



## Main

Range	TeSys
Product or Component Type	Contactor
Device short name	LP1K
Contactor application	Resistive load

## Complementary

Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	Power circuit $\leq 690$ V AC $\leq 400$ Hz Signalling circuit $\leq 690$ V AC $\leq 400$ Hz
[Ie] rated operational current	20 A (at $\leq 140$ °F (60 °C)) at $\leq 690$ V AC AC-1 for power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	220 V DC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage 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
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
[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 20 A 122 °F (50 °C) - $\geq 15$ min for power circuit
Associated fuse rating	25 A gG at $\leq 440$ 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 UL 508 Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA C22.2 No 14
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 Uc (at $\leq 122$ °F (50 °C)) Drop-out: $\geq 0.10$ Uc (at $\leq 122$ °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 Power circuit screw clamp terminals 2 0.00 in <sup>2</sup> (1.5 mm <sup>2</sup> )flexible with cable end
Maximum operating rate	3600 cyc/h
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 25...35 ms coil energisation and NC opening 15 ms coil de-energisation and NC 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	10 Mcycles
Electrical durability	0.16 Mcycles 20 A AC-1 <= 690 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]UKCA
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	US10I1222321
Discount Schedule	0I12
GTIN	3389110495782
Returnability	No
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.89 in (4.8 cm)
Package 1 Width	2.36 in (6.0 cm)
Package 1 Length	2.56 in (6.5 cm)
Package 1 Weight	7.51 oz (213.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
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	19.64 lb(US) (8.909 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 <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>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</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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