

# Product datasheet

Specifications



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

CAD50AF7

EAN Code: 3606487541356

### Main

Range	TeSys
Product name	TeSys CAD
Product or component type	Control relay
Device short name	CAD
Contactors 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	AC 50/60 Hz
[Uc] control circuit voltage	110 V AC 50/60 Hz
[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	0.3...0.6 U <sub>c</sub> (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz 0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz 1...1.1 U <sub>c</sub> (60...70 °C):operational AC 50/60 Hz
Operating time	4...19 ms coil energisation and NC opening 12...22 ms coil energisation and NO closing 4...12 ms coil de-energisation and NO opening 6...17 ms coil de-energisation and NC closing

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>Mechanical durability</b>	30 Mcycles
<b>Maximum operating rate</b>	180 cyc/mn
<b>Inrush power in VA</b>	70 VA 50 Hz (at 20 °C)
<b>Hold-in power consumption in VA</b>	8 VA 50 Hz (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>	387 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 cm
<b>Package 1 Width</b>	10.5 cm
<b>Package 1 Length</b>	11.5 cm
<b>Package 1 Weight</b>	407 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

Package 2 Length	40 cm
Package 2 Weight	6.42 kg
Unit Type of Package 3	P06
Number of Units in Package 3	240
Package 3 Height	75 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	111.22 kg

## Contractual warranty

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 17

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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