



### Main

Range	TeSys
Product or component type	Contactor
Product name	TeSys K
Device short name	LC1K
Device application	Control
Contactor application	Resistive load

### Complementary




Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	690 V AC 50/60 Hz
[Ie] rated operational current	20 A (at <50 °C) AC-1 for power circuit 16 A (at <70 °C) AC-1 for power circuit
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	Without
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 50 °C)
Irms rated making capacity	110 A AC conforming to NF C 63-110 110 A AC conforming to IEC 60947
Rated breaking capacity	110 A at 220...230 V conforming to IEC 60947 110 A at 380...415 V conforming to IEC 60947 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	90 A 50 °C - 1 s 85 A 50 °C - 5 s 80 A 50 °C - 10 s 60 A 50 °C - 30 s 45 A 50 °C - 1 min 40 A 50 °C - 3 min 20 A 50 °C - >= 15 min
Associated fuse rating	25 A gG at <= 440 V for power circuit 25 A aM for power circuit
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 600 V conforming to UL 60947-4-1 Power circuit: 600 V conforming to CSA C22.2 No 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 690 V conforming to BS 5424 Power circuit: 690 V conforming to NF C 20-040 Power circuit: 750 V conforming to VDE 0110 group C
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
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: 0.2...0.75 Uc (at <50 °C)

Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> solid Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> solid Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end
Maximum operating rate	3600 cyc/h
Mounting support	Rail Plate
Tightening torque	0.8 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm 0.8 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	10...20 ms coil energisation and NO closing 5...15 ms coil energisation and NC opening 10...20 ms coil de-energisation and NO opening 15...25 ms coil de-energisation and NC 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	10 Mcycles
Electrical durability	0.18 Mcycles 20 A AC-1 at Ue ≤ 690 V
Mechanical robustness	Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6
Height	58 mm
Width	45 mm
Depth	57 mm
Net weight	0.235 kg

## Environment

Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660 EN 60335-1
Product certifications	CSA UL
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 storage	-50...80 °C
Operating altitude	0...2000 m without derating
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	 Yes

China RoHS Regulation	<a href="#"> China RoHS Declaration</a>
Environmental Disclosure	<a href="#"> Product Environmental Profile</a>
Circularity Profile	<a href="#"> End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

### Contractual warranty

Warranty	18 months
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