

# Product data sheet

Specifications



## Contacteur, TeSys K, 3P, AC-3/ AC-3e, 440V, 9A, 1NC aux, 48V DC coil

LP1K0901ED

### Main

|                                |   |
|--------------------------------|---|
| Range of product               | TeSys K   |
| Range                          | TeSys   |
| Product or component type      | Contacteur  |
| Device short name              | LP1K  |
| Contacteur application         | Resistive load<br>Motor control   |
| Utilisation category           | AC-3<br>AC-1<br>AC-4<br>AC-3  |
| Poles description              | 3P  |
| Pole contact composition       | 3 NO  |
| [Ie] rated operational current | 20 A (at <math>50\text{ }^\circ\text{C}</math>) at $\leq 440\text{ V AC AC-1}$ for power circuit<br>9 A at $\leq 440\text{ V AC AC-3}$ for power circuit<br>16 A (at <math>70\text{ }^\circ\text{C}</math>) at $690\text{ V AC AC-1}$ for power circuit |
| Auxiliary contact composition  | 1 NC  |

### Complementary

|  |  |
|--|--|
| Auxiliary contacts type                | type instantaneous 1 NC  |
| Control circuit voltage limits         | Operational: $0.8 \dots 1.15 U_c$ (at $<math>50\text{ }^\circ\text{C}</math>)Drop-out: 0.1 \dots 0.75 U_c (at <math>50\text{ }^\circ\text{C}</math>)$  |
| [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 |
| [Uimp] rated impulse withstand voltage | 8 kV   |
| Overvoltage category                   | III  |
| Mounting support                       | Plate<br>Rail  |
| 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   |
| 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 $\text{Ø } 6\text{ mm}$<br>0.8...1.3 N.m - on screw clamp terminals pozidriv No 2   |
| [Ue] rated operational voltage         | Power circuit: 690 V AC 50/60 Hz   |

Signalling circuit: <= 690 V AC 50/60 Hz

|  |  |
|--|--|
| <b>[Ith] conventional free air thermal current</b> | 20 A (at 50 °C) for power circuit<br>10 A (at 50 °C) for signalling circuit  |
| <b>Irms rated making capacity</b>                  | 110 A AC for power circuit conforming to NF C 63-110<br>110 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947  |
| <b>Rated breaking capacity</b>                     | 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>110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>70 A at 660...690 V conforming to IEC 60947 |
| <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 - Ith 20 A 50 Hz for power 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>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 conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| <b>Mechanical durability</b>                       | 10 Mcycles   |
| <b>Maximum operating rate</b>                      | 3600 cyc/h   |
| <b>Minimum switching current</b>                   | 5 mA for signalling circuit  |
| <b>Minimum switching voltage</b>                   | 17 V for signalling circuit  |
| <b>Insulation resistance</b>                       | > 10 MOhm for signalling circuit   |
| <b>Height</b>                                      | 58 mm  |
| <b>Width</b>                                       | 45 mm  |
| <b>Depth</b>                                       | 57 mm  |
| <b>Net weight</b>                                  | 0.225 kg   |

## Environment

|  |   |
|--|---|
| <b>Standards</b>                             | EN/IEC 60947-4-1<br>GB/T 14048.4<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1 |
| <b>Product certifications</b>                | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA  |
| <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   |

## Packing Units

|                                     |      |
|-------------------------------------|------|
| <b>Unit Type of Package 1</b>       | PCE  |
| <b>Number of Units in Package 1</b> | 1    |
| <b>Package 1 Height</b>             | 5 cm |
| <b>Package 1 Width</b>              | 6 cm |

|                              |          |
|------------------------------|----------|
| Package 1 Length             | 6.5 cm   |
| Package 1 Weight             | 219 g    |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 40       |
| Package 2 Height             | 15 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 8.995 kg |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope)                 |
| RoHS exemption information | <a href="#">Yes</a>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

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

## Recommended replacement(s)