

# Product datasheet

Specifications



## TeSys D control relay - 5 NO - <= 690 V - 220 V DC standard coil

Local distributor code:

381796444

CAD50MD

EAN Code: 3389110406641

## Main

|                           |                     |
|---------------------------|---------------------|
| Range                     | TeSys<br>TeSys Deca |
| Product name              | TeSys CAD           |
| Product or component type | Control relay       |
| Device short name         | CAD                 |
| Contactor application     | Control circuit     |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Utilisation category                        | DC-13<br>AC-15<br>AC-14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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 conforming to IEC 60947-5-1<br>250 A DC conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| [Icw] rated short-time withstand current    | 100 A - 1 s<br>120 A - 500 ms<br>140 A - 100 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Associated fuse rating                      | 10 A gG conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [Ui] rated insulation voltage               | 600 V UL certified<br>600 V CSA certified<br>690 V conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mounting support                            | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connections - terminals                     | Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>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<br>1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>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<br>0.7...1.25 Uc (-40...60 °C):operational DC<br>1...1.25 Uc (60...70 °C):operational DC                                                                                                                                                                                                                                                                                                                                                                                 |

|                                       |                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Operating time</b>                 | 53...72 ms coil energisation and NO closing<br>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<br>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<br>Shocks control relay closed: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Vibrations control relay open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>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<br>GB/T 14048.5<br>UL 60947-5-1<br>CSA C22.2 No 60947-5-1<br>JIS C8201-5-1 |
| <b>Product certifications</b>                | CB<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>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<br>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>             | 11.200 cm |
| <b>Package 1 Width</b>              | 9.100 cm  |
| <b>Package 1 Length</b>             | 5.000 cm  |
| <b>Package 1 Weight</b>             | 501.000 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>             | 7.816 kg  |

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## Logistical informations

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|                          |    |
|--------------------------|----|
| <b>Country of origin</b> | FR |
|--------------------------|----|

## Contractual warranty

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|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|



## 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 No

[EU RoHS Directive](#) Compliant with Exemptions

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

REACH Regulation [REACH Declaration](#)

### Use Again

#### Repack and remanufacture

Recyclability potential, in % 75

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

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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