

# Product datasheet

Specifications



Control relay, TeSys Deca, 5NO,  
<=690V, 110V DC standard coil,  
snap-in terminals

CAD50AFD

EAN Code: 3606487541363

## 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	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 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 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
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

<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>Net 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
<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>	5.200 cm
<b>Package 1 Width</b>	9.800 cm
<b>Package 1 Length</b>	11.500 cm
<b>Package 1 Weight</b>	572.000 g
<b>Unit Type of Package 2</b>	S02
<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

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Package 2 Weight	8.870 kg
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## Contractual warranty

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Warranty (in months)	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

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](#)

### Use Longer

#### Lifetime extension

Repair No

### 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

Technical Illustration

Assembly's dimensions

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