

Product data sheet

Characteristics

CAD50N7

Control relay, TeSys Deca, 5NO, 0 to 690V, 415VAC 50/60Hz standard coil, screw clamp



Main

Range	TeSys
Product name	TeSys CAD
Product or component type	Control relay
Device short name	CAD
Contact application	Control circuit

Complementary

Utilisation category	AC-14 AC-15 DC-13
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	415 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
[Ith] conventional free air thermal current	10 A (at 60 °C)
Irms rated making capacity	140 A AC conforming to IEC 60947-5-1 250 A DC conforming to IEC 60947-5-1
[Icw] rated short-time withstand current	100 A - 1 s 120 A - 500 ms 140 A - 100 ms
Associated fuse rating	10 A gG conforming to IEC 60947-5-1
[Ui] rated insulation voltage	600 V UL certified 600 V CSA certified 690 V conforming to IEC 60947-5-1
Mounting support	Rail Plate
Connections - terminals	Screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm ² solid without cable end
Tightening torque	1.2 N.M - on screw clamp terminals - with screwdriver Phillips No 2 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Control circuit voltage limits	0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 50/60 Hz
Operating time	12...22 ms coil energisation and NO closing 4...12 ms coil de-energisation and NO opening
Mechanical durability	30 Mcycles
Maximum operating rate	180 cyc/mn
Inrush power in VA	70 VA 50 Hz (at 20 °C)

Hold-in power consumption in VA	8 VA 50 Hz (at 20 °C)
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non-overlap time	1.5 Ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm
Mechanical robustness	Shocks control relay open: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks control relay closed: 15 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations control relay open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6
Height	77 mm
Width	45 mm
Depth	84 mm
Net weight	0.58 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 CCC UL CSA EAC CE UKCA
IP degree of protection	IP2X front face conforming to VDE 0106
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-60...80 °C
Operating altitude	0...3000 m

Packing Units

Unit Type of Package 1	Db
Number of Units in Package 1	1
Package 1 Height	4.9 cm
Package 1 Width	11.1 cm
Package 1 Length	8.9 cm
Package 1 Weight	362.0 g

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant  EU RoHS Declaration
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
----------	-----------