



Main

Range	TeSys
Product name	TeSys K
Product or component type	Reversing contactor
Device short name	LC2K
Device application	Control
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Pole contact composition	3 NO
System Voltage	690 V AC 50/60 Hz power circuit <= 690 V AC 50/60 Hz signalling circuit
[Ie] rated operational current	20 A (<= 122 °F (50 °C)) at <= 440 V AC AC-1 power circuit 16 A (<= 158 °F (70 °C)) at 690 V AC AC-1 power circuit 12 A at <= 440 V AC AC-3 power circuit
Motor power kW	3 kW at 220...230 V AC 50/60 Hz 4 kW at 480 V AC 50/60 Hz 4 kW at 500...600 V AC 50/60 Hz 4 kW at 660...690 V AC 50/60 Hz 5.5 kW at 380...415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	220...230 V AC 50/60 Hz
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A at <= 122 °F (50 °C) power circuit 10 A at <= 122 °F (50 °C) signalling circuit
Irms rated making capacity	144 A at 690 V AC power circuit conforming to IEC 60947 144 A at 690 V AC power circuit conforming to NF C 63-110 110 A AC 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
[Icw] rated short-time withstand current	80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 115 A <= 122 °F (50 °C) 1 s power circuit 105 A <= 122 °F (50 °C) 5 s power circuit 100 A <= 122 °F (50 °C) 10 s power circuit 75 A <= 122 °F (50 °C) 30 s power circuit 55 A <= 122 °F (50 °C) 1 min power circuit 50 A <= 122 °F (50 °C) 3 min power circuit 25 A <= 50 °C >= 15 min power circuit
Associated fuse rating	25 A gG at <= 440 V power circuit 25 A aM power circuit 10 A gG signalling circuit conforming to IEC 60947 10 A gG signalling circuit conforming to VDE 0660

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Average impedance	3 mOhm at 50 Hz - lth 20 A power circuit
[Ui] rated insulation voltage	690 V power circuit conforming to IEC 60947-4-1 600 V power circuit conforming to UL 508 690 V signalling circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-5-1 600 V signalling circuit conforming to UL 508 600 V power circuit conforming to CSA C22.2 No 14 600 V signalling circuit conforming to CSA C22.2 No 14
Electrical durability	0.3 Mcycles 20 A AC-1 at $U_e \leq 440$ V 1.3 Mcycles 12 A AC-3 at $U_e \leq 440$ V
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
Connections - terminals	Screw clamp terminals 1 cable(s) 0...0.01 in ² (1.5...4 mm ²) - cable stiffness: solid Screw clamp terminals 1 cable(s) 0...0.01 in ² (0.75...4 mm ²) - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0...0 in ² (0.34...2.5 mm ²) - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 0...0.01 in ² (1.5...4 mm ²) - cable stiffness: solid Screw clamp terminals 2 cable(s) 0...0.01 in ² (0.75...4 mm ²) - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0...0 in ² (0.34...1.5 mm ²) - cable stiffness: flexible - with cable end
Tightening torque	11.5 lbf.in (1.3 N.m) - on screw clamp terminals - with screwdriver Philips No 2 11.5 lbf.in (1.3 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm
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 conforming to EN/ISO 13849-1 B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	5 Mcycles
Operating rate	3600 cyc/h

Complementary

Control circuit voltage limits	0.2...0.75 U_c at ≤ 122 °F (50 °C) drop-out 0.8...1.15 U_c at ≤ 122 °F (50 °C) operational
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
Auxiliary contacts type	Type instantaneous 1 NO
Signalling circuit frequency	≤ 400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V signalling circuit
Non overlap distance	0.02 in (0.5 mm)
Insulation resistance	> 10 MOhm signalling circuit

Environment

IP degree of protection	IP20 conforming to VDE 0106
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protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
ambient air temperature for operation	-13...122 °F (-25...50 °C)
ambient air temperature for storage	-58...176 °F (-50...80 °C)
operating altitude	6561.68 ft (2000 m) without derating derating in temperature
flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
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	3.54 in (90 mm)
depth	2.24 in (57 mm)
product weight	0.86 lb(US) (0.39 kg)

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0706 - Schneider Electric declaration of conformity	Compliant - since 0706 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Contractual warranty

Warranty period	18 months
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