

Product data sheet

Specifications



control relay, TeSys K,
4P(3NO+1NC), 690V, 24V DC,
standard

CA3KN313BD

Main

| | |
|--------------------------------|--------------------|
| Range | TeSys |
| Product name | TeSys CAK |
| Product or component type | Control relay |
| Device short name | CA3K |
| 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 standard |
| [Uc] control circuit voltage | 24 V DC |

Complementary

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|---|--|
| [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 | Spring terminals 1 cable(s) 0.75...1.5 mm²solid Spring terminals 1 cable(s) 0.75...1.5 mm²flexible without cable end |
| Control circuit voltage limits | Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: 0.1...0.75 Uc (at <50 °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 |
| 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 |

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

| | |
|---------------------------|-----------|
| 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 60947-5-1 GB/T 14048.5 UL 60947-5-1 CSA C22.2 No 60947-5-1 JIS C8201-5-1 |
| Product certifications | CB Scheme CCC UL CSA EAC CE UKCA |
| 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 | 4.8 cm |
| Package 1 Width | 6.2 cm |
| Package 1 Length | 6.5 cm |
| Package 1 Weight | 224.0 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 40 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 9.3 kg |

Contractual warranty

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|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)


[How we assess product sustainability >](#)

| Environmental footprint | |
|----------------------------------|-----|
| Total lifecycle Carbon footprint | 119 |

Use Better

| Materials and Substances | |
|--|---|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| EU RoHS Directive | Compliant |
| REACH Regulation | REACH Declaration |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |

Use Again

| Repack and remanufacture | |
|---------------------------------|---|
| End of life manual availability | End of Life Information |
| Take-back | No |
| WEEE Label |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |