



Main

Range	TeSys
Product or component type	Contactors
Product name	TeSys K
Device short name	LC1K
Device application	Control
Contactors application	Motor control Resistive load

Complementary

Utilisation category	AC-1 AC-3
Poles description	3P
Power 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	12 A at \leq 440 V AC AC-3 for power circuit
Control circuit type	DC low consumption
[Uc] control circuit voltage	24 V DC
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 5.5 kW at 380...415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz 4 kW at 660/690 V AC 50/60 Hz
Auxiliary contact composition	1 NC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A at \leq 50 °C for power circuit 10 A at \leq 50 °C for signalling circuit
Irms rated making capacity	110 A AC for signalling circuit conforming to IEC 60947

144 A AC for power circuit conforming to NF C 63-110
 144 A AC for power 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 <= 50 °C 1 s signalling circuit 25 A <= 50 °C >= 15 min power circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 115 A <= 50 °C 1 s power circuit 105 A <= 50 °C 5 s power circuit 100 A <= 50 °C 10 s power circuit 75 A <= 50 °C 30 s power circuit 55 A <= 50 °C 1 min power circuit 50 A <= 50 °C 3 min power circuit
Associated fuse rating	25 A gG at <= 440 V 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 60947-5-1 690 V for power circuit conforming to BS 5424 690 V for power circuit conforming to IEC 60947-4-1 690 V for power circuit conforming to NF C 20-040 750 V for power circuit conforming to VDE 0110 group C
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in W	1.8 W at 20 °C
Hold-in power consumption in W	1.8 W at 20 °C
Heat dissipation	1.8 W
Control circuit voltage limits	>= 0.10 Uc at <= 50 °C drop-out 0.7...1.3 Uc at <= 50 °C operational
Connections - terminals	Power circuit : lugs-ring terminals - external diameter: 7 mm
Operating rate	3600 cyc/h
Coil technology	With integral suppression device
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
Mounting support	Plate Rail
Tightening torque	Power circuit : 1.3 N.m - on lugs-ring terminals - with screwdriver Philips No 2 3.2 mm Power circuit : 1.3 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm 3.2 mm
Operating time	10...20 ms coil de-energisation and NO opening 30...40 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
Non overlap distance	0.5 mm
Mechanical durability	30 Mcycles
Electrical durability	0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V
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	45 mm
Depth	57 mm
Product weight	0.235 kg

Environment

Standards	EN 45545 R22 HL3 EN/IEC 60947-4-1 BS 5424 IEC 60947 NF C 63-110 VDE 0660 IEC 60077-1 IEC 60077-2 UL 60947-4-1 CSA C22.2 No 60947-4-1 EN/IEC 60947-5-1
Product certifications	CCC CSA IEC UL EAC
IP degree of protection	IP20 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
Permissible ambient air temperature around the device	-40...70 °C at Uc
Operating altitude	2000 m without derating
Flame retardance	V0 conforming to UL 94

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant 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 end of life instructions	Available