

LC1K16004F7

contactor TeSys LC1-K - 3 poles - AC-3 690 V
16 A - coil 110 V AC

Main

Range of product	TeSys K
Product or component type	Contacteur
Device short name	LC1K
Contacteur application	Motor control
Utilisation category	AC-3
Control circuit type	AC
Coil type	AC 50/60 Hz
Poles description	3P
Pole contact composition	3 NO
[I _e] rated operational current	16 A (<= 60 °C) at 440 V AC AC-3 for power circuit
Motor power kW	4 kW at 660...690 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 3 kW at 220...230 V AC 50/60 Hz 7.5 kW at 380...415 V AC 50/60 Hz 7.5 kW at 440 V AC 50/60 Hz
Motor power hp	2 hp at 200...208 V AC 60 Hz conforming to CSA 2 hp at 200...208 V AC 60 Hz conforming to UL 5 hp at 460...480 V AC 60 Hz conforming to CSA 5 hp at 460...480 V AC 60 Hz conforming to UL 2 hp at 230...240 V AC 60 Hz conforming to CSA 2 hp at 230...240 V AC 60 Hz conforming to UL 7.5 hp at 575...600 V AC 60 Hz conforming to CSA 7.5 hp at 575...600 V AC 60 Hz conforming to UL
Auxiliary contact composition	1 NC

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[Uc] control circuit voltage	110 V AC 50/60 Hz
Connections - terminals	<p>Power circuit: screw clamp terminal 1 cable 1.5 mm² - cable stiffness: solid</p> <p>Power circuit: screw clamp terminal 2 cable 4 mm² - cable stiffness: solid</p> <p>Power circuit: screw clamp terminal 1 cable 0.75 mm² - cable stiffness: flexible</p> <p>Power circuit: screw clamp terminal 2 cable 4 mm² - cable stiffness: flexible</p> <p>Power circuit: screw clamp terminal 1 cable 0.34 mm² - cable stiffness: flexible</p> <p>Power circuit: screw clamp terminal 1 cable 1.5 mm² - cable stiffness: flexible</p> <p>Power circuit: screw clamp terminal 1 cable 2.5 mm² - cable stiffness: flexible</p> <p>Control circuit: screw clamp terminal 1 cable 1.5 mm² - cable stiffness: solid</p> <p>Control circuit: screw clamp terminal 2 cable 4 mm² - cable stiffness: solid</p> <p>Control circuit: screw clamp terminal 1 cable 0.75 mm² - cable stiffness: flexible</p> <p>Control circuit: screw clamp terminal 2 cable 4 mm² - cable stiffness: flexible</p> <p>Control circuit: screw clamp terminal 1 cable 0.34 mm² - cable stiffness: flexible</p> <p>Control circuit: screw clamp terminal 1 cable 1.5 mm² - cable stiffness: flexible</p> <p>Control circuit: screw clamp terminal 1 cable 2.5 mm² - cable stiffness: flexible</p> <p>Power circuit: spring terminal 1 cable 0.75 mm² - cable stiffness: solid</p> <p>Power circuit: spring terminal 1 cable 1.5 mm² - cable stiffness: solid</p> <p>Power circuit: spring terminal 1 cable 0.75 mm² - cable stiffness: flexible</p> <p>Power circuit: spring terminal 1 cable 1.5 mm² - cable stiffness: flexible</p> <p>Control circuit: spring terminal 1 cable 0.75 mm² - cable stiffness: solid</p> <p>Control circuit: spring terminal 1 cable 1.5 mm² - cable stiffness: solid</p> <p>Control circuit: spring terminal 1 cable 0.75 mm² - cable stiffness: flexible</p> <p>Control circuit: spring terminal 1 cable 1.5 mm² - cable stiffness: flexible</p> <p>Power circuit: Faston connectors 2 - width: 2.8 mm - cable stiffness: clip</p> <p>Power circuit: Faston connectors 1 - width: 6.35 mm - cable stiffness: clip</p> <p>Control circuit: Faston connectors 2 - width: 2.8 mm - cable stiffness: clip</p> <p>Control circuit: Faston connectors 1 - width: 6.35 mm - cable stiffness: clip</p>

Complementary

Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	<p>$\geq 0.20 U_c$ at ≤ 50 °C drop-out 50/60 Hz</p> <p>$0.8 \dots 1.15 U_c$ at ≤ 50 °C operational 50/60 Hz</p>
[Ui] rated insulation voltage	<p>600 V for control circuit conforming to CSA C22-2 No 14</p> <p>690 V for control circuit conforming to BS 5424</p> <p>690 V for control circuit conforming to IEC 60947</p> <p>750 V for control circuit conforming to VDE 0110 group C</p>
Mounting support	<p>Plate</p> <p>Rail</p>
Flame retardance	<p>Class C2 conforming to NF F 16-101</p> <p>Class C2 conforming to NF F 16-102</p> <p>V1 conforming to UL 94</p>
Tightening torque	<p>Power circuit: 0.8 N.m...1.3 nm - on screw clamp terminal - with screwdriver flat \varnothing 6 mm</p> <p>Power circuit: 0.8 N.m...1.3 nm - on screw clamp terminal - with screwdriver Philips No 2</p>
[Ue] rated operational voltage	≤ 690 V AC 400 Hz for power circuit
[Ith] conventional free air thermal current	<p>10 A at ≤ 50 °C for control circuit</p> <p>20 A at ≤ 50 °C for power circuit</p>

Irms rated making capacity	110 A at 690 V AC for control circuit conforming to IEC 60947 110 A at 690 V AC for power circuit conforming to IEC 60947 160 A at 690 V AC for power circuit conforming to NF C 63-110
Rated breaking capacity	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 63-110 160 A at 440 V for power circuit conforming to IEC 60947 160 A at 440 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 coil de-energisation and NO opening 15...25 ms coil de-energisation and NC opening 10...20 ms between energisation of coil and closing of NO contact 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
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 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed
Heat dissipation	1.3 W at 50/60 Hz for control circuit