

Product datasheet

Specifications



contactor TeSys LP1-K - 3P - AC-3 - 440 V 9 A - coil 24 V DC

LP1K0901BD3TQ

⚠ Discontinued on: 1 Nov 2020

EAN Code: 3389110876420

⚠ Discontinued

Main

Range of product	TeSys K
Product or component type	Contactors
Device short name	LP1K
Utilisation category	AC-3 AC-1
Control circuit type	DC
Coil technology	Built-in bidirectional peak limiting diode suppressor
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	20 A (at <50 °C) AC AC-1 for power circuit 9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	2.2 kW at 220...230 V AC 50/60 Hz 4 kW at 380...415 V AC 50/60 Hz 4 kW at 440/500 V AC 50/60 Hz 4 kW at 660/690 V AC 50/60 Hz
Motor power hp	3 hp at 230/240 V AC 60 Hz conforming to CSA 3 hp at 230/240 V AC 60 Hz conforming to UL 2 hp at 200/208 V AC 60 Hz conforming to CSA 2 hp at 200/208 V AC 60 Hz conforming to UL 5 hp at 460/480 V AC 60 Hz conforming to CSA 5 hp at 460/480 V AC 60 Hz conforming to UL 5 hp at 575/600 V AC 60 Hz conforming to CSA 5 hp at 575/600 V AC 60 Hz conforming to UL

Complementary

Contactors application	Resistive load Motor control
Coil type	DC standard
Auxiliary contact composition	1 NC
[Uc] control circuit voltage	24 V DC
Control circuit voltage limits	Drop-out: $\geq 0.10 U_c$ (at <50 °C) Operational: $0.8...1.15 U_c$ (at <50 °C)
[Ui] rated insulation voltage	Control circuit: 690 V conforming to BS 5424 Control circuit: 690 V conforming to IEC 60947 Power circuit: 690 V conforming to BS 5424 Power circuit: 690 V conforming to IEC 60947 Power circuit: 690 V conforming to NF C 20-040 Control circuit: 750 V conforming to VDE 0110 group C Power circuit: 750 V conforming to VDE 0110 group C Control circuit: 600 V conforming to CSA C22.2 No 14 Power circuit: 600 V UL 508 certified conforming to CSA C22.2 No 14

[Uimp] rated impulse withstand voltage	8 kV
Mounting support	Rail Plate
Standards	BS 5424 NF C 63-110 IEC 60947 VDE 0660
Product certifications	GOST CSA UL
IP degree of protection	IP2X conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068
Ambient air temperature for operation	-25...50 °C
Ambient air temperature for storage	-50...80 °C
Operating altitude	2000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	10 gn contactor closed 6 gn contactor opened
Vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed
Connections - terminals	Power circuit: screw clamp terminal 1 x 1.5 mm ² solid Power circuit: screw clamp terminal 2 x 4 mm ² solid Power circuit: screw clamp terminal 1 x 0.75 mm ² flexible Power circuit: screw clamp terminal 2 x 4 mm ² flexible Power circuit: screw clamp terminal 1 x 0.34 mm ² flexible Power circuit: screw clamp terminal 1 x 1.5 mm ² flexible Power circuit: screw clamp terminal 1 x 2.5 mm ² flexible Control circuit: screw clamp terminal 1 x 1.5 mm ² solid Control circuit: screw clamp terminal 2 x 4 mm ² solid Control circuit: screw clamp terminal 1 x 0.75 mm ² flexible Control circuit: screw clamp terminal 2 x 4 mm ² flexible Control circuit: screw clamp terminal 1 x 0.34 mm ² flexible Control circuit: screw clamp terminal 1 x 1.5 mm ² flexible Control circuit: screw clamp terminal 1 x 2.5 mm ² flexible Power circuit: spring terminal 1 x 0.75 mm ² solid Power circuit: spring terminal 1 x 1.5 mm ² solid Power circuit: spring terminal 1 x 0.75 mm ² flexible Power circuit: spring terminal 1 x 1.5 mm ² flexible Control circuit: spring terminal 1 x 0.75 mm ² solid Control circuit: spring terminal 1 x 1.5 mm ² solid Control circuit: spring terminal 1 x 0.75 mm ² flexible Control circuit: spring terminal 1 x 1.5 mm ² flexible Power circuit: Faston connectors 2 x clip - width: 2.8 mm Power circuit: Faston connectors 1 x clip - width: 6.35 mm Control circuit: Faston connectors 2 x clip - width: 2.8 mm Control circuit: Faston connectors 1 x clip - width: 6.35 mm
Tightening torque	Power circuit: - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: - on screw clamp terminal - with screwdriver Philips No 2
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC ≤ 400 Hz
[Ith] conventional free air thermal current	10 A (at 50 °C) for control circuit 20 A (at 50 °C) for power circuit
Irms rated making capacity	110 A at 690 V AC for control circuit conforming to IEC 60947 110 A at 690 V AC for power circuit conforming to IEC 60947 110 A at 690 V AC for power circuit conforming to NF C 63-110

Rated breaking capacity	110 A at 440 V for power circuit conforming to IEC 60947 110 A at 440 V for power circuit conforming to NF C 63-110 70 A at 660...690 V for power circuit conforming to IEC 60947 70 A at 660...690 V for power circuit conforming to NF C 63-110 80 A at 500 V for power circuit conforming to IEC 60947 80 A at 500 V for power circuit conforming to NF C 63-110 110 A at 220...230 V for power circuit conforming to IEC 60947 110 A at 220...230 V for power circuit conforming to NF C 63-110 110 A at 380...400 V for power circuit conforming to IEC 60947 110 A at 380...400 V for power circuit conforming to NF C 63-110 110 A at 415 V for power circuit conforming to IEC 60947 110 A at 415 V for power circuit conforming to NF C 63-110
Permissible short-time rating	20 A 50 °C >= 15 min for power circuit 40 A 50 °C 3 min for power circuit 45 A 50 °C 1 min for power circuit 60 A 50 °C 30 s for power circuit 80 A 50 °C 10 s for power circuit 85 A 50 °C 5 s for power circuit 90 A 50 °C 1 s for power circuit
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947 10 A gG for control circuit conforming to VDE 0660 25 A gG at <= 440 V for power circuit
Average impedance	3 mOhm - lth 20 A 50 Hz for power circuit
Heat dissipation	3 W for control circuit
Operating time	10 ms coil de-energisation and NO opening 15 ms coil de-energisation and NC opening 25...35 ms coil energisation and NC opening 30...40 ms between energisation of coil and closing of NO contact
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10000000 cycles
Maximum operating rate	3600 cyc/h
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Insulation resistance	> 10 MOhm for control circuit
Rated operational power in W	120 W at 24 V DC-13 - electrical durability: 1000000 cycles - for control circuit 15 W at 24 V DC-13 - electrical durability: 10000000 cycles - for control circuit 55 W at 24 V DC-13 - electrical durability: 3000000 cycles - for control circuit
Height	58 mm
Width	45 mm
Depth	57 mm
Product weight	0.225 kg
Compatibility code	LP1K

Environment

Inrush power in W	3 W (at 20 °C)
Hold-in power consumption in W	3 W at 20 °C
Flame retardance	Class C2 conforming to NF F 16-101 Class C2 conforming to NF F 16-102 V1 conforming to UL 94

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