

# Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3/  
AC-3e, 440V, 6A, 1NO aux, 12V  
DC coil,screw clamps

LP1K0610JD

## Main

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

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>6 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit                                                                                                                                                                                                                  |
| Control Circuit Type                        | DC standard                                                                                                                                                                                                                                                                                                                                        |
| [Uc] Control Circuit Voltage                | 12 V DC                                                                                                                                                                                                                                                                                                                                            |
| Motor Power Kw                              | 1.5 kW 220...230 V AC 50/60 Hz AC-3<br>2.2 kW 380...415 V AC 50/60 Hz AC-3<br>3 kW 440/690 V AC 50/60 Hz AC-3<br>1.5 kW 220...230 V AC 50/60 Hz AC-3e<br>2.2 kW 380...415 V AC 50/60 Hz AC-3e<br>3 kW 440/690 V AC 50/60 Hz AC-3e<br>1.5 kW 220...230 V AC 50/60 Hz AC-4<br>2.2 kW 380...415 V AC 50/60 Hz AC-4<br>3 kW 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 140 °F (60 °C)) for power circuit<br>10 A (at 122 °F (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

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>[Icw] Rated Short-Time Withstand Current</b> | 90 A 122 °F (50 °C) - 1 s for power circuit<br>85 A 122 °F (50 °C) - 5 s for power circuit<br>80 A 122 °F (50 °C) - 10 s for power circuit<br>60 A 122 °F (50 °C) - 30 s for power circuit<br>45 A 122 °F (50 °C) - 1 min for power circuit<br>40 A 122 °F (50 °C) - 3 min for power circuit<br>20 A 122 °F (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 UL 508<br>Power circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-5-1<br>Signalling circuit 600 V UL 508<br>Power circuit 600 V CSA C22.2 No 14<br>Signalling circuit 600 V CSA C22.2 No 14                                                                                                                                                                                                                                                                                 |
| <b>Insulation Resistance</b>                    | > 10 MOhm for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Inrush Power In W</b>                        | 3 W 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Hold-In Power Consumption In W</b>           | 3 W 68 °F (20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Heat Dissipation</b>                         | 1.3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Control Circuit Voltage Limits</b>           | Operational: 0.8...1.15 Uc (at <122 °F (50 °C))<br>Drop-out: >= 0.10 Uc (at <122 °F (50 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Connections - Terminals</b>                  | screw clamp terminals 1 0.00...0.01 in² (1.5...4 mm²)solid<br>screw clamp terminals 1 0.00...0.01 in² (0.75...4 mm²)flexible without cable end<br>screw clamp terminals 1 0.00...0.00 in² (0.34...2.5 mm²)flexible with cable end<br>screw clamp terminals 2 0.00...0.01 in² (1.5...4 mm²)solid<br>screw clamp terminals 2 0.00...0.01 in² (0.75...4 mm²)flexible without cable end<br>screw clamp terminals 2 0.00...0.00 in² (0.34...1.5 mm²)flexible with cable end<br>Power circuit screw clamp terminals 2 0.00 in² (1.5 mm²)flexible with cable end |
| <b>Maximum Operating Rate</b>                   | 3600 cyc/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Auxiliary Contacts Type</b>                  | 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>                        | 7.08...11.51 lbf.in (0.8...1.3 N.m) screw clamp terminals Philips No 2<br>7.08...11.51 lbf.in (0.8...1.3 N.m) screw clamp terminals flat Ø 6 mm<br>7.08...11.51 lbf.in (0.8...1.3 N.m) screw clamp terminals pozidriv No 2                                                                                                                                                                                                                                                                                                                                |
| <b>Operating Time</b>                           | 30...40 ms coil energisation and NO closing<br>10 ms coil de-energisation and NO opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Safety Reliability Level</b>                 | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Mechanical Durability</b>                    | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Electrical Durability</b>                    | 1.3 Mcycles 6 A AC-3 <= 440 V<br>1.3 Mcycles 6 A AC-3e <= 440 V<br>0.05 Mcycles 36 A AC-4 <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Height</b>                                   | 2.28 in (58 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Width</b>                                    | 1.77 in (45 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Depth</b>                                    | 2.24 in (57 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Net Weight</b>                               | 0.50 lb(US) (0.225 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 | -13...122 °F (-25...50 °C)                                                                                                               |
| Ambient Air Temperature For Storage   | -58...176 °F (-50...80 °C)                                                                                                               |
| Operating Altitude                    | 2000 m without derating                                                                                                                  |
| Flame Retardance                      | V1 UL 94<br>Requirement 2 NF F 16-101<br>Requirement 2 NF F 16-102                                                                       |

# Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type Of Package 1       | PCE                     |
| Number Of Units In Package 1 | 1                       |
| Package 1 Height             | 2.56 in (6.500 cm)      |
| Package 1 Width              | 2.44 in (6.200 cm)      |
| Package 1 Length             | 1.89 in (4.800 cm)      |
| Package 1 Weight             | 7.65 oz (217.000 g)     |
| Unit Type Of Package 2       | S02                     |
| Number Of Units In Package 2 | 40                      |
| Package 2 Height             | 5.91 in (15.000 cm)     |
| Package 2 Width              | 11.81 in (30.000 cm)    |
| Package 2 Length             | 15.75 in (40.000 cm)    |
| Package 2 Weight             | 20.07 lb(US) (9.104 kg) |

# Contractual warranty

|          |           |
|----------|-----------|
| 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<sub>2</sub> products.

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Transparency   RoHS/REACH

## Well-being performance

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

## Certifications & Standards

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