



Main

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

Complementary

Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	Power circuit ≤ 690 V AC ≤ 400 Hz Signalling circuit ≤ 690 V AC ≤ 400 Hz
[Ie] rated operational current	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
[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	110 A AC for power 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 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
Associated fuse rating	25 A gG at ≤ 440 V for power circuit 25 A aM for power circuit
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 Power circuit 600 V CSA C22.2 No 14
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 0.00...0.01 in ² (1.5...4 mm ²)solid Screw clamp terminals 1 0.00...0.01 in ² (0.75...4 mm ²)flexible without cable end Screw clamp terminals 1 0.00...0.00 in ² (0.34...2.5 mm ²)flexible with cable end Screw clamp terminals 2 0.00...0.01 in ² (1.5...4 mm ²)solid Screw clamp terminals 2 0.00...0.01 in ² (0.75...4 mm ²)flexible without cable end Screw clamp terminals 2 0.00...0.00 in ² (0.34...1.5 mm ²)flexible with cable end
Maximum operating rate	3600 cyc/h
Signalling circuit frequency	<= 400 Hz
Mounting Support	Plate Rail
Tightening torque	7.08...11.51 Lbf.In (0.8...1.3 N.m) screw clamp terminals Philips No 2 7.08...11.51 Lbf.In (0.8...1.3 N.m) screw clamp terminals flat Ø 6 mm 7.08...11.51 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 15...25 ms coil de-energisation and NC closing 5...15 ms coil energisation and NC opening
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
Mechanical durability	10 Mcycles
Electrical durability	0.16 Mcycles 20 A AC-1 <= 690 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	2.28 in (58 mm)
Width	1.77 in (45 mm)
Depth	2.24 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
Product Certifications	CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]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	US10I1222326
Discount Schedule	0I12
GTIN	3389110488760
Returnability	Yes
Country of origin	SG

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.89 in (4.800 cm)
Package 1 Width	2.44 in (6.200 cm)
Package 1 Length	2.56 in (6.500 cm)
Package 1 Weight	6.32 oz (179.100 g)
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	20.32 lb(US) (9.215 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	800
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	342.69 lb(US) (155.440 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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