Product data sheet
Characteristics

CA3KN31BD3
TeSys K control relay - 3 NO + 1 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	AC-15 DC-13
Pole contact composition	3 NO + 1 NC
[Ue] rated operational voltage	<= 690 V <= 400 Hz
Control circuit type	DC standard
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 VDE 0660 10 A gG conforming to IEC 60947
[Ui] rated insulation voltage	600 V conforming to CSA C22.2 No 14 690 V conforming to BS 5424 750 V conforming to VDE 0110 group C 690 V conforming to IEC 60947
Mounting support	Plate Rail
Connections - terminals	Screw clamp terminals 2 cable(s) 0.34...1.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.34...1.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 0.75...4 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.75...4 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.5...4 mm² - cable stiffness: solid
Tightening torque	1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Control circuit voltage limits	0.1...0.75 Uc at 50 °C drop-out 0.8...1.15 Uc at 50 °C operational
Operating time	25...35 ms coil energisation and NC opening 15 ms coil de-energisation and NC closing 30...40 ms coil energisation and NO closing 10 ms coil de-energisation and NO opening
Mechanical durability	20 Mcycles
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

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Minimum switching current	5 mA
Non overlap distance	0.5 mm
Insulation resistance	> 10 MOhm
Height	58 mm
Width	45 mm
Depth	57 mm
Product weight	0.225 kg

Environment

Standards	BS 5424 IEC 60947 NF C 63-140 VDE 0660
Product certifications	CSA UL
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 in temperature
Flame retardance	Requirement 2 conforming to NF F 16-102 Requirement 2 conforming to NF F 16-101 V1 conforming to UL 94
Mechanical robustness	Shocks contactor closed 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor open 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor open 2 Gn, 5...300 Hz IEC 60068-2-6

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0825 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Need no specific recycling operations