



### Main

Range of product	TeSys k control relay
Product or component type	Electromagnetic relay
Device short name	CA3K
Contactor application	Control circuit
Utilisation category	DC-13
Control circuit type	DC
Coil type	Standard
Coil technology	Without integral suppression device
Pole contact composition	4 NO
[Uc] control circuit voltage	48 V DC
Connections - terminals	Screwclamp terminal 1 cable 1.5 mm <sup>2</sup> - cable stiffness: solid Screwclamp terminal 2 cable 4 mm <sup>2</sup> - cable stiffness: solid Screwclamp terminal 1 cable 0.75 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screwclamp terminal 2 cable 4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screwclamp terminal 1 cable 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Screwclamp terminal 1 cable 0.34...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end

### Complementary

Contact operation	Mechanically linked conforming to IEC 60947-5-1
Control circuit voltage limits	0.8...1.15 Uc at 50 °C operational <= 0.1 Uc at 50 °C drop-out
[Ui] rated insulation voltage	600 V - conforming to CSA C22-2 No 14 690 V - conforming to BS 5424 690 V - conforming to IEC 60947 750 V - conforming to VDE 0110 group C
Flame retardance	V1 conforming to UL 94 Class C2 conforming to NF F 16-101 Class C2 conforming to NF F 16-102
Tightening torque	0.8...1.3 N.m - on screwclamp terminal - with screwdriver Philips 2 mm 0.8...1.3 N.m - on screwclamp terminal - with screwdriver flat Ø 6 mm
[Ue] rated operational voltage	<= 690 V DC
[Ith] conventional free air thermal current	10 A at ≤ 50 °C
Irms rated making capacity	110 A at <= 690 V DC conforming to IEC 60947
Associated fuse rating	10 A gG at <= 690 V conforming to VDE 0660 10 A gG at <= 690 V conforming to IEC 60947
Inrush power in W	3 W at 20 °C
Hold-in power consumption in W	3 W at 20 °C
Mechanical durability	20000000 cycles
Operating rate	10000 cyc/h at 20 °C
Operating time	10 ms coil de-energisation and NO opening 15 ms coil de-energisation and NC closing 25...35 ms coil energisation and NC opening 30...40 ms coil energisation and NO closing
Minimum switching current	5 mA
Minimum switching voltage	17 V

Non-overlap time	1.5 ms on energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Non overlap distance	0.5 m
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 conforming to VDE 0106
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
Shock resistance	10 gn control relay open 15 gn control relay closed
Vibration resistance	2 gn 5...300 Hz control relay open 4 gn 5...300 Hz control relay closed
Heat dissipation	3 W
Immunity to microbreaks	2 ms
RoHS EUR conformity date	0640
RoHS EUR status	Compliant