

LP1K090045ED

TeSys K contactor - 4P(4 NO) - AC-1 - ≤ 440 V 20 A - 48 V DC coil



Main

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|---|---|
| Range | TeSys |
| Product name | TeSys K |
| Contacteur application | Resistive load |
| Utilisation category | AC-1 |
| Poles description | 4P |
| Pole contact composition | 4 NO |
| [Ue] rated operational voltage | 690 V AC 50/60 Hz for power circuit |
| Control circuit type | DC standard |
| Control circuit voltage | 48 V DC |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 20 A at ≤ 50 °C for power 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 |
| 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 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 70 A at 660...690 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 20 A ≤ 50 °C ≥ 15 s power circuit |
| Associated fuse rating | 25 A gG at ≤ 440 V for power circuit 25 aM for power circuit |
| Average impedance | 3 mOhm at 50 Hz - Ith 20 A for power circuit |
| [Ui] rated insulation voltage | 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14 |
| Electrical durability | 0.18 Mcycles 20 A AC-1 at Ue ≤ 440 V |
| Mounting support | Printed circuit boards |
| Standards | BS 5424 IEC 60947 NF C 63-110 VDE 0660 |
| Product certifications | CSA UL |
| Connections - terminals | Solder pins 1.5 x 0.9 mm |
| Operating time | 10 ms coil de-energisation and NO opening 30...40 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 | 10 Mcycles |
| Operating rate | 3600 cyc/h |

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Complementary

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| Control circuit voltage limits | 0.8...1.15 U _c at ≤ 50 °C operational 0.1...0.75 U _c 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 |

Environment

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|---------------------------------------|---|
| 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 | -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 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, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5...300 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 | 45 mm |
| Depth | 57 mm |
| Product weight | 0.225 kg |

Offer Sustainability

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|----------------------------------|---|
| Sustainable offer status | Not Green Premium product |
| RoHS | Compliant - since 0640 - Schneider Electric declaration of conformity |
| Product end of life instructions | Need no specific recycling operations |