

Product data sheet

Specifications



contactor, TeSys K,
4P(4NO),AC-1, 440V, 20A, 12V
DC coil

LP1K12004JD

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	4 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC <= 400 Hz Signalling circuit <= 690 V AC <= 400 Hz
[Ie] rated operational current	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	12 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	144 A AC for power circuit conforming to IEC 60947
Rated breaking capacity	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	115 A 122 °F (50 °C) - 1 s for power circuit 105 A 122 °F (50 °C) - 5 s for power circuit 100 A 122 °F (50 °C) - 10 s for power circuit 75 A 122 °F (50 °C) - 30 s for power circuit 55 A 122 °F (50 °C) - 1 min for power circuit 50 A 122 °F (50 °C) - 3 min for power circuit 25 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
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)

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

Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: >= 0.10 Uc (at <122 °F (50 °C))
Connections - terminals	screw clamp terminals 1 0.002...0.006 in² (1.5...4 mm²)solid screw clamp terminals 1 0.001...0.006 in² (0.75...4 mm²)flexible without cable end screw clamp terminals 1 0.0005...0.004 in² (0.34...2.5 mm²)flexible with cable end screw clamp terminals 2 0.002...0.006 in² (1.5...4 mm²)solid screw clamp terminals 2 0.001...0.006 in² (0.75...4 mm²)flexible without cable end screw clamp terminals 2 0.0005...0.002 in² (0.34...1.5 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.002 in² (1.5 mm²)flexible with cable end
Maximum operating rate	3600 cyc/h
mounting support	Rail Plate
Tightening torque	7.08...11.5 lbf.in (0.8...1.3 N.m) screw clamp terminals Philips No 2 7.08...11.5 lbf.in (0.8...1.3 N.m) screw clamp terminals flat Ø 6 mm 7.08...11.5 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	0.3 Mcycles 20 A AC-1 <= 690 V
Height	2.3 in (58 mm)
Width	1.8 in (45 mm)
Depth	2.2 in (57 mm)
net weight	0.496 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 CCC UL CSA EAC CE 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	2000 m without derating
Flame retardance	V1 UL 94 Requirement 2 NF F 16-101 Requirement 2 NF F 16-102

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.6 in (6.5 cm)

Package 1 Width	2.4 in (6.2 cm)
Package 1 Length	1.9 in (4.8 cm)
Package 1 Weight	7.9 oz (224.0 g)

Contractual warranty

Warranty	18 months
----------	-----------

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓	Reach Free Of Svhc	
✓	Toxic Heavy Metal Free	
✓	Mercury Free	
✓	Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACH Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information