Product data sheet

Specifications



Control relay, TeSys K, 3 NO + 1 NC, lt or eq to 690V, 24VDC standard coil

CA3KN31BD3

Product availability: Stock - Normally stocked in distribution facility

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 AC-15
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

Coil technology	Built-in bidirectional peak limiting diode suppressor
[Ith] conventional free air thermal current	10 A (at 122 °F (50 °C))
Irms rated making capacity	110 A 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 IEC 60947 750 V VDE 0110 group C 690 V BS 5424 600 V CSA C22.2 No 14
Mounting Support	Rail Plate
Connections - terminals	screw clamp terminals 1 0.002…0.006 in² (1.5…4 mm²)solid screw clamp terminals 2 0.002…0.006 in² (1.5…4 mm²)solid screw clamp terminals 1 0.001…0.006 in² (0.75…4 mm²)flexible with cable end screw clamp terminals 2 0.001…0.006 in² (0.75…4 mm²)flexible without cable end screw clamp terminals 1 0.0005…0.002 in² (0.34…1.5 mm²)flexible with cable end screw clamp terminals 2 0.0005…0.002 in² (0.34…1.5 mm²)flexible without cable end
Tightening torque	11.5 lbf.in (1.3 N.m) screw clamp terminals flat Ø 6 mm 11.5 lbf.in (1.3 N.m) screw clamp terminals Philips No 2 0.2 in (6 mm) 11.5 lbf.in (1.3 N.m) screw clamp terminals pozidriv No 2
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: 0.1...0.75 Uc (at <122 °F (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

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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	2.3 in (58 mm)
Width	1.8 in (45 mm)
Depth	2.2 in (57 mm)
Product Weight	0.496 lb(US) (0.225 kg)

Environment

Standards	EN/IEC 60947-5-1 GB/T 14048.5 UL 60947-5-1 CSA C22.2 No 60947-5-1 JIS C8201-5-1
Product Certifications	CB Scheme CCC UL CSA EAC CE 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 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor closed4 Gn, 5...300 Hz IEC 60068-2-6 Shocks contactor open10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed15 Gn for 11 ms IEC 60068-2-27

Ordering and shipping details

Category	US10I1222371
Discount Schedule	0I12
GTIN	3389110484281
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE

Nbr. of units in pkg.	1
Package 1 Height	2.559 in (6.500 cm)
Package 1 Width	2.362 in (6.000 cm)
Package 1 Length	1.890 in (4.800 cm)
Package weight(Lbs)	7.513 oz (213.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	20.375 lb(US) (9.242 kg)

Contractual warranty

Warranty (in months)	18

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	**59 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**1 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.4 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**57 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**
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 www.P65Warnings.ca.gov**

Use Longer

Lifetime extension

Repair	**No**

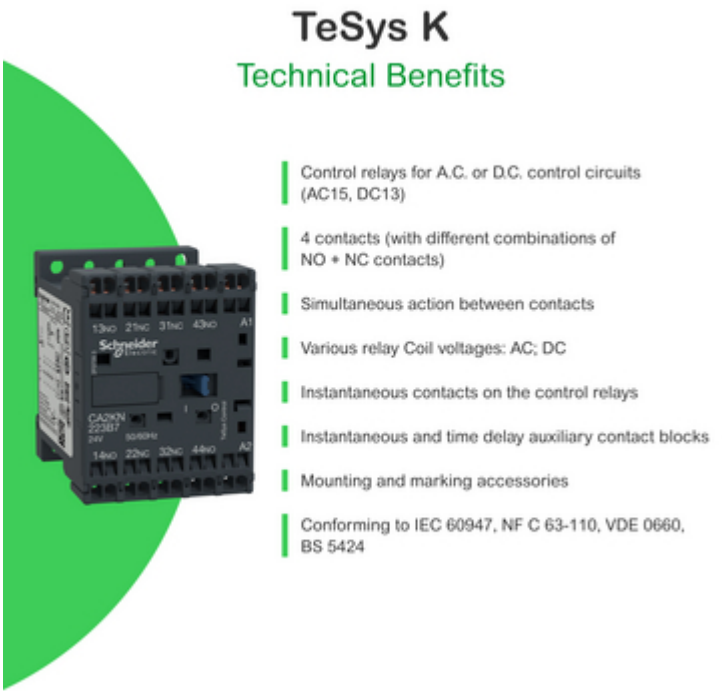
Use Again

Repack and remanufacture

Recyclability potential, in %	**63**
Circularity Profile	**End of Life Information**
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.**

Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

