



## Main

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

## Complementary

Utilisation category	AC-4 AC-1 AC-3
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit 690 V AC 50/60 Hz Signalling circuit $\leq$ 690 V AC 50/60 Hz
[Ie] rated operational current	20 A 122 °F (50 °C) $\leq$ 440 V AC AC-1 power circuit 12 A $\leq$ 440 V AC AC-3 power circuit 16 A 158 °F (70 °C) 690 V AC AC-1 power circuit
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	110 V AC 50/60 Hz
Motor power kW	4 kW 480 V AC 50/60 Hz AC-3 4 kW 500...600 V AC 50/60 Hz AC-3 4 kW 660...690 V AC 50/60 Hz AC-3 2.2 kW 400 V AC 50/60 Hz AC-4 3 kW 220...230 V AC 50/60 Hz AC-3 5.5 kW 380...415 V AC 50/60 Hz AC-3 5.5 kW 440 V AC 50/60 Hz AC-3
Auxiliary contact composition	1 NO

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

[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 signalling circuit IEC 60947 144 A AC power circuit NF C 63-110 144 A AC power circuit IEC 60947
Rated breaking capacity	110 A 440 V IEC 60947 80 A 500 V IEC 60947 70 A 660...690 V IEC 60947
[Icw] rated short-time withstand current	115 A 122 °F (50 °C) - 1 s power circuit 105 A 122 °F (50 °C) - 5 s power circuit 100 A 122 °F (50 °C) - 10 s power circuit 75 A 122 °F (50 °C) - 30 s power circuit 55 A 122 °F (50 °C) - 1 min power circuit 50 A 122 °F (50 °C) - 3 min power circuit 80 A - 1 s signalling circuit 90 A - 500 ms signalling circuit 110 A - 100 ms signalling circuit 25 A 122 °F (50 °C) - >= 15 min power 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 - Ith 20 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 600 V UL 508 Power circuit 690 V 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 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 U <sub>c</sub> 122 °F (50 °C)) Drop-out 0.2...0.75 U <sub>c</sub> 122 °F (50 °C))
Connections - terminals	screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.34...2.5 mm <sup>2</sup> )flexible with cable end screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> )flexible with cable end
Maximum operating rate	3600 cyc/h
Coil technology	Built-in bidirectional peak limiting diode suppressor
Auxiliary contacts type	Instantaneous 1 NO
Signalling circuit frequency	<= 400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V 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 EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Non overlap distance	0.02 in (0.5 mm)
Mechanical durability	10 Mcycles
Electrical durability	0.3 Mcycles 20 A AC-1 <= 440 V 1.3 Mcycles 12 A AC-3 <= 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	2.28 in (58 mm)
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	UL CSA
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
Flame retardance	V1 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	03389110185546
Returnability	No
Country of origin	FR

## 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 Carcinogen harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>
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	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information.
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
----------	-----------