

Product datasheet

Specifications



TeSys K control relay - 3 NO + 1 NC - $\leq 690\text{ V}$ - 48 V DC standard coil

CA3KN31ED

EAN Code: 3389110484304

Main

| | |
|--------------------------------|--|
| Range | TeSys |
| Product Name | TeSys CAK |
| Product Or Component Type | Control relay |
| Device Short Name | CA3K |
| Contactors Application | Control circuit |
| Utilisation Category | DC-13 AC-15 |
| Pole Contact Composition | 3 NO + 1 NC |
| [Ue] Rated Operational Voltage | $\leq 690\text{ V}$ $\leq 400\text{ Hz}$ |
| Control Circuit Type | DC standard |
| [Uc] Control Circuit Voltage | 48 V DC |

Complementary

| | |
|---|--|
| [Ith] Conventional Free Air Thermal Current | 10 A (at $50\text{ }^{\circ}\text{C}$) |
| 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) 1.5...4 mm ² solid Screw clamp terminals 2 cable(s) 1.5...4 mm ² solid Screw clamp terminals 1 cable(s) 0.75...4 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 0.75...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 0.34...1.5 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm ² flexible without cable end |
| Tightening Torque | 1.3 N.m - on screw clamp terminals - with screwdriver flat $\varnothing 6\text{ mm}$ 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: 0.8...1.15 U _c (at $\leq 50\text{ }^{\circ}\text{C}$) Drop-out: 0.1...0.75 U _c (at $\leq 50\text{ }^{\circ}\text{C}$) |
| Operating Time | 10 ms coil de-energisation and NO opening 30...40 ms coil energisation and NO closing 15 ms coil de-energisation and NC closing 25...35 ms coil energisation and NC opening |
| Mechanical Durability | 20 Mcycles |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|--------------------------------|----------------|
| 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

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|---------------------------------------|--|
| 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 | -25...50 °C |
| Ambient Air Temperature For Storage | -50...80 °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, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor closed: 4 Gn, 5...300 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

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|------------------------------|-----------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 6.500 cm |
| Package 1 Width | 6.200 cm |
| Package 1 Length | 4.800 cm |
| Package 1 Weight | 219.000 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 | 9.165 kg |

Contractual warranty

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| Warranty | 18 months |
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Sustainability



Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class 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.

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[Guide to assess a product’s sustainability >](#)



Transparency RoHS/REACH

Well-being performance

| | | |
|---|----------------------------|-----|
| ✓ | Reach Free Of Svhc | |
| ✓ | Toxic Heavy Metal Free | |
| ✓ | Mercury Free | |
| ✓ | Rohs Exemption Information | Yes |

Certifications & Standards

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|--------------------------|---|
| 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 |