

# Product datasheet

Specifications



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

LP2K12004ND3

! Discontinued

### 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
Overtoltage category	III
[Ith] conventional free air thermal current	20 A (at 50 °C) for power circuit
Irms rated making capacity	144 A AC for power circuit conforming to NF C 63-110 144 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 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 25 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
[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

<b>Electrical durability</b>	0.3 Mcycles 20 A AC-1 at $U_e \leq 440$ V
<b>Interlocking type</b>	Mechanical
<b>Mounting support</b>	Rail Plate
<b>Standards</b>	VDE 0660 BS 5424 NF C 63-110 IEC 60947
<b>Product certifications</b>	CB Scheme CCC UL CSA EAC CE UKCA
<b>Connections - terminals</b>	Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> solid Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> solid Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end
<b>Tightening torque</b>	1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
<b>Operating time</b>	30...40 ms coil energisation and NO closing 10 ms coil de-energisation and NO opening
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	5 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h

## Complementary

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

## Environment

<b>IP degree of protection</b>	IP20 conforming to VDE 0106
<b>Protective treatment</b>	TC conforming to IEC 60068 TC conforming to DIN 50016
<b>Ambient air temperature for operation</b>	-25...50 °C
<b>Ambient air temperature for storage</b>	-50...80 °C
<b>Operating altitude</b>	2000 m without derating
<b>Flame retardance</b>	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

<b>Mechanical robustness</b>	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
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<b>Height</b>	58 mm
<b>Width</b>	90 mm
<b>Depth</b>	57 mm
<b>Net weight</b>	0.48 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1

## Contractual warranty

<b>Warranty (in months)</b>	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