

Product data sheet

Characteristics

CA2KN31U7

control relay, TeSys K, 4P(3NO+1NC),
<=690V, 230...240V AC coil



Main

Range	TeSys
Product name	TeSys CAK
Product or component type	Control relay
Device short name	CA2K
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	AC at 50/60 Hz
[Uc] control circuit voltage	230...240 V AC 50/60 Hz

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	Plate Rail
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: 0.2...0.75 Uc (at <50 °C) Operational: 0.8...1.15 Uc (at <50 °C)
Operating time	10...20 ms coil de-energisation and NO opening 10...20 ms coil energisation and NO closing 15...25 ms coil de-energisation and NC closing 5...15 ms coil energisation and NC opening
Mechanical durability	10 Mcycles
Maximum operating rate	10000 cyc/h
Immunity to microbreaks	2 ms
Inrush power in VA	30 VA (at 20 °C)
Hold-in power consumption in VA	4.5 VA (at 20 °C)
Heat dissipation	1.3 W
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non overlap distance	0.5 mm

Insulation resistance	> 10 MΩ
Height	58 mm
Width	45 mm
Depth	57 mm
Net weight	0.18 kg

Environment

Standards	BS 5424 IEC 60947 NF C 63-140 VDE 0660
Product certifications	UL CSA 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 Weight	178.0 g
Package 1 Height	4.8 cm
Package 1 width	6.2 cm
Package 1 Length	6.5 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Weight	1.78 kg
Package 2 Height	6.2 cm
Package 2 width	13.5 cm
Package 2 Length	24.0 cm
Unit Type of Package 3	S02
Number of Units in Package 3	50
Package 3 Weight	9.4 kg
Package 3 Height	15.0 cm
Package 3 width	30.0 cm
Package 3 Length	40.0 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<input checked="" type="checkbox"/> REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <input checked="" type="checkbox"/> EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration

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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