Product datasheet

Specifications

contactor TeSys K, 3P, AC-3/AC-3e, 690V 9A, coil 380 V AC

LC1K0910Q7TQ

Main

Product or component type	Contactor
Device short name	LC1K
Contactor application	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 <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	380...400 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 NO
[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

[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 - Ith 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 Control circuit: 750 V conforming to VDE 0110 group C Control circuit: 600 V 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	Rail Plate
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	5.600 cm
Package 1 Width	5.800 cm
Package 1 Length	4.500 cm
Package 1 Weight	168.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	7.300 cm
Package 2 Width	30.700 cm
Package 2 Length	29.500 cm
Package 2 Weight	5.162 kg
Unit Type of Package 3	CAR
Number of Units in Package 3	60
Package 3 Height	29.600 cm
Package 3 Width	37.400 cm
Package 3 Length	29.800 cm
Package 3 Weight	10.844 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**

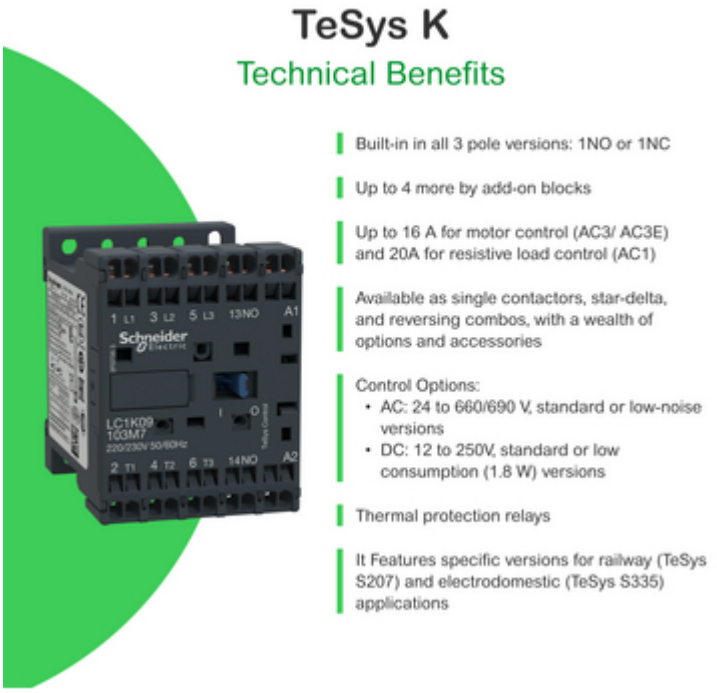
Use Again

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



Offer Marketing Illustration

Product benefits / Features