

# Product data sheet

Specifications



control relay, TeSys K,  
4P(2NO+2NC), 690V, 24V DC  
coil, screw clamp connection

CA3KN22BD3

## Main

|                                |                    |
|--------------------------------|--------------------|
| Range                          | TeSys              |
| Product name                   | TeSys CAK          |
| Product or component type      | Control relay      |
| Device short name              | CA3K               |
| Contacting 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Rms 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 mm <sup>2</sup> solid<br>Screw clamp terminals 2 cable(s) 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 cable(s) 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                           | 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<br>15 ms coil de-energisation and NC closing<br>25...35 ms coil energisation and NC opening                                                                                                                                                                                                                                                                                                           |

|                                       |                |
|---------------------------------------|----------------|
| <b>Mechanical durability</b>          | 20 Mcycles     |
| <b>Maximum operating rate</b>         | 10000 cyc/h    |
| <b>Immunity to microbreaks</b>        | 2 ms           |
| <b>Inrush power in W</b>              | 3 W (at 20 °C) |
| <b>Hold-in power consumption in W</b> | 3 W at 20 °C   |
| <b>Heat dissipation</b>               | 3 W            |
| <b>Minimum switching voltage</b>      | 17 V           |
| <b>Minimum switching current</b>      | 5 mA           |
| <b>Non overlap distance</b>           | 0.5 mm         |
| <b>Insulation resistance</b>          | > 10 MOhm      |
| <b>Height</b>                         | 58 mm          |
| <b>Width</b>                          | 45 mm          |
| <b>Depth</b>                          | 57 mm          |
| <b>Net weight</b>                     | 0.225 kg       |

## Environment

|                                              |                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standards</b>                             | 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                                                                                                                                                                                                          |
| <b>Product certifications</b>                | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                                                                                                                                                   |
| <b>IP degree of protection</b>               | IP2X                                                                                                                                                                                                                                                                                                 |
| <b>Protective treatment</b>                  | TC conforming to IEC 60068                                                                                                                                                                                                                                                                           |
| <b>Ambient air temperature for operation</b> | -25...50 °C                                                                                                                                                                                                                                                                                          |
| <b>Ambient air temperature for storage</b>   | -50...80 °C                                                                                                                                                                                                                                                                                          |
| <b>Operating altitude</b>                    | 2000 m without derating                                                                                                                                                                                                                                                                              |
| <b>Flame retardance</b>                      | V1 conforming to UL 94<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102                                                                                                                                                                                         |
| <b>Mechanical robustness</b>                 | 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

|                                     |         |
|-------------------------------------|---------|
| <b>Unit Type of Package 1</b>       | PCE     |
| <b>Number of Units in Package 1</b> | 1       |
| <b>Package 1 Height</b>             | 5.0 cm  |
| <b>Package 1 Width</b>              | 6.2 cm  |
| <b>Package 1 Length</b>             | 6.7 cm  |
| <b>Package 1 Weight</b>             | 222.0 g |

---

|                                     |          |
|-------------------------------------|----------|
| <b>Unit Type of Package 2</b>       | S02      |
| <b>Number of Units in Package 2</b> | 40       |
| <b>Package 2 Height</b>             | 15 cm    |
| <b>Package 2 Width</b>              | 30 cm    |
| <b>Package 2 Length</b>             | 40 cm    |
| <b>Package 2 Weight</b>             | 9.199 kg |

---

## **Contractual warranty**

---

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|



## Environmental Data

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

|                                   |           |
|-----------------------------------|-----------|
| <a href="#">EU RoHS Directive</a> | Compliant |
|-----------------------------------|-----------|

|                  |                                   |
|------------------|-----------------------------------|
| REACH Regulation | <a href="#">REACH Declaration</a> |
|------------------|-----------------------------------|

|                           |                                                                                                                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| California proposition 65 | <b>WARNING:</b> 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> |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Use Again

### Repack and remanufacture

|                                 |                                         |
|---------------------------------|-----------------------------------------|
| End of life manual availability | <a href="#">End of Life Information</a> |
|---------------------------------|-----------------------------------------|

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