

Product data sheet

Characteristics

CAD50EL

TeSys D control relay - 5 NO - ≤ 690 V - 48 V
DC low consumption coil



Main

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

Complementary

Utilisation category	AC-14 DC-13 AC-15
Pole contact composition	5 NO
[Ue] rated operational voltage	≤ 690 V AC 25...400 Hz
Control circuit type	DC low consumption
[Uc] control circuit voltage	48 V DC
[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 Philips No 2 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Control circuit voltage limits	0.1...0.25 U _c (-40...70 °C):drop-out DC 0.7...1.25 U _c (-40...60 °C):operational DC 1...1.25 U _c (60...70 °C):operational DC
Operating time	65...88 ms coil energisation and NO closing 14...25 ms coil de-energisation and NO opening
Mechanical durability	30 Mcycles
Maximum operating rate	180 cyc/mn
Time constant	40 ms
Inrush power in W	2.4 W (at 20 °C)

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Hold-in power consumption in W	2.4 W 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	93 mm
Product weight	0.58 kg


Environment

Standards	BS 4794 EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660
Product certifications	UL CSA
IP degree of protection	IP2x 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	PCE
Number of Units in Package 1	1
Package 1 Weight	362 g
Package 1 Height	4.9 cm
Package 1 width	11.1 cm
Package 1 Length	8.9 cm
Unit Type of Package 2	S02
Number of Units in Package 2	1
Package 2 Weight	817 g
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

EU RoHS Directive	Compliant  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
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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