

Product data sheet

Characteristics

CA3KN31BD

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



Main

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

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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 | Rail Plate |
| 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 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: 0.8...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 |
| Heat dissipation | 3 W |
| Minimum switching voltage | 17 V |
| Minimum switching current | 5 mA |
| Non overlap distance | 0.5 mm |

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| Insulation resistance | > 10 MΩ |
| Height | 58 mm |
| Width | 45 mm |
| Depth | 57 mm |
| Net weight | 0.225 kg |

Environment

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| Standards | BS 5424 IEC 60947 NF C 63-140 VDE 0660 |
| Product certifications | UL CSA 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 Weight | 221.0 g |
| Package 1 Height | 6.6 cm |
| Package 1 width | 4.8 cm |
| Package 1 Length | 6.2 cm |
| Unit Type of Package 2 | P06 |
| Number of Units in Package 2 | 320 |
| Package 2 Weight | 82.86 kg |
| Package 2 Height | 45.0 cm |
| Package 2 width | 80.0 cm |
| Package 2 Length | 60.0 cm |
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 40 |
| Package 3 Weight | 9.222 kg |
| Package 3 Height | 15.0 cm |
| Package 3 width | 30.0 cm |
| Package 3 Length | 40.0 cm |

Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | <input checked="" type="checkbox"/> REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Compliant <input checked="" type="checkbox"/> EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | <input checked="" type="checkbox"/> Yes |
| China RoHS Regulation | <input checked="" type="checkbox"/> China RoHS Declaration |

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| Environmental Disclosure |  Product Environmental Profile |
| Circularity Profile |  End Of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

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| Warranty | 18 months |
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