

Product data sheet

Specifications



TeSys K contactor , 4P (4 NO) ,AC-1, <= 440V, 20A , 72V DC coil

LP1K090045SD3

⚠ Discontinued on: Aug 30, 2023

⚠ End-of-service on: Dec 31, 2023

⚠ Discontinued

Main

Range of product	TeSys K
Range	TeSys
Product or component type	Contactors
Device short name	LP1K
Utilisation category	AC-1
Coil technology	Built-in bidirectional peak limiting diode suppressor
Poles description	4P
Pole contact composition	4 NO
[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

Complementary

Contactors application	Resistive load
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: 0.1...0.75 Uc (at <122 °F (50 °C))
[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
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
Mounting support	Printed circuit boards
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 CCC UL CSA EAC CE UKCA
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
[Ue] rated operational voltage	Power circuit 690 V AC 50/60 Hz

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

[Ith] conventional free air thermal current	20 A (at 122 °F (50 °C)) for power 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
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
Associated fuse rating	25 A gG at <= 440 V for power circuit 25 aM for power circuit
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
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
Maximum operating rate	3600 cyc/h
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)
Compatibility code	LP1K

Environment

Inrush power in W	3 W 68 °F (20 °C))
Hold-in power consumption in W	3 W 68 °F (20 °C)
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

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Longer

Lifetime extension	
Repair	No