

Main

Range of product	TeSys K
Range	TeSys
Product name	TeSys K
Product or component type	Reversing contactor
Device short name	LC2K
Device application	Control
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit \leq 690 V AC 50/60 Hz for signalling circuit
[Ie] rated operational current	20 A (\leq 50 °C) at \leq 440 V AC AC-1 for power circuit 16 A (\leq 70 °C) at 690 V AC AC-1 for power circuit 12 A at \leq 440 V AC AC-3 for 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
Control circuit voltage	110 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 $\leq 50^{\circ}\text{C}$ for power circuit 10 A at $\leq 50^{\circ}\text{C}$ for signalling circuit
Irms rated making capacity	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 63-110 110 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
[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 $\leq 50^{\circ}\text{C}$ 1 s power circuit 105 A $\leq 50^{\circ}\text{C}$ 5 s power circuit 100 A $\leq 50^{\circ}\text{C}$ 10 s power circuit 75 A $\leq 50^{\circ}\text{C}$ 30 s power circuit 55 A $\leq 50^{\circ}\text{C}$ 1 min power circuit 50 A $\leq 50^{\circ}\text{C}$ 3 min power circuit 25 A $\leq 50^{\circ}\text{C}$ ≥ 15 s power 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 at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	690 V for signalling circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-5-1 600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling 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	0.3 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	Rail Plate
Standards	VDE 0660 BS 5424 IEC 60947 NF C 63-110
Product certifications	CSA UL
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm ² - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.75...4 mm ² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm ² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm ² - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.75...4 mm ² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm ² - cable stiffness: flexible - with cable end
Tightening torque	1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 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 = 20000000 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 $\leq 50^{\circ}\text{C}$ drop-out 0.8...1.15 U_c at $\leq 50^{\circ}\text{C}$ 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
Auxiliary contacts type	Type instantaneous 1 NO
Signalling circuit frequency	≤ 400 Hz

Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non overlap distance	0.5 mm
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP2x conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-25...50 °C
Ambient air temperature for storage	-50...80 °C
Operating altitude	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	58 mm
Width	90 mm
Depth	57 mm
Product weight	0.39 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0706 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available  Product environmental
Product end of life instructions	Available  End of life manual

Contractual warranty

Warranty period	18 months
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