

# Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3/  
AC-3e, 440V, 12A, 1NO aux, 24V  
DC low consumption coil, screw  
clamps terminals

LP4K1210BW3

## Main

|                           |                                 |
|---------------------------|---------------------------------|
| Range                     | TeSys                           |
| Product or component type | Contactor                       |
| Device short name         | LP4K                            |
| Contactor application     | Motor control<br>Resistive load |

## Complementary

|   |  |
|---|--|
| Utilisation category                        | AC-3<br>AC-3e<br>AC-1<br>AC-4  |
| Poles description                           | 3P   |
| power pole contact composition              | 3 NO   |
| [Ue] rated operational voltage              | Power circuit: $\leq 690$ V AC $\leq 400$ Hz<br>Signalling circuit: $\leq 690$ V AC $\leq 400$ Hz  |
| [Ie] rated operational current              | 12 A (at $<60$ °C) at $\leq 440$ V AC AC-3 for power circuit<br>12 A (at $<60$ °C) at $\leq 440$ V AC AC-3e for power circuit<br>20 A (at $<60$ °C) at $\leq 690$ V AC AC-1 for power circuit  |
| Control circuit type                        | DC wide range  |
| [Uc] control circuit voltage                | 24 V DC  |
| Motor power kW                              | 3 kW at 220...230 V AC 50/60 Hz AC-3<br>5.5 kW at 380...415 V AC 50/60 Hz AC-3<br>5.5 kW at 440 V AC 50/60 Hz AC-3<br>4 kW at 690 V AC 50/60 Hz AC-3<br>3 kW at 220...230 V AC 50/60 Hz AC-3e<br>5.5 kW at 380...415 V AC 50/60 Hz AC-3e<br>5.5 kW at 440 V AC 50/60 Hz AC-3e<br>4 kW at 690 V AC 50/60 Hz AC-3e<br>3 kW at 220...230 V AC 50/60 Hz AC-4<br>5.5 kW at 380...415 V AC 50/60 Hz AC-4<br>5.5 kW at 440 V AC 50/60 Hz AC-4<br>4 kW at 690 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<br>10 A (at $50$ °C) for signalling circuit  |
| Irms rated making capacity                  | 144 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>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<br>105 A 50 °C - 5 s for power circuit<br>100 A 50 °C - 10 s for power circuit<br>75 A 50 °C - 30 s for power circuit<br>55 A 50 °C - 1 min for power circuit<br>50 A 50 °C - 3 min for power circuit<br>25 A 50 °C - >= 15 min for power circuit<br>80 A - 1 s for signalling circuit<br>90 A - 500 ms for signalling circuit<br>110 A - 100 ms for signalling circuit   |
| <b>Associated fuse rating</b>                   | 25 A gG at <= 440 V for power circuit<br>25 A aM for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947<br>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<br>Power circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-5-1<br>Signalling circuit: 600 V conforming to UL 508<br>Power circuit: 600 V conforming to CSA C22.2 No 14<br>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>                        | 1.8 W (at 20 °C)  |
| <b>Hold-in power consumption in W</b>           | 1.8 W at 20 °C  |
| <b>Heat dissipation</b>                         | 1.8 W   |
| <b>Control circuit voltage limits</b>           | Operational: 0.7...1.3 U <sub>c</sub> (at <50 °C)<br>Drop-out: >= 0.10 U <sub>c</sub> (at <50 °C)   |
| <b>Connections - terminals</b>                  | Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> flexible with cable end<br>Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> solid<br>Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end<br>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>Coil technology</b>                          | Built-in bidirectional peak limiting diode suppressor   |
| <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<br>Rail   |
| <b>Tightening torque</b>                        | 0.8...1.3 N.m - on screw clamp terminals Philips No 2<br>0.8...1.3 N.m - on screw clamp terminals flat Ø 6 mm<br>0.8...1.3 N.m - on screw clamp terminals pozidriv No 2   |
| <b>Operating time</b>                           | 10...20 ms coil de-energisation and NO opening<br>30...40 ms coil energisation and NO closing   |
| <b>Safety reliability level</b>                 | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1  |
| <b>Mechanical durability</b>                    | 30 Mcycles  |
| <b>Electrical durability</b>                    | 1.3 Mcycles 12 A AC-3 at U <sub>e</sub> <= 440 V<br>1.3 Mcycles 12 A AC-3e at U <sub>e</sub> <= 440 V<br>0.3 Mcycles 20 A AC-1 at U <sub>e</sub> <= 690 V<br>0.02 Mcycles 72 A AC-4 at U <sub>e</sub> <= 440 V  |
| <b>Height</b>                                   | 58 mm   |
| <b>Width</b>                                    | 45 mm   |

|                |          |
|----------------|----------|
| Depth          | 57 mm    |
| Product weight | 0.235 kg |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>UL 60947-5-1<br>CSA C22.2 No 60947-4-1<br>CSA C22.2 No 60947-5-1<br>GB/T 14048.4 |
| Product certifications                | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA   |
| IP degree of protection               | IP2X   |
| 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<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102                             |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 6.600 cm  |
| Package 1 Width              | 6.200 cm  |
| Package 1 Length             | 4.800 cm  |
| Package 1 Weight             | 221.000 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 40        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 9.239 kg  |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|



## 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

Total lifecycle Carbon footprint 77

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[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

End of life manual availability [End of Life Information](#)

Take-back No

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

Offer Marketing Illustration

Product benefits / Features

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## TeSys K Contactors



### Flexibility

Designed with control voltages, low consumption, minimal noise levels, robust power connections, and a range of auxiliaries, and application-specific variants to meet diverse needs.



### Safety

It provide ultimate protection with IP20 finger-safe terminals, built-in NO/NC auxiliary contacts, and IEC-certified mirror and mechanically linked contacts for safety applications.



### Compact size

Up to 50% less volume is captured in your panels. One of the smallest contactors offerings in the market



Offer Marketing Illustration

Product benefits / Features

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## TeSys K

### Technical Benefits



- Built-in in all 3 pole versions: 1NO or 1NC
- Up to 4 more by add-on blocks
- Up to 16 A for motor control (AC3/ AC3E) and 20A for resistive load control (AC1)
- Available as single contactors, star-delta, and reversing combos, with a wealth of options and accessories
- Control Options:
  - AC: 24 to 660/690 V, standard or low-noise versions
  - DC: 12 to 250V, standard or low consumption (1.8 W) versions
- Thermal protection relays
- It Features specific versions for railway (TeSys S207) and electrodomestic (TeSys S335) applications

Technical Illustration

Assembly's dimensions

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