



Main

Range of product	TeSys K
Product or component type	Contacteur
Device short name	LC1K
Contacteur application	Resistive load
Utilisation category	AC-1
Control circuit type	AC
Coil type	Standard
Poles description	4P
Pole contact composition	4 NO
[Ie] rated operational current	20 A ($\leq 50\text{ }^{\circ}\text{C}$) AC AC-1 for power circuit
Control circuit voltage	110 V AC 50/60 Hz
Connections - terminals	Screw clamp terminal power circuit: 1 cable 0.34...2.5 mm ² - cable stiffness: flexible - with cable end Screw clamp terminal power circuit: 1 cable 0.75...4 mm ² - cable stiffness: flexible - without cable end Screw clamp terminal power circuit: 1 cable 1.5...4 mm ² - cable stiffness: solid - without cable end Screw clamp terminal power circuit: 2 cable 0.34...2.5 mm ² - cable stiffness: flexible - with cable end Screw clamp terminal power circuit: 2 cable 0.75...4 mm ² - cable stiffness: flexible - without cable end Screw clamp terminal power circuit: 2 cable 1.5...4 mm ² - cable stiffness: solid - without cable end

Complementary

Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	$\geq 0.20\text{ }U_c$ at $\leq 50\text{ }^{\circ}\text{C}$ drop-out 50/60 Hz $0.8\text{...}1.15\text{ }U_c$ at $\leq 50\text{ }^{\circ}\text{C}$ operational 50/60 Hz
[Ui] rated insulation voltage	600 V conforming to CSA C22-2 No 14 for control circuit 600 V certifications UL 508 conforming to CSA C22-2 No 14 for power circuit 690 V conforming to BS 5424 for control circuit 690 V conforming to IEC 60947 for control circuit 690 V conforming to BS 5424 for power circuit 690 V conforming to IEC 60947 for power circuit 690 V conforming to NF C 20-040 for power circuit 750 V conforming to VDE 0110 group C for control circuit 750 V conforming to VDE 0110 group C for power circuit
[Uimp] rated impulse withstand voltage	8 kV
Mounting support	Plate Rail
Flame retardance	Class C2 conforming to NF F 16-101 Class C2 conforming to NF F 16-102 V1 conforming to UL 94
Tightening torque	0.8...1.3 N.m power circuit: - on screw clamp terminal - with screwdriver flat $\varnothing 6$ mm 0.8...1.3 N.m power circuit: - on screw clamp terminal - with screwdriver Philips No 2
[Ue] rated operational voltage	$\leq 690\text{ V AC } \leq 400\text{ Hz}$ for power circuit
[Ith] conventional free air thermal current	10 A at $\leq 50\text{ }^{\circ}\text{C}$ for control circuit 20 A at $\leq 50\text{ }^{\circ}\text{C}$ for power circuit
Irms rated making capacity	110 A at 690 V AC for control circuit conforming to IEC 60947 144 A at 690 V AC for power circuit conforming to IEC 60947 144 A at 690 V AC for power circuit conforming to NF C 63-110

Rated breaking capacity	110 A at 440 V for power circuit conforming to IEC 60947 110 A at 440 V for power circuit conforming to NF C 63-110 70 A at 660...690 V for power circuit conforming to IEC 60947 70 A at 660...690 V for power circuit conforming to NF C 63-110 80 A at 500 V for power circuit conforming to IEC 60947 80 A at 500 V for power circuit conforming to NF C 63-110
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 at 50 Hz - lth 20 A for power circuit
Inrush power in VA	30 VA at 20 °C
Hold-in power consumption in VA	4.5 VA at 20 °C 50/60 Hz
Operating time	10...20 ms between energisation of coil and closing of NO contact 10...20 ms coil de-energisation and NO opening 15...25 ms coil de-energisation and NC opening 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	10000000 cycles
Operating rate	3600 cyc/h
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Insulation resistance	> 10 MOhm for control circuit
Height	58 mm
Width	45 mm
Depth	57 mm
Product weight	0.18 kg

Environment

Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA GOST UL
IP degree of protection	IP2x conforming to VDE 0106
Protective treatment	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
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	10 gn contactor closed 6 gn contactor opened
Vibration resistance	2 gn contactor opened 5...300 Hz 4 gn contactor closed 5...300 Hz
Heat dissipation	1.3 W at 50/60 Hz for control circuit