

# Product data sheet

Specifications



Control relay, TeSys Deca, 5NO,  
<=690V, 110V DC standard coil,  
screw clamp terminals

CAD50FD

## 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 AC-14 DC-13
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	DC standard
[Uc] control circuit voltage	110 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 <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	1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm 1.7 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

<b>Operating time</b>	53...72 ms coil energisation and NO closing 16...24 ms coil de-energisation and NO opening
<b>Mechanical durability</b>	30 Mcycles
<b>Maximum operating rate</b>	180 cyc/mn
<b>Time constant</b>	28 ms
<b>Inrush power in W</b>	5.4 W (at 20 °C)
<b>Hold-in power consumption in W</b>	5.4 W at 20 °C
<b>Minimum switching voltage</b>	17 V
<b>Minimum switching current</b>	5 mA
<b>Non-overlap time</b>	1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
<b>Insulation resistance</b>	> 10 MOhm
<b>Mechanical robustness</b>	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
<b>Height</b>	77 mm
<b>Width</b>	45 mm
<b>Depth</b>	93 mm
<b>Net weight</b>	0.58 kg

## Environment

<b>Standards</b>	EN/IEC 60947-5-1 GB/T 14048.5 UL 60947-5-1 CSA C22.2 No 60947-5-1 JIS C8201-5-1
<b>Product certifications</b>	CB CCC UL CSA EAC CE UKCA
<b>IP degree of protection</b>	IP2X front face conforming to VDE 0106
<b>Protective treatment</b>	TH conforming to IEC 60068
<b>Ambient air temperature for operation</b>	-40...60 °C 60...70 °C with derating
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	0...3000 m

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.100 cm
<b>Package 1 Width</b>	8.600 cm
<b>Package 1 Length</b>	10.600 cm
<b>Package 1 Weight</b>	521.000 g
<b>Unit Type of Package 2</b>	S02

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<b>Number of Units in Package 2</b>	15
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	8.088 kg

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## **Contractual warranty**

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<b>Warranty</b>	18 months
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Total lifecycle Carbon footprint 38

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number B67ac941-f42f-4afd-894a-0b6f9cefde62

REACH Regulation [REACH Declaration](#)

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 [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Use Again

### Repack and remanufacture

End of life manual availability [End of Life Information](#)

Take-back No

WEEE Label  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Image of product / Alternate images

Alternative

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