Product datasheet Characteristics

LP2K0901BD

TeSys K reversing contactor - 3P - AC-3 <= 440 V 9 A - 1 NC - 24 V DC coil



Main

| Main | | |
|--|--|--|
| Range of product | TeSys K | |
| Range | TeSys | |
| Product name | TeSys K | |
| Product or component type | Reversing contactor | |
| Device short name | LP2K | |
| Device application | Control | |
| Contactor application | Motor control Resistive load | |
| Utilisation category | AC-3 AC-1 AC-4 | |
| Device presentation | Preassembled with reversing power busbar | |
| Poles description | 3P | |
| Pole contact composition | 3 NO | |
| [Ue] rated operational voltage | 690 V AC 50/60 Hz for power circuit <= 690 V AC 50/60 Hz for signalling circuit | |
| [le] rated operational current | 9 A at <= 440 V AC AC-3 for power circuit 20 A (<= 50 °C) at <= 440 V AC AC-1 for power circuit 16 A (<= 70 °C) at 690 V AC AC-1 for power circuit | |
| Motor power kW | 4 kW at 380415 V AC 50/60 Hz 4 kW at 440 V AC 50/60 Hz 4 kW at 480 V AC 50/60 Hz 4 kW at 500600 V AC 50/60 Hz 4 kW at 660690 V AC 50/60 Hz 2.2 kW at 220230 V AC 50/60 Hz | |
| Control circuit type | DC standard | |
| Control circuit voltage | 24 V DC | |
| Auxiliary contact composition | 1 NC | |
| [Uimp] rated impulse withstand voltage | 8 kV | |
| Overvoltage category | | |



| [Ith] conventional free air thermal current | 20 A at <= 50 °C for power circuit 10 A at <= 50 °C for signalling circuit |
|--|---|
| Irms rated making capacity | 110 A AC for power circuit conforming to NF C 63-110 110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947 |
| Rated breaking capacity | 110 A at 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 220230 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 70 A at 660690 V conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 90 A <= 50 °C 1 s power circuit 85 A <= 50 °C 5 s power circuit 80 A <= 50 °C 10 s power circuit 60 A <= 50 °C 30 s power circuit 45 A <= 50 °C 1 min power circuit 40 A <= 50 °C 3 min power circuit 80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 20 A <= 50 °C >= 15 s power circuit |
| Associated fuse rating | 25 A gG at <= 440 V for power circuit 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 - Ith 20 A for power circuit |
| [Ui] rated insulation voltage | 690 V for signalling circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-5-1 600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling circuit conforming to CSA C22.2 No 14 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508 |
| Electrical durability | 0.18 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 9 A AC-3 at Ue <= 440 V |
| Interlocking type | Mechanical |
| Mounting support | Rail Plate |
| Standards | BS 5424 VDE 0660 IEC 60947 NF C 63-110 |
| Product certifications | CSA UL |
| Connections - terminals | Screw clamp terminals 1 cable(s) 1.54 mm ² - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.754 mm ² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm ² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm ² - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.754 mm ² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.754 mm ² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.754 mm ² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.3415 mm ² - cable stiffness: flexible - with cable end |
| Tightening torque | 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm |
| Operating time | 10 ms coil de-energisation and NO opening 3040 ms coil energisation and NO closing |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 5 Mcycles |
| Operating rate | 3600 cyc/h |

Complementary

| Control circuit voltage limits | 0.81.15 Uc at <= 50 °C operational 0.10.75 Uc at <= 50 °C drop-out |
|--------------------------------|---|
| Inrush power in W | 3 W at 20 °C |
| Hold-in power consumption in W | 3 W at 20 °C |
| Heat dissipation | 3 W |

| Auxiliary contacts type | Type instantaneous 1 NC |
|---------------------------|----------------------------------|
| Minimum switching current | 5 mA for signalling circuit |
| Minimum switching voltage | 17 V for signalling circuit |
| Non overlap distance | 0.5 mm |
| Insulation resistance | > 10 MOhm for signalling circuit |

Environment

| IP degree of protection | IP2x conforming to VDE 0106 |
|---------------------------------------|---|
| Protective treatment | TC conforming to IEC 60068 TC conforming to DIN 50016 |
| Ambient air temperature for operation | -2550 °C |
| Ambient air temperature for storage | -5080 °C |
| Operating altitude | 2000 m without derating in temperature |
| Flame retardance | V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102 |
| Mechanical robustness | Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5300 Hz IEC 60068-2-6 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 10 Gn for 11 ms IEC 60068-2-27 |
| Height | 58 mm |
| Width | 90 mm |
| Depth | 57 mm |
| Product weight | 0.48 kg |
| | |

Offer Sustainability

| Sustainable offer status | Green Premium product | |
|----------------------------------|---|--|
| RoHS (date code: YYWW) | Compliant - since 0706 - Schneider Electric declaration of conformity | |
| | Schneider Electric declaration of conformity | |
| REACh | Reference not containing SVHC above the threshold | |
| | Reference not containing SVHC above the threshold | |
| Product environmental profile | Available | |
| | Product environmental | |
| Product end of life instructions | Available | |
| | 🛃 End of life manual | |

Contractual warranty Warranty period 18 months