Product datasheet

Specification





TeSys K control relay - 3 NO + 1 NC - <= 690 V - 24 V DC standard coil

CA3KN31BD

Main

| Range | TeSys |
|--------------------------------|--------------------|
| Product Name | TeSys CAK |
| Product Or Component Type | Control relay |
| Device Short Name | CA3K |
| Contactor Application | Control circuit |
| Utilisation Category | AC-15 DC-13 |
| Pole Contact Composition | 3 NO + 1 NC |
| [Ue] Rated Operational Voltage | <= 690 V <= 400 Hz |
| Control Circuit Type | DC standard |
| [Uc] Control Circuit Voltage | 24 V DC |

Complementary

| Complementary | |
|--|--|
| [Ith] Conventional Free Air Thermal Current | 10 A (at 50 °C) |
| Irms Rated Making Capacity | 110 A conforming to IEC 60947 |
| Associated Fuse Rating | 10 A gG conforming to IEC 60947 10 A gG conforming to VDE 0660 |
| [Ui] Rated Insulation Voltage | 690 V conforming to IEC 60947 750 V conforming to VDE 0110 group C 690 V conforming to BS 5424 600 V conforming to CSA C22.2 No 14 |
| Mounting Support | Rail Plate |
| Connections - Terminals | Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible with cable end Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.341.5 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible without cable end |
| Tightening Torque | 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 26 mm 1.3 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
| Control Circuit Voltage Limits | Operational: 0.81.15 Uc (at <50 °C) Drop-out: 0.10.75 Uc (at <50 °C) |
| Operating Time | 10 ms coil de-energisation and NO opening 3040 ms coil energisation and NO closing 15 ms coil de-energisation and NC closing 2535 ms coil energisation and NC opening |
| Mechanical Durability | 20 Mcycles |

| Maximum Operating Rate | 10000 cyc/h |
|--------------------------------|----------------|
| Immunity To Microbreaks | 2 ms |
| Inrush Power In W | 3 W (at 20 °C) |
| Hold-In Power Consumption In W | 3 W at 20 °C |
| Heat Dissipation | 3 W |
| Minimum Switching Voltage | 17 V |
| Minimum Switching Current | 5 mA |
| Non Overlap Distance | 0.5 mm |
| Insulation Resistance | > 10 MOhm |
| Height | 58 mm |
| Width | 45 mm |
| Depth | 57 mm |
| Net Weight | 0.225 kg |

Environment

| Standards | EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1 |
|---------------------------------------|---|
| Product Certifications | CB Scheme CCC UL CSA EAC CE |
| Ip Degree Of Protection | IP2X |
| Protective Treatment | TC conforming to IEC 60068 |
| Ambient Air Temperature For Operation | -2550 °C |
| Ambient Air Temperature For Storage | -5080 °C |
| Operating Altitude | 2000 m without derating |
| 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 | Vibrations contactor open: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Shocks contactor open: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed: 15 Gn for 11 ms conforming to IEC 60068-2-27 |

Packing Units

| Unit Type Of Package 1 | PCE |
|------------------------------|-----------|
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 6.600 cm |
| Package 1 Width | 4.800 cm |
| Package 1 Length | 6.200 cm |
| Package 1 Weight | 221.000 g |
| Unit Type Of Package 2 | S02 |

| Number Of Units In Package 2 | 40 |
|------------------------------|-----------|
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 9.222 kg |
| Unit Type Of Package 3 | P06 |
| Number Of Units In Package 3 | 320 |
| Package 3 Height | 45.000 cm |
| Package 3 Width | 60.000 cm |
| Package 3 Length | 80.000 cm |
| Package 3 Weight | 82.860 kg |

Contractual warranty

Warranty 18 months



Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

| ⊘ | Reach Free Of Svhc | |
|----------|----------------------------|-----|
| 9 | Toxic Heavy Metal Free | |
| ② | Mercury Free | |
| ⊘ | Rohs Exemption Information | Yes |

Certifications & Standards

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