



Main

Range	TeSys
Product or component type	Contactor
Product name	TeSys K
Device short name	LC1K
Device application	Control
Contactor application	Motor control

Complementary

Utilisation category	AC-3 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit 690 V AC 50/60 Hz Signalling circuit ≤ 690 V AC 50/60 Hz
[Ie] rated operational current	6 A ≤ 440 V AC AC-3 power circuit
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	500 V AC 50/60 Hz
Motor power kW	1.5 kW 220...230 V AC 50/60 Hz AC-3 2.2 kW 380...415 V AC 50/60 Hz AC-3 3 kW 440 V AC 50/60 Hz AC-3 3 kW 480 V AC 50/60 Hz AC-3 3 kW 500...600 V AC 50/60 Hz AC-3 3 kW 660...690 V AC 50/60 Hz AC-3 1.5 kW 400 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A 122 °F (50 °C) power circuit 10 A 122 °F (50 °C) signalling circuit
Irms rated making capacity	110 A AC power circuit NF C 63-110 110 A AC power circuit IEC 60947 110 A AC signalling circuit IEC 60947
Rated breaking capacity	110 A 415 V IEC 60947 110 A 440 V IEC 60947 80 A 500 V IEC 60947 110 A 220...230 V IEC 60947 110 A 380...400 V IEC 60947 70 A 660...690 V IEC 60947
[Icw] rated short-time withstand current	90 A 122 °F (50 °C) - 1 s power circuit 85 A 122 °F (50 °C) - 5 s power circuit 80 A 122 °F (50 °C) - 10 s power circuit 60 A 122 °F (50 °C) - 30 s power circuit 45 A 122 °F (50 °C) - 1 min power circuit 40 A 122 °F (50 °C) - 3 min power circuit 20 A 122 °F (50 °C) - ≥ 15 min power circuit 80 A - 1 s signalling circuit 90 A - 500 ms signalling circuit 110 A - 100 ms signalling circuit

Associated fuse rating	25 A gG <= 440 V power circuit 25 A aM power circuit 10 A gG signalling circuit IEC 60947 10 A gG signalling circuit VDE 0660
Average impedance	3 mOhm - lth 20 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 600 V UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-5-1 Signalling circuit 600 V UL 508 Power circuit 600 V CSA C22.2 No 14 Signalling circuit 600 V CSA C22.2 No 14
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in VA	30 VA 68 °F (20 °C))
Hold-in power consumption in VA	4.5 VA 68 °F (20 °C))
Heat dissipation	1.3 W
Control circuit voltage limits	Operational 0.8...1.15 Uc 122 °F (50 °C)) Drop-out 0.2...0.75 Uc 122 °F (50 °C))
Connections - terminals	Screw clamp terminals 1 0.00...0.01 in ² (1.5...4 mm ²)solid Screw clamp terminals 1 0.00...0.01 in ² (0.75...4 mm ²)flexible without cable end Screw clamp terminals 1 0.00...0.00 in ² (0.34...2.5 mm ²)flexible with cable end Screw clamp terminals 2 0.00...0.01 in ² (1.5...4 mm ²)solid Screw clamp terminals 2 0.00...0.01 in ² (0.75...4 mm ²)flexible without cable end Screw clamp terminals 2 0.00...0.00 in ² (0.34...1.5 mm ²)flexible with cable end
Maximum operating rate	3600 cyc/h
Auxiliary contacts 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
Mounting support	Plate Rail
Tightening torque	11.51 Lbf.in (1.3 N.m) screw clamp terminals Philips No 2 11.51 lbf.in (1.3 N.m) screw clamp terminals 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
Non overlap distance	0.02 in (0.5 mm)
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 6 A AC-3 <= 440 V
Mechanical robustness	Shocks contactor closed, on X axis10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened2 Gn, 5...300 Hz IEC 60068-2-6
Height	2.28 in (58 mm)
Maximum Width	1.77 in (45 mm)
Depth	2.24 in (57 mm)
Net Weight	0.40 lb(US) (0.18 kg)

Environment

Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
IP degree of protection	IP2x VDE 0106
Protective treatment	TC IEC 60068 TC DIN 50016
Ambient air temperature for storage	-58...176 °F (-50...80 °C)

Operating altitude	6561.68 ft (2000 m) without derating
Flame retardance	V1 conforming to UL 94 Requirement 2 NF F 16-101 Requirement 2 NF F 16-102

Ordering and shipping details

Category	22326 - CTR,K-LINE,AC,OPEN,NONREV
Discount Schedule	I12
GTIN	03389110487688
Nbr. of units in pkg.	1
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.89 in (4.8 cm)
Package 1 width	2.44 in (6.2 cm)
Package 1 Length	2.60 in (6.6 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
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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