

# Product data sheet

Specifications



Control relay, TeSys Deca, 5NO, 0 to 690V, 72VDC standard coil, screw clamp

CAD50SD

## Main

Range	TeSys TeSys Deca
Product Name	TeSys CAD
Product Or Component Type	Control relay
Device Short Name	CAD
Contactor Application	Control circuit

## Complementary

Utilisation Category	AC-15 DC-13 AC-14
Pole Contact Composition	5 NO
[Ue] Rated Operational Voltage	<= 690 V AC 25...400 Hz
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	72 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	Plate Rail
Connections - Terminals	Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> 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 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Control Circuit Voltage Limits	0.1...0.25 Uc (-40...70 °C):drop-out DC 0.7...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Operating Time	53...72 ms coil energisation and NO closing 16...24 ms coil de-energisation and NO opening
Mechanical Durability	30 Mcycles
Maximum Operating Rate	180 cyc/mn
Time Constant	28 ms
Inrush Power In W	5.4 W (at 20 °C)
Hold-In Power Consumption In W	5.4 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
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 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	PCE
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
Unit Type Of Package 2	S02

Number Of Units In Package 2	15
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.885 kg

## Contractual warranty

Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information   [Yes](#)

## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	<a href="#">End of Life Information</a>
California Proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="#">www.P65Warnings.ca.gov</a>