

# CA3KN22ED

Control relay, TeSys K, 2 NO + 2 NC, lt or eq to 690V, 48VDC 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           | AC-15<br>DC-13     |
| Pole contact composition       | 2 NO + 2 NC        |
| [Ue] rated operational voltage | <= 690 V <= 400 Hz |
| Control circuit type           | DC standard        |
| [Uc] control circuit voltage   | 48 V DC            |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ith] conventional free air thermal current | 10 A 122 °F (50 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Irms rated making capacity                  | 110 A IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Associated fuse rating                      | 10 A gG IEC 60947<br>10 A gG VDE 0660                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [Ui] rated insulation voltage               | 690 V IEC 60947<br>750 V VDE 0110 group C<br>690 V BS 5424<br>600 V 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 0.00...0.01 in <sup>2</sup> (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 0.00...0.00 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> )flexible with cable end<br>Screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (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)<br>11.51 Lbf.in (1.3 N.m) screw clamp terminals pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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

## Environment

|                                       |                                                                                                                                                                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60947-4-1<br>GB/T 14048.4<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1                                                                                                                                          |
| Product Certifications                | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                                                                                   |
| 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 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102                                                                                                                         |
| Mechanical robustness                 | Vibrations contactor open2 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations contactor closed4 Gn, 5...300 Hz IEC 60068-2-6<br>Shocks contactor open10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed15 Gn for 11 ms IEC 60068-2-27 |

## Ordering and shipping details

|                   |                       |
|-------------------|-----------------------|
| Category          | 22371-RELAYS, CONTROL |
| Discount Schedule | I12                   |
| GTIN              | 3389110483826         |
| Returnability     | No                    |
| Country of origin | FR                    |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Number of Units in Package 1 | 1                       |
| Package 1 Height             | 1.85 in (4.7 cm)        |
| Package 1 Width              | 2.40 in (6.1 cm)        |
| Package 1 Length             | 2.56 in (6.5 cm)        |
| Package 1 Weight             | 7.72 oz (219.0 g)       |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 40                      |
| Package 2 Height             | 5.91 in (15 cm)         |
| Package 2 Width              | 11.81 in (30 cm)        |
| Package 2 Length             | 15.75 in (40 cm)        |
| Package 2 Weight             | 20.06 lb(US) (9.098 kg) |

## 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                                                                                                                          |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                       |
| RoHS exemption information | <a href="#">Yes</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 |
|----------|-----------|