

Product data sheet

Specifications



TeSys K changeover contactor , 4P , AC,1 <= 440 V 20 A , 60 V DC coil

LP2K090045ND3

⚠ Discontinued on: Jul 24, 2022

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Main

Range	TeSys
Product name	TeSys K
Product or component type	Changeover contactor
Device short name	LP2K
Device application	Control
Contactor application	Resistive load
Utilisation category	AC-1
Device presentation	Preassembled with reversing power busbar
Poles description	4P
power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit: 690 V AC 50/60 Hz
[Ie] rated operational current	20 A (at <50 °C) at <= 440 V AC AC-1 for power circuit 16 A (at <70 °C) at 690 V AC AC-1 for power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	60 V DC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 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
[Icw] rated short-time withstand current	90 A 50 °C - 1 s for power circuit 85 A 50 °C - 5 s for power circuit 80 A 50 °C - 10 s for power circuit 60 A 50 °C - 30 s for power circuit 45 A 50 °C - 1 min for power circuit 40 A 50 °C - 3 min for power circuit 20 A 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

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

[Ui] rated insulation voltage	Power circuit: 600 V conforming to UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V conforming to CSA C22.2 No 14
Electrical durability	0.18 Mcycles 20 A AC-1 at Ue <= 440 V
Interlocking type	Mechanical
Mounting support	Rail Plate
Standards	IEC 60947 NF C 63-110 BS 5424 VDE 0660
Product certifications	CB Scheme CCC UL CSA EAC CE UKCA
Connections - terminals	Solder pins - busbar cross section: 1.5 x 0.9 mm
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 conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	5 Mcycles
Maximum operating rate	3600 cyc/h

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: 0.1...0.75 Uc (at <50 °C)
Inrush power in W	3 W (at 20 °C)
Hold-in power consumption in W	3 W at 20 °C
Heat dissipation	3 W

Environment

IP degree of protection	IP20 conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-25...50 °C
Ambient air temperature for storage	-50...80 °C
Operating altitude	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
Mechanical robustness	Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on X axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27
Height	58 mm

Width	90 mm
Depth	57 mm
Net weight	0.48 kg

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