

# Product data sheet

Specifications



## Contacteur, TeSys K, 3P, AC-3/ AC-3e, 440V, 12A, 1NO aux, 24V DC coil, screw clamps

LP1K1210BD

### Main

Range	TeSys
Product or component type	Contacteur
Device short name	LP1K
Contacteur application	Resistive load Motor control

### Complementary

Utilisation category	AC-3 AC-3e AC-1 AC-4
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: $\leq 690$ V AC $\leq 400$ Hz Signalling circuit: $\leq 690$ V AC $\leq 400$ Hz
[Ie] rated operational current	12 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-3 for power circuit 12 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-3e for power circuit 20 A (at $\leq 60$ °C) at $\leq 690$ V AC AC-1 for power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
Motor power kW	3 kW at 220...230 V AC 50/60 Hz AC-3 5.5 kW at 380...415 V AC 50/60 Hz AC-3 5.5 kW at 440 V AC 50/60 Hz AC-3 4 kW at 690 V AC 50/60 Hz AC-3 3 kW at 220...230 V AC 50/60 Hz AC-3e 5.5 kW at 380...415 V AC 50/60 Hz AC-3e 5.5 kW at 440 V AC 50/60 Hz AC-3e 4 kW at 690 V AC 50/60 Hz AC-3e 3 kW at 220...230 V AC 50/60 Hz AC-4 5.5 kW at 380...415 V AC 50/60 Hz AC-4 5.5 kW at 440 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit
Irms rated making capacity	144 A AC for power circuit conforming to IEC 60947 110 A AC for signalling 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

<b>[Icw] rated short-time withstand current</b>	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 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit
<b>Associated fuse rating</b>	25 A gG at <= 440 V for power circuit 25 A aM for power circuit 10 A gG for signalling circuit conforming to IEC 60947 10 A gG for signalling circuit conforming to VDE 0660
<b>Average impedance</b>	3 mOhm - lth 20 A 50 Hz for power circuit
<b>[Ui] rated insulation voltage</b>	Power circuit: 600 V conforming to UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-5-1 Signalling circuit: 600 V conforming to UL 508 Power circuit: 600 V conforming to CSA C22.2 No 14 Signalling circuit: 600 V conforming to CSA C22.2 No 14
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<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>	1.3 W
<b>Control circuit voltage limits</b>	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: >= 0.10 Uc (at <50 °C)
<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 Power circuit: screw clamp terminals 2 cable(s) 1.5 mm <sup>2</sup> flexible with cable end
<b>Maximum operating rate</b>	3600 cyc/h
<b>Auxiliary contacts type</b>	type instantaneous 1 NO
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Mounting support</b>	Plate Rail
<b>Tightening torque</b>	0.8...1.3 N.m - on screw clamp terminals Philips No 2 0.8...1.3 N.m - on screw clamp terminals flat Ø 6 mm 0.8...1.3 N.m - on screw clamp terminals pozidriv No 2
<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>	10 Mcycles
<b>Electrical durability</b>	1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3e at Ue <= 440 V 0.3 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V
<b>Height</b>	58 mm
<b>Width</b>	45 mm
<b>Depth</b>	57 mm

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Net weight	0.225 kg
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## Environment

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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
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Product certifications	CB Scheme CCC UL CSA EAC CE UKCA
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IP degree of protection	IP2X
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Ambient air temperature for operation	-25...50 °C
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Ambient air temperature for storage	-50...80 °C
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Permissible ambient air temperature around the device	-40...70 °C at U <sub>c</sub>
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Operating altitude	2000 m without derating
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Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	6.600 cm
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Package 1 Width	6.200 cm
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Package 1 Length	4.800 cm
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Package 1 Weight	223.000 g
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Unit Type of Package 2	S02
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Number of Units in Package 2	40
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Package 2 Height	15.000 cm
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Package 2 Width	30.000 cm
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Package 2 Length	40.000 cm
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Package 2 Weight	9.247 kg
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Unit Type of Package 3	P06
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Number of Units in Package 3	320
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Package 3 Height	45.000 cm
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Package 3 Width	60.000 cm
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Package 3 Length	80.000 cm
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Package 3 Weight	82.540 kg
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## Contractual warranty

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Warranty	18 months
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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 >](#)

### Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) **121**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

[EU RoHS Directive](#) **Compliant**

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

## Use Again

### Repack and remanufacture

Circularity Profile [End of Life Information](#)

WEEE  **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Take-back **No**