Product datasheet

Specification





TeSys K control relay - 3 NO + 1 NC - <= 690 V - 12 V DC low consumption coil

CA4KN31JW3

Main

| Range | TeSys | |
|--------------------------------|--------------------|--|
| Product name | TeSys CAK | |
| Product or component type | Control relay | |
| Device short name | CA4K | |
| contactor application | Control circuit | |
| Utilisation category | DC-13 AC-15 | |
| Pole contact composition | 3 NO + 1 NC | |
| [Ue] rated operational voltage | <= 690 V <= 400 Hz | |
| Control circuit type | DC low consumption | |
| [Uc] control circuit voltage | 12 V DC | |

Complementary

| J | |
|---|---|
| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| [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 | Plate Rail |
| 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 with 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 | Drop-out: 0.10.75 Uc (at <50 °C) Operational: 0.71.3 Uc (at <50 °C) |
| Operating time | 1020 ms coil de-energisation and NO opening 1525 ms coil de-energisation and NC closing 3040 ms coil energisation and NO closing 2535 ms coil energisation and NC opening |

| Mechanical durability | 30 Mcycles | |
|--------------------------------|----------------------------|--|
| Maximum operating rate | 6000 cyc/h | |
| Immunity to microbreaks | 2 ms | |
| Inrush power in W | 1.8 W (at 20 °C) | |
| Hold-in power consumption in W | pption in W 1.8 W at 20 °C | |
| Heat dissipation | 1.8 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 | 0.235 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 |
| | UKCA |
| 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 | 6.5 cm |
| Package 1 Width | 6.2 cm |
| Package 1 Length | 4.8 cm |
| Package 1 Weight | 226.0 g |

Contractual warranty

Warranty

14 Aug 2024

18 months

Sustainability Green Premium*

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 | |
|----------|----------------------------|-----|
| ⊘ | Toxic Heavy Metal Free | |
| Ø | 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 |