# Product data sheet

Specifications

Green Premium™

## Contactor, TeSys K, 3P, AC-3/ AC-3e, 440V, 6A, 1NO aux, 110V DC coil,screw clamps

LP1K0610FD

Discontinued on: 14/10/2011

Discontinued

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Product Or Component Type** | Contactor |
| **Device Short Name** | LP1K |
| **Contactor Application** | Motor control |

## Complementary

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|---|---|
| **Utilisation Category** | AC-3<br>AC-3e<br>AC-4 |
| **Poles Description** | 3P |
| **Power Pole Contact Composition** | 3 NO |
| **[Ue] Rated Operational Voltage** | Power circuit: <= 690 V AC <= 400 Hz<br>Signalling circuit: <= 690 V AC <= 400 Hz |
| **[Ie] Rated Operational Current** | 6 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>6 A (at <60 °C) at <= 440 V AC AC-3e for power circuit |
| **Control Circuit Type** | DC standard |
| **[Uc] Control Circuit Voltage** | 110 V DC |
| **Motor Power Kw** | 1.5 kW at 220...230 V AC 50/60 Hz AC-3<br>2.2 kW at 380...415 V AC 50/60 Hz AC-3<br>3 kW at 440/690 V AC 50/60 Hz AC-3<br>1.5 kW at 220...230 V AC 50/60 Hz AC-3e<br>2.2 kW at 380...415 V AC 50/60 Hz AC-3e<br>3 kW at 440/690 V AC 50/60 Hz AC-3e<br>1.5 kW at 220...230 V AC 50/60 Hz AC-4<br>2.2 kW at 380...415 V AC 50/60 Hz AC-4<br>3 kW at 440/690 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** | 110 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 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>110 A at 415 V conforming to IEC 60947<br>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 |

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

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|---|---|
| **[Icw] Rated Short-Time Withstand Current** | 90 A 50 °C - 1 s for power circuit<br>85 A 50 °C - 5 s for power circuit<br>80 A 50 °C - 10 s for power circuit<br>60 A 50 °C - 30 s for power circuit<br>45 A 50 °C - 1 min for power circuit<br>40 A 50 °C - 3 min for power circuit<br>20 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 |
| **Associated Fuse Rating** | 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 |
| **Average Impedance** | 3 mOhm - Ith 20 A 50 Hz for power circuit |
| **[Ui] Rated Insulation Voltage** | 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 |
| **Insulation Resistance** | > 10 MOhm for signalling circuit |
| **Inrush Power In W** | 3 W (at 20 °C) |
| **Hold-In Power Consumption In W** | 3 W at 20 °C |
| **Heat Dissipation** | 1.3 W |
| **Control Circuit Voltage Limits** | Operational: 0.8...1.15 Uc (at <50 °C)<br>Drop-out: >= 0.10 Uc (at <50 °C) |
| **Connections - Terminals** | Screw clamp terminals 1 cable(s) 1.5…4 mm²solid<br>Screw clamp terminals 1 cable(s) 0.75…4 mm²flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34…2.5 mm²flexible with cable end<br>Screw clamp terminals 2 cable(s) 1.5…4 mm²solid<br>Screw clamp terminals 2 cable(s) 0.75…4 mm²flexible without cable end<br>Screw clamp terminals 2 cable(s) 0.34…1.5 mm²flexible with cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1.5 mm²flexible with cable end |
| **Maximum Operating Rate** | 3600 cyc/h |
| **Auxiliary Contacts Type** | type instantaneous 1 NO |
| **Minimum Switching Current** | 5 mA for signalling circuit |
| **Minimum Switching Voltage** | 17 V for signalling circuit |
| **Mounting Support** | Rail<br>Plate |
| **Tightening Torque** | 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 |
| **Operating Time** | 30...40 ms coil energisation and NO closing<br>10 ms coil de-energisation and NO opening |
| **Safety Reliability Level** | 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 |
| **Mechanical Durability** | 10 Mcycles |
| **Electrical Durability** | 1.3 Mcycles 6 A AC-3 at Ue <= 440 V<br>1.3 Mcycles 6 A AC-3e at Ue <= 440 V<br>0.05 Mcycles 36 A AC-4 at Ue <= 440 V |
| **Height** | 58 mm |
| **Width** | 45 mm |
| **Depth** | 57 mm |
| **Net Weight** | 0.225 kg |

## Environment

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|---|---|
| **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

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|---|---|
| **Unit Type Of Package 1** | PCE |
| **Number Of Units In Package 1** | 1 |
| **Package 1 Height** | 6.200 cm |
| **Package 1 Width** | 4.800 cm |
| **Package 1 Length** | 6.600 cm |
| **Package 1 Weight** | 220.000 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** | 9.058 kg |

## Contractual warranty

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

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

## Well-being performance

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|---|---|
| Reach Free Of Svhc | |
| Toxic Heavy Metal Free | |
| Mercury Free | |
| Rohs Exemption Information | Yes |

## Certifications & Standards

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|---|---|
| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Compliant<br>EU RoHS Declaration |
| **China Rohs Regulation** | China RoHS declaration<br>Pro-active China RoHS declaration (out of China RoHS legal scope) |
| **Environmental Disclosure** | Product Environmental Profile |
| **Weee** | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| **Circularity Profile** | End of Life Information |