

# LP1K0901ED

TeSys K contactor - 3P - AC-3  $\leq$  440 V 9 A - 1 NC  
aux. - 48 V DC coil



## Main

|                           |                                 |
|---------------------------|---------------------------------|
| Range                     | TeSys                           |
| Product or component type | Contacteur                      |
| Product name              | TeSys K                         |
| Device short name         | LP1K                            |
| Device application        | Control                         |
| Contacteur application    | Motor control<br>Resistive load |

## Complementary

|   |   |
|---|---|
| Utilisation category                        | AC-1<br>AC-3<br>AC-4  |
| Poles description                           | 3P  |
| Pole contact composition                    | 3 NO  |
| [Ue] rated operational voltage              | 690 V AC 50/60 Hz for power circuit<br>$\leq$ 690 V AC 50/60 Hz for signalling circuit  |
| [Ie] rated operational current              | 9 A at $\leq$ 440 V AC AC-3 for power circuit<br>20 A ( $\leq$ 50 °C) at $\leq$ 440 V AC AC-1 for power circuit<br>16 A ( $\leq$ 70 °C) at 690 V AC AC-1 for power circuit  |
| Control circuit type                        | DC standard   |
| [Uc] control circuit voltage                | 48 V DC   |
| Motor power kW                              | 2.2 kW at 400 V AC 50/60 Hz AC-4<br>2.2 kW at 220...230 V AC 50/60 Hz AC-3<br>4 kW at 380...415 V AC 50/60 Hz AC-3<br>4 kW at 440 V AC 50/60 Hz AC-3<br>4 kW at 480 V AC 50/60 Hz AC-3<br>4 kW at 500...600 V AC 50/60 Hz AC-3<br>4 kW at 660...690 V AC 50/60 Hz AC-3  |
| Auxiliary contact composition               | 1 NC  |
| [Uimp] rated impulse withstand voltage      | 8 kV  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 20 A at $\leq$ 50 °C for power circuit<br>10 A at $\leq$ 50 °C for signalling circuit   |
| Irms rated making capacity                  | 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   |
| Rated breaking capacity                     | 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  |
| [Icw] rated short-time withstand current    | 90 A $\leq$ 50 °C 1 s power circuit<br>85 A $\leq$ 50 °C 5 s power circuit<br>80 A $\leq$ 50 °C 10 s power circuit<br>60 A $\leq$ 50 °C 30 s power circuit<br>45 A $\leq$ 50 °C 1 min power circuit<br>40 A $\leq$ 50 °C 3 min power circuit<br>80 A 1 s signalling circuit<br>90 A 500 ms signalling circuit<br>110 A 100 ms signalling circuit<br>20 A $\leq$ 50 °C $\geq$ 15 min power circuit |
| Associated fuse rating                      | 25 A gG at $\leq$ 440 V for power circuit   |

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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

|                                |  |
|--------------------------------|--|
| Average impedance              | 3 mOhm at 50 Hz - lth 20 A for power circuit   |
| [Ui] rated insulation voltage  | 690 V for power circuit conforming to IEC 60947-4-1<br>600 V for power circuit conforming to UL 508<br>690 V for signalling circuit conforming to IEC 60947-4-1<br>690 V for signalling circuit conforming to IEC 60947-5-1<br>600 V for signalling circuit conforming to UL 508<br>600 V for power circuit conforming to CSA C22.2 No 14<br>600 V for signalling circuit 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               | 3 W  |
| Control circuit voltage limits | 0.8...1.15 U <sub>c</sub> at ≤ 50 °C operational<br>0.1...0.75 U <sub>c</sub> at ≤ 50 °C drop-out  |
| Connections - terminals        | Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid<br>Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end |
| Operating rate                 | 3600 cyc/h   |
| Auxiliary contacts type        | Type instantaneous (1 NC)  |
| Minimum switching current      | 5 mA for signalling circuit  |
| Minimum switching voltage      | 17 V for signalling circuit  |
| Mounting support               | Plate<br>Rail  |
| Tightening torque              | 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  |
| Operating time                 | 10 ms coil de-energisation and NO opening<br>30...40 ms coil energisation and NO closing   |
| 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   |
| Non overlap distance           | 0.5 mm   |
| Mechanical durability          | 10 Mcycles   |
| Electrical durability          | 0.18 Mcycles 20 A AC-1 at U <sub>e</sub> ≤ 440 V<br>1.3 Mcycles 9 A AC-3 at U <sub>e</sub> ≤ 440 V   |
| Mechanical robustness          | Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27<br>Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6<br>Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Y axis 6 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on X axis 15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Y axis 10 Gn for 11 ms IEC 60068-2-27  |
| Height                         | 58 mm  |
| Width                          | 45 mm  |
| Depth                          | 57 mm  |
| Product weight                 | 0.225 kg   |

## Environment

|                         |   |
|-------------------------|---|
| standards               | BS 5424<br>IEC 60947<br>NF C 63-110<br>VDE 0660 |
| product certifications  | CSA<br>UL                                       |
| IP degree of protection | IP2x conforming to VDE 0106                     |

|                                       |  |
|---------------------------------------|--|
| protective treatment                  | TC conforming to IEC 60068<br>TC conforming to DIN 50016   |
| ambient air temperature for operation | -25...50 °C  |
| ambient air temperature for storage   | -50...80 °C  |
| operating altitude                    | 2000 m without derating in temperature   |
| 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 |

### Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 0640 - Schneider Electric declaration of conformity |
| REACH                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available   |
| Product end of life instructions | Available   |