

# Product data sheet

Specifications



## TeSys Deca control relay - 5 NO - <= 690 V - 24 V DC standard coil

CAD50BD

**Product availability: Stock - Normally stocked in distribution facility**

### Main

Range	TeSys TeSys Deca
Product name	TeSys CAD
Product or Component Type	Control relay
Device short name	CAD
Contactors application	Control circuit

### Complementary

Utilisation category	AC-14 DC-13 AC-15
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C))
Irms rated making capacity	140 A AC IEC 60947-5-1 250 A DC 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 600 V CSA 690 V IEC 60947-5-1
Mounting Support	Rail Plate
Connections - terminals	screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end
Tightening torque	15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2
Control circuit voltage limits	0.1...0.25 U <sub>c</sub> (-40...158 °F (-40...70 °C)):drop-out DC 0.7...1.25 U <sub>c</sub> (-40...140 °F (-40...60 °C)):operational DC 1...1.25 U <sub>c</sub> (140...158 °F (60...70 °C)):operational DC

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<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 68 °F (20 °C))
<b>Hold-in power consumption in W</b>	5.4 W 68 °F (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 open10 Gn for 11 ms IEC 60068-2-27 Shocks control relay closed15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open2 Gn, 5...300 Hz IEC 60068-2-6 Vibrations control relay closed4 Gn, 5...300 Hz IEC 60068-2-6
<b>Height</b>	3.03 in (77 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.7 in (93 mm)
<b>Product Weight</b>	1.28 lb(US) (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 VDE 0106
<b>Protective treatment</b>	TH IEC 60068
<b>Ambient air temperature for operation</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<b>Ambient Air Temperature for Storage</b>	-76...176 °F (-60...80 °C)
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)

## Ordering and shipping details

<b>Category</b>	US10I1222371
<b>Discount Schedule</b>	0I12
<b>GTIN</b>	3389110405583
<b>Returnability</b>	Yes
<b>Country of origin</b>	ID

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	1.969 in (5.000 cm)
<b>Package 1 Width</b>	3.622 in (9.200 cm)
<b>Package 1 Length</b>	4.409 in (11.200 cm)
<b>Package weight(Lbs)</b>	18.554 oz (526.000 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	15
<b>Package 2 Height</b>	5.906 in (15.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	18.122 lb(US) (8.220 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	38 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]	33 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	50ae7612-fd2e-41e4-a369-50d0dea6e592
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</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="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Use Longer




### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

Recyclability potential, in %	75
Circularity Profile	<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.

Offer Marketing Illustration

Product benefits / Features

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## TeSys Deca Control Relays



### Performance

Engineered to enhance performance, this solution bridges automation with advanced power architectures to significantly boost motor efficiency.



### Versatile

It supports multiple connection methods, including screw clamp terminals, spring terminals, and direct PCB welding, ensuring flexible installation across various applications.



### Efficient

It offers connected, efficient products and solutions for switching and protection of motors and electrical loads in compliance with all major global electrical standards.

Offer Marketing Illustration

Product benefits / Features

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## TeSys Deca Technical Benefits



- Control relays for AC or DC control circuits (AC15, DC13)
- Up to 5 contacts (with different combinations of NO + NC contacts)
- Various Relay Coil Voltages: A.C, D.C. or low consumption
- Instantaneous contacts on the control relays and time delay auxiliary contact blocks
- Wide range of temperature: - 40°C – 70°C
- A full scope of accessories and spare parts

Image of product / Alternate images

Alternative

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