



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
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	110 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 NC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	16 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
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

[I _{cw}] 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 - I _{th} 16 A 50 Hz for power circuit
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 U _c (at <122 °F (50 °C)) Drop-out: >= 0.20 U _c (at <122 °F (50 °C))
Connections - terminals	Spring terminals 1 0.00...0.00 in ² (0.75...1.5 mm ²)solid Spring terminals 1 0.00...0.00 in ² (0.75...1.5 mm ²)flexible without cable end Spring terminals 2 0.00...0.00 in ² (0.75...1.5 mm ²)flexible without cable end
Maximum operating rate	3600 cyc/h
Auxiliary contacts type	Instantaneous 1 NC
Signalling circuit frequency	<= 400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
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 axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened 2 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)

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
Protective treatment	TC IEC 60068 TC DIN 50016
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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.89 in (4.8 cm)
Package 1 Width	2.56 in (6.5 cm)
Package 1 Length	2.44 in (6.2 cm)
Package 1 Weight	6.49 oz (184.0 g)

Offer Sustainability

Sustainable offer status	Green Premium product
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.