



### 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
Contactors application	Resistive load Motor control
Utilisation category	AC-3 AC-4 AC-1
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	9 A at $\leq$ 440 V AC AC-3 for power circuit 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
Motor power kW	4 kW at 380...415 V AC 50/60 Hz 4 kW at 440 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 2.2 kW at 220...230 V AC 50/60 Hz
Control circuit type	AC 50/60 Hz
Control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III

Disclaimer: 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

[I <sub>th</sub> ] conventional free air thermal current	20 A at ≤ 50 °C for power circuit 10 A at ≤ 50 °C for signalling circuit
I <sub>rms</sub> rated making capacity	110 A AC for power circuit conforming to NF C 63-110 110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947
Rated breaking capacity	110 A at 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
[I <sub>cw</sub> ] rated short-time withstand current	90 A ≤ 50 °C 1 s power circuit 85 A ≤ 50 °C 5 s power circuit 80 A ≤ 50 °C 10 s power circuit 60 A ≤ 50 °C 30 s power circuit 45 A ≤ 50 °C 1 min power circuit 40 A ≤ 50 °C 3 min power circuit 80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 20 A ≤ 50 °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 - I <sub>th</sub> 20 A for power circuit
[U <sub>i</sub> ] 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	0.18 Mcycles 20 A AC-1 at U <sub>e</sub> ≤ 440 V 1.3 Mcycles 9 A AC-3 at U <sub>e</sub> ≤ 440 V
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	UL CSA
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> - 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 <sub>c</sub> at ≤ 50 °C drop-out 0.8...1.15 U <sub>c</sub> 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

Auxiliary contacts type	Type instantaneous 1 NC
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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available <a href="#">Product environmental</a>
Product end of life instructions	Available <a href="#">End of life manual</a>

## Contractual warranty

Warranty period	18 months
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