# Product data sheet
## Characteristics

# CA3KN40BD3
control relay, TeSys K, 4P(4NO), 690V, 24V DC 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<br>DC-13 |
| Pole contact composition | 4 NO |
| [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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| 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<br>10 A gG conforming to VDE 0660 |
| [Ui] rated insulation voltage | 690 V conforming to IEC 60947<br>750 V conforming to VDE 0110 group C<br>690 V conforming to BS 5424<br>600 V conforming to CSA C22.2 No 14 |
| Mounting support | Plate<br>Rail |
| Connections - terminals | Screw clamp terminals 1 cable(s) 1.5…4 mm²solid<br>Screw clamp terminals 2 cable(s) 1.5…4 mm²solid<br>Screw clamp terminals 1 cable(s) 0.75…4 mm²flexible with cable end<br>Screw clamp terminals 2 cable(s) 0.75…4 mm²flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34…1.5 mm²flexible with cable end<br>Screw clamp terminals 2 cable(s) 0.34…1.5 mm²flexible without cable end |
| Tightening torque | 1.3 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>1.3 N.M - on screw clamp terminals - with screwdriver Philips No 26 mm<br>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)<br>Drop-out: 0.1...0.75 Uc (at <50 °C) |
| Operating time | 10 ms coil de-energisation and NO opening<br>30...40 ms coil energisation and NO closing |
| Mechanical durability | 20 Mcycles |
| Maximum operating rate | 10000 Cyc/H |
| Immunity to microbreaks | 2 Ms |
| Inrush power in W | 3 W (at 20 °C) |

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|---|---|
| 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 60947-5-1<br>GB/T 14048.5<br>UL 60947-5-1<br>CSA C22.2 No 60947-5-1<br>JIS C8201-5-1 |
| Product certifications | CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]U |
| 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<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102 |
| Mechanical robustness | Vibrations contactor open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Shocks contactor open: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>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 | 220.0 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 | 9.335 Kg |

## Offer Sustainability

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| Recyclability potential, in % | 63 |
| Total lifecycle Carbon footprint | 59 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 1.12968161082548 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 1 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.43599897717785074 |
| Carbon footprint of the distribution phase [A4] | 0.4 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.029973119016202792 |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 56.65241524409139 |
| REACh free of SVHC | Yes |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 57 kg CO2 eq. |
| Toxic heavy metal free | Yes |

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| Mercury free | Yes |
| Sustainable packaging | Yes |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.3166179717450206 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.3 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 59 |
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| REACh Regulation | Free of Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony tr |
| 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 a |

## Contractual warranty

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| Warranty (in months) | 18 |

Product Life Status : Commercialised