





Main

Range	TeSys
Product name	TeSys K
Product or Component Type	Reversing contactor
Device short name	LP5K
Device Application	Control
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Device presentation	Preassembled with reversing power busbar
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	20 A (at <122 °F (50 °C)) at ≤ 440 V AC AC-1 for power circuit 16 A (at <158 °F (70 °C)) at 690 V AC AC-1 for power circuit 9 A at ≤ 440 V AC AC-3 for power circuit 9 A at ≤ 440 V AC AC-3e for power circuit
Motor power kW	2.2 KW 220...230 V AC 50/60 Hz 4 KW 380...415 V AC 50/60 Hz 4 KW 440 V AC 50/60 Hz 4 KW 480 V AC 50/60 Hz 4 KW 500...600 V AC 50/60 Hz 4 kW 660...690 V AC 50/60 Hz
Control circuit type	DC low consumption
[Uc] control circuit voltage	24 V DC
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 122 °F (50 °C)) for power circuit 10 A (at 122 °F (50 °C)) for signalling circuit
Irms 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
[Icw] rated short-time withstand current	90 A 122 °F (50 °C) - 1 s for power circuit 85 A 122 °F (50 °C) - 5 s for power circuit 80 A 122 °F (50 °C) - 10 s for power circuit 60 A 122 °F (50 °C) - 30 s for power circuit 45 A 122 °F (50 °C) - 1 min for power circuit 40 A 122 °F (50 °C) - 3 min for power circuit 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit 20 A 122 °F (50 °C) - ≥ 15 min for 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 - Ith 20 A 50 Hz for 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
Electrical durability	1.3 Mcycles 9 A AC-3 ≤ 440 V 1.3 Mcycles 9 A AC-3e ≤ 440 V 0.16 Mcycles 20 A AC-1 ≤ 690 V 0.02 Mcycles 54 A AC-4 ≤ 440 V
Interlocking type	Mechanical
Mounting Support	Plate Rail
Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product Certifications	CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]
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
Tightening torque	7.08...11.51 Lbf.in (0.8...1.3 N.m) screw clamp terminals Philips No 2 7.08...11.51 Lbf.in (0.8...1.3 N.m) screw clamp terminals flat Ø 6 mm 7.08...11.51 lbf.in (0.8...1.3 N.m) screw clamp terminals pozidriv No 2
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 EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	5 Mcycles
Maximum operating rate	3600 cyc/h

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	Operational: 0.7...1.30 Uc (at <122 °F (50 °C)) Drop-out: 0.1...0.7 Uc (at <122 °F (50 °C))
Inrush power in W	1.8 W 68 °F (20 °C))
Hold-in power consumption in W	1.8 W 68 °F (20 °C)
Heat dissipation	1.8 W
Auxiliary contacts type	Instantaneous 1 NO
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non overlap distance	0.02 in (0.5 mm)
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 VDE 0106
Protective treatment	TC IEC 60068 TC DIN 50016
Ambient Air Temperature for Operation	-13...122 °F (-25...50 °C)
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 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical robustness	Shocks contactor closed, on Z axis15 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 Shocks contactor opened, on X axis10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis10 Gn for 11 ms IEC 60068-2-27
Height	2.28 in (58 mm)
Width	3.54 in (90 mm)
Depth	2.24 in (57 mm)
Net Weight	1.08 lb(US) (0.49 kg)

Ordering and shipping details

Category	US10I1222322
Discount Schedule	0I12
GTIN	3389110501827
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.56 in (6.5 cm)
Package 1 Width	3.62 in (9.2 cm)
Package 1 Length	2.36 in (6.0 cm)
Package 1 Weight	15.77 oz (447.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	20.47 lb(US) (9.284 kg)

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
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes

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