Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3, lt or eq to 440V 12 A, 1 NO aux., 24VAC coil

LC1K1210B7

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	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 <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 12 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	24 V AC 50/60 Hz
Motor power kW	3 kW 220...230 V AC 50/60 Hz AC-3 5.5 kW 380...415 V AC 50/60 Hz AC-3 5.5 kW 440 V AC 50/60 Hz AC-3 4 kW 690 V AC 50/60 Hz AC-3 3 kW 220...230 V AC 50/60 Hz AC-3e 5.5 kW 380...415 V AC 50/60 Hz AC-3e 5.5 kW 440 V AC 50/60 Hz AC-3e 4 kW 690 V AC 50/60 Hz AC-3e 3 kW 220...230 V AC 50/60 Hz AC-4 5.5 kW 380...415 V AC 50/60 Hz AC-4 5.5 kW 440 V AC 50/60 Hz AC-4 4 kW 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 140 °F (60 °C)) for power circuit 10 A (at 122 °F (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

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

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

Rated breaking capacity	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	115 A 122 °F (50 °C) - 1 s for power circuit 105 A 122 °F (50 °C) - 5 s for power circuit 100 A 122 °F (50 °C) - 10 s for power circuit 75 A 122 °F (50 °C) - 30 s for power circuit 55 A 122 °F (50 °C) - 1 min for power circuit 50 A 122 °F (50 °C) - 3 min for power circuit 25 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
Associated fuse rating	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
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 600 V UL 508 Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-5-1 Signalling circuit 600 V UL 508 Power circuit 600 V CSA C22.2 No 14 Signalling circuit 600 V CSA C22.2 No 14
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in VA	30 VA (at 68 °F (20 °C))
Hold-in power consumption in VA	4.5 VA (at 68 °F (20 °C))
Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: >= 0.20 Uc (at <122 °F (50 °C))
Connections - terminals	screw clamp terminals 1 0.002…0.006 in² (1.5…4 mm²)solid screw clamp terminals 1 0.001…0.006 in² (0.75…4 mm²)flexible without cable end screw clamp terminals 1 0.0005…0.004 in² (0.34…2.5 mm²)flexible with cable end screw clamp terminals 2 0.002…0.006 in² (1.5…4 mm²)solid screw clamp terminals 2 0.001…0.006 in² (0.75…4 mm²)flexible without cable end screw clamp terminals 2 0.0005…0.002 in² (0.34…1.5 mm²)flexible with cable end
Maximum operating rate	3600 cyc/h
Coil technology	Without built-in suppressor module
Auxiliary contacts type	Instantaneous 1 NO
Signalling circuit frequency	<= 400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Mounting Support	Plate Rail
Tightening torque	7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals Philips No 2 7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals flat Ø 6 mm 7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals pozidriv No 2
Operating time	10...20 ms coil de-energisation and NO opening 10...20 ms coil energisation and NO closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Non overlap distance	0.02 in (0.5 mm)
Mechanical durability	10 Mcycles

Electrical durability	1.3 Mcycles 12 A AC-3 <= 440 V 1.3 Mcycles 12 A AC-3e <= 440 V 0.3 Mcycles 20 A AC-1 <= 690 V 0.02 Mcycles 72 A AC-4 <= 440 V
Mechanical robustness	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
Height	2.3 in (58 mm)
Width	1.8 in (45 mm)
Depth	2.2 in (57 mm)
Net Weight	0.40 lb(US) (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 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
IP degree of protection	IP2X VDE 0106
Protective treatment	TC IEC 60068 TC DIN 50016
Ambient Air Temperature for Storage	-58…176 °F (-50…80 °C)
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	US1CTR221256
Discount Schedule	CTR2
GTIN	3389110789744
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.598 in (6.600 cm)
Package 1 Width	2.441 in (6.200 cm)

Package 1 Length	1.890 in (4.800 cm)
Package weight(Lbs)	6.243 oz (177.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	20.291 lb(US) (9.204 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	400
Package 3 Height	17.717 in (45.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	183.733 lb(US) (83.340 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	**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	**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	**Free of Substances of Very High Concern above the threshold**
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 and/or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**

Use Again

Repack and remanufacture

Recyclability potential, in %	**63**
Circularity Profile	**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.**