) 0.75...4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm²solid Screw clamp terminals 2 cable(s) 0.75...4 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm²flexible with cable end
Maximum operating rate	3600 cyc/h
Coil technology	Without built-in suppressor module
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Mounting support	Plate Rail
Operating time	10...20 ms coil de-energisation and NO opening 15...25 ms coil de-energisation and NC opening 10...20 ms between energisation of coil and closing of NO contact 5...15 ms coil energisation and NC opening
Safety reliability level	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
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 9 A AC-3 at Ue <= 440 V 1.3 Mcycles 9 A AC-3e at Ue <= 440 V 0.16 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 54 A AC-4 at Ue <= 440 V
Height	58 mm
Width	45 mm
Depth	57 mm
Net weight	0.18 kg

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
Product certifications	CB Scheme CCC UL CSA EAC CE UKCA
Ambient air temperature for storage	-50...80 °C
Operating altitude	2000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	Class C2 conforming to NF F 16-101 Class C2 conforming to NF F 16-102 V1 conforming to UL 94

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.500 cm
Package 1 Width	5.900 cm
Package 1 Length	5.900 cm
Package 1 Weight	169.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	7.000 cm
Package 2 Width	29.200 cm
Package 2 Length	29.800 cm
Package 2 Weight	5.260 kg
Unit Type of Package 3	S03
Number of Units in Package 3	60
Package 3 Height	30.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	11.046 kg

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	53 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]	51 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
EU RoHS Directive	Compliant
REACH Regulation	Free of Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
--------	----

Use Again



Repack and remanufacture

Recyclability potential, in %	64
End of life manual availability	End of Life Information
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

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 he 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 electrodomeestic (TeSys S335) applications