

# Product datasheet

Specifications



Control relay, TeSys Deca, 5NO,  
≤690V, 220V DC standard coil,  
snap-in terminals

CAD50AMD

## 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-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	220 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 250 A DC
[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	690 V conforming to IEC 60947-5-1
Mounting support	Rail Plate
Connections - terminals	Snap-in terminal 1 cable(s) 0.5...4 mm <sup>2</sup> flexible without cable end Snap-in terminal 2 cable(s) 0.5...4 mm <sup>2</sup> flexible without cable end Snap-in terminal 1 cable(s) 0.5...2.5 mm <sup>2</sup> flexible with cable end Snap-in terminal 2 cable(s) 0.5...2.5 mm <sup>2</sup> flexible with cable end Snap-in terminal 1 cable(s) 0.5...2.5 mm <sup>2</sup> solid without cable end Snap-in terminal 2 cable(s) 0.5...2.5 mm <sup>2</sup> solid without cable end
Control circuit voltage limits	0.1...0.25 U <sub>c</sub> (-40...70 °C):drop-out DC 0.7...1.25 U <sub>c</sub> (-40...60 °C):operational DC 1...1.25 U <sub>c</sub> (60...70 °C):operational DC
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

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

<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>	107 mm
<b>Width</b>	45 mm
<b>Depth</b>	93 mm
<b>Product weight</b>	562 g

## Environment

<b>Standards</b>	EN/IEC 60947-5-1 UL 60947-5-1 CSA C22.2 No 60947-5-1 GB/T 14048.5 JIS C8201-5-1
<b>Product certifications</b>	CB Scheme CCC cULus CE UKCA EU-RO-MR by DNV
<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 cm
<b>Package 1 Width</b>	10.5 cm
<b>Package 1 Length</b>	11.5 cm
<b>Package 1 Weight</b>	582 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	15
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm

<b>Package 2 Weight</b>	9.045 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	240
<b>Package 3 Height</b>	75 cm
<b>Package 3 Width</b>	60 cm
<b>Package 3 Length</b>	80 cm
<b>Package 3 Weight</b>	153.22 kg

## **Contractual warranty**

<b>Warranty (in months)</b>	18
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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	5 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	0 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	B67ac941-f42f-4afd-894a-0b6f9cefde62
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>

## Use Longer




### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

Recyclability potential, in %	75
End of life manual availability	<a href="#">End of Life Information</a>
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

Technical Illustration

Assembly's dimensions

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