

Product data sheet

Characteristics

CA4KN31EW3

control relay, TeSys K, 4P(3NO+1NC),
<=690V, 48V DC low consumption coil



Main

Range	TeSys
Product name	TeSys CAK
Product or component type	Control relay
Device short name	CA4K
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 low consumption
[Uc] control circuit voltage	48 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 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 mm ² solid Screw clamp terminals 2 cable(s) 1.5...4 mm ² solid Screw clamp terminals 1 cable(s) 0.75...4 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 0.75...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 0.34...1.5 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm ² flexible 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	Drop-out: 0.1...0.75 Uc (at <50 °C) Operational: 0.7...1.3 Uc (at <50 °C)
Operating time	10...20 ms coil de-energisation and NO opening 15...25 ms coil de-energisation and NC closing 30...40 ms coil energisation and NO closing 25...35 ms coil energisation and NC opening
Mechanical durability	30 Mcycles
Maximum operating rate	6000 cyc/h
Immunity to microbreaks	2 ms
Inrush power in W	1.8 W (at 20 °C)
Hold-in power consumption in W	1.8 W at 20 °C
Heat dissipation	1.8 W
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non overlap distance	0.5 mm

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Insulation resistance	> 10 MΩ
Height	58 mm
Width	45 mm
Depth	57 mm
Net weight	0.235 kg

Environment

Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product certifications	CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]UKCA
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	4.8 cm
Package 1 Width	6.2 cm
Package 1 Length	6.6 cm
Package 1 Weight	219.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	9.21 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant  EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information
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
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