

# CA3KN22BD3

TeSys K control relay - 2 NO + 2 NC - ≤ 690 V - 24 V DC standard coil



## 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<br>AC-15   |
| Pole contact composition       | 2 NO + 2 NC      |
| [Ue] rated operational voltage | ≤ 690 V ≤ 400 Hz |
| Control circuit type           | DC standard      |
| [Uc] control circuit voltage   | 24 V DC          |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid<br>Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> flexible with cable end<br>Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end<br>Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible without cable end |
| Tightening torque                           | 11.51 Lbf.in (1.3 N.m) screw clamp terminals flat Ø 6 mm<br>11.51 lbf.in (1.3 N.m) screw clamp terminals Philips No 2 0.24 in (6 mm)                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control circuit voltage limits              | Operational 0.8...1.15 Uc 122 °F (50 °C))<br>Drop-out 0.1...0.75 Uc 122 °F (50 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Operating time                              | 10 ms coil de-energisation and NO opening<br>30...40 ms coil energisation and NO closing<br>15 ms coil de-energisation and NC closing<br>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 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Hold-in power consumption in W              | 3 W 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Heat dissipation                            | 3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Minimum switching voltage                   | 17 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Minimum switching current                   | 5 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Non overlap distance                        | 0.02 in (0.5 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Insulation resistance                       | > 10 MOhm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|               |                        |
|---------------|------------------------|
| Height        | 2.28 in (58 mm)        |
| Maximum Width | 1.77 in (45 mm)        |
| Depth         | 2.24 in (57 mm)        |
| Net Weight    | 0.50 lb(US) (0.225 kg) |

## Environment

|                                       |                                                                                                                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | BS 5424<br>IEC 60947<br>NF C 63-140<br>VDE 0660                                                                                                                                                                                                                                        |
| Product certifications                | UL<br>CSA                                                                                                                                                                                                                                                                              |
| IP degree of protection               | IP2x                                                                                                                                                                                                                                                                                   |
| Protective treatment                  | TC IEC 60068                                                                                                                                                                                                                                                                           |
| Ambient air temperature for operation | -13...122 °F (-25...50 °C)                                                                                                                                                                                                                                                             |
| Ambient air temperature for storage   | -58...176 °F (-50...80 °C)                                                                                                                                                                                                                                                             |
| Operating altitude                    | 6561.68 ft (2000 m) without derating                                                                                                                                                                                                                                                   |
| Flame retardance                      | V1 conforming to UL 94<br>Requirement 2 NF F 16-101<br>Requirement 2 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 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 |

## Ordering and shipping details

|                       |                         |
|-----------------------|-------------------------|
| Category              | 22371 - RELAYS, CONTROL |
| Discount Schedule     | I12                     |
| GTIN                  | 00785901065005          |
| Nbr. of units in pkg. | 1                       |
| Package weight(Lbs)   | 0.49 lb(US) (0.22 kg)   |
| Returnability         | Yes                     |
| Country of origin     | FR                      |

## Packing Units

|                              |                           |
|------------------------------|---------------------------|
| Unit Type of Package 1       | PCE                       |
| Package 1 Height             | 1.97 in (5 cm)            |
| Package 1 width              | 2.44 in (6.2 cm)          |
| Package 1 Length             | 2.64 in (6.7 cm)          |
| Unit Type of Package 2       | S02                       |
| Number of Units in Package 2 | 40                        |
| Package 2 Weight             | 20.39 lb(US) (9.249 kg)   |
| Package 2 Height             | 5.91 in (15 cm)           |
| Package 2 width              | 11.81 in (30 cm)          |
| Package 2 Length             | 15.75 in (40 cm)          |
| Unit Type of Package 3       | P06                       |
| Number of Units in Package 3 | 640                       |
| Package 3 Weight             | 348.02 lb(US) (157.86 kg) |
| Package 3 Height             | 30.31 in (77 cm)          |
| Package 3 width              | 31.50 in (80 cm)          |
| Package 3 Length             | 23.62 in (60 cm)          |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                     |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                         |
| REACH free of SVHC         | Yes                                                                                                                                                                                                                                                       |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                             |
| Toxic heavy metal free     | Yes                                                                                                                                                                                                                                                       |
| Mercury free               | Yes                                                                                                                                                                                                                                                       |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                       |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                    |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                             |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                              |

## Contractual warranty

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