



Main

Range	TeSys
Product name	TeSys K
Product or component type	Contactor
Device short name	LC1K
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit
[Ie] rated operational current	16 A (≤ 70 °C) at 690 V AC AC-1 for power circuit 20 A (≤ 50 °C) at ≤ 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
Control circuit voltage	48 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A at ≤ 50 °C for power circuit
Irms rated making capacity	110 A AC for power circuit conforming to IEC 60947 110 A AC for power circuit conforming to NF C 63-110
Rated breaking capacity	70 A at 660...690 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 110 A at 220...230 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 110 A at 415 V conforming to IEC 60947
[Icw] rated short-time withstand current	20 A ≤ 50 °C ≥ 15 s power circuit 40 A ≤ 50 °C 3 min power circuit 45 A ≤ 50 °C 1 min power circuit 60 A ≤ 50 °C 30 s power circuit 80 A ≤ 50 °C 10 s power circuit 85 A ≤ 50 °C 5 s power circuit 90 A ≤ 50 °C 1 s power circuit
Associated fuse rating	25 A aM for power circuit 25 A gG at ≤ 440 V for power circuit
Average impedance	3 mOhm at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit conforming to CSA C22.2 No 14 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508
Electrical durability	0.18 Mcycles 20 A AC-1 at Ue ≤ 440 V
Mounting support	Printed circuit boards
Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
Connections - terminals	Solder pins 1.5 x 0.9 mm
Operating time	10...20 ms coil energisation and NO closing 10...20 ms coil de-energisation and NO opening

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Operating rate	3600 cyc/h

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.2...0.75 Uc at <= 50 °C drop-out 0.8...1.15 Uc at <= 50 °C operational
Inrush power in VA	30 VA at 20 °C
Hold-in power consumption in VA	4.5 VA at 20 °C
Heat dissipation	1.3 W
Signalling circuit frequency	<= 400 Hz

Environment

IP degree of protection	IP2x conforming to VDE 0106
Protective treatment	TC conforming to DIN 50016 TC conforming to IEC 60068
Ambient air temperature for operation	-25...50 °C
Ambient air temperature for storage	-50...80 °C
Operating altitude	2000 m without derating in temperature
Flame retardance	Requirement 2 conforming to NF F 16-102 Requirement 2 conforming to NF F 16-101 V1 conforming to UL 94
Mechanical robustness	Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Shocks contactor opened, on Z axis 10 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 X axis 6 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 closed, on Y axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis 10 Gn for 11 ms IEC 60068-2-27
Height	58 mm
Width	45 mm
Depth	57 mm
Product weight	0.18 kg