



Main

Range	TeSys
Product or Component Type	Contacteur
Device short name	LP1K
Contacteur application	Motor control Resistive load

Complementary

Utilisation category	AC-3 AC-3e AC-1 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit ≤ 690 V AC ≤ 400 Hz Signalling circuit ≤ 690 V AC ≤ 400 Hz
[Ie] rated operational current	9 A (at <140 °F (60 °C)) at ≤ 440 V AC AC-3 for power circuit 9 A (at <140 °F (60 °C)) at ≤ 440 V AC AC-3e for power circuit 20 A (at <140 °F (60 °C)) at ≤ 690 V AC AC-1 for power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
Motor power kW	2.2 KW 220...230 V AC 50/60 Hz AC-3 4 KW 380...415 V AC 50/60 Hz AC-3 4 KW 440/690 V AC 50/60 Hz AC-3 2.2 KW 220...230 V AC 50/60 Hz AC-3e 4 KW 380...415 V AC 50/60 Hz AC-3e 4 KW 440/690 V AC 50/60 Hz AC-3e 2.2 KW 220...230 V AC 50/60 Hz AC-4 4 KW 380...415 V AC 50/60 Hz AC-4 4 KW 440/690 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Oversvoltage category	III
[Ith] conventional free air thermal current	20 A (at 140 °F (60 °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 IEC 60947 110 A AC for signalling circuit conforming to IEC 60947
Rated breaking capacity	110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 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 70 A at 660...690 V conforming to IEC 60947

[I _{cw}] 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 20 A 122 °F (50 °C) - >= 15 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
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 - lth 20 A 50 Hz for power circuit
[U _i] 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 for signalling circuit
Inrush power in W	3 W 68 °F (20 °C))
Hold-in power consumption in W	3 W 68 °F (20 °C)
Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.8...1.15 U _c (at <122 °F (50 °C)) Drop-out: >= 0.10 U _c (at <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 Power circuit screw clamp terminals 2 0.00 in ² (1.5 mm ²)flexible with cable end
Maximum operating rate	3600 cyc/h
Auxiliary contacts type	Instantaneous 1 NO
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Mounting Support	Rail Plate
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	30...40 ms coil energisation and NO closing 10 ms coil de-energisation and NO opening
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	10 Mcycles
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
Height	2.28 in (58 mm)
Width	1.77 in (45 mm)
Depth	2.24 in (57 mm)
Net Weight	0.50 lb(US) (0.225 kg)

Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4
Product Certifications	CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]UL
IP degree of protection	IP2X
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

Ordering and shipping details

Category	22321-CTR,K-LINE,DC,OPEN,NONREV
Discount Schedule	I12
GTIN	3389110363241
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	2.36 in (6.000 cm)
Package 1 Length	2.56 in (6.500 cm)
Package 1 Weight	7.87 oz (223.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	20.21 lb(US) (9.168 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	341.03 lb(US) (154.688 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
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