Product data sheet
Characteristics

CA3KN31BD
control relay, TeSys K, 4P(3NO+1NC), 690V, 24V 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	AC-15 DC-13
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

[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 10 A gG conforming to VDE 0660
[Ui] rated insulation voltage	690 V conforming to IEC 60947 750 V conforming to VDE 0110 group C 690 V conforming to BS 5424 600 V conforming to CSA C22.2 No 14
Mounting support	Rail Plate
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5…4 mm²solid Screw clamp terminals 2 cable(s) 1.5…4 mm²solid Screw clamp terminals 1 cable(s) 0.75…4 mm²flexible with cable end Screw clamp terminals 2 cable(s) 0.75…4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.34…1.5 mm²flexible with cable end 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 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 26 mm 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) Drop-out: 0.1...0.75 Uc (at <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
Maximum operating rate	10000 Cyc/H
Immunity to microbreaks	2 Ms
Inrush power in W	3 W (at 20 °C)

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

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[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 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Shocks contactor open: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed: 15 Gn for 11 ms conforming to IEC 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.600 Cm
Package 1 Width	4.800 Cm
Package 1 Length	6.200 Cm
Package 1 Weight	219.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	9.154 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Height	45.000 Cm
Package 3 Width	60.000 Cm
Package 3 Length	80.000 Cm
Package 3 Weight	82.860 Kg

Offer Sustainability

Recyclability potential, in %	63
Total lifecycle Carbon footprint	59 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1.1245466944126368
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.43401716364522414
Carbon footprint of the distribution phase [A4]	0.4 kg CO2 eq.

Carbon footprint of the installation phase [A5]	0.02983687756612914
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
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.3151787991461796
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

Warranty (in months)	18

Product Life Status : Commercialised