

Product data sheet

Specifications



Control relay, TeSys Deca, 5NO, 0 to 690V, 24VDC standard coil, screw clamp

CAD50BD

Main

| | |
|---------------------------|---------------------|
| Range | TeSys TeSys Deca |
| Product Name | TeSys CAD |
| Product Or Component Type | Control relay |
| Device Short Name | CAD |
| Contactor 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 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 60947-5-1 250 A DC conforming to 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 certified 600 V CSA certified 690 V conforming to IEC 60947-5-1 |
| Mounting Support | Rail Plate |
| Connections - Terminals | Screw clamp terminals 1 cable(s) 1...4 mm²flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm²solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm²solid without cable end |
| Tightening Torque | 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm 1.2 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 0.7...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC |

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

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|--------------------------------|--|
| 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 |
| Time Constant | 28 ms |
| Inrush Power In W | 5.4 W (at 20 °C) |
| Hold-In Power Consumption In W | 5.4 W at 20 °C |
| Minimum Switching Voltage | 17 V |
| Minimum Switching Current | 5 mA |
| Non-Overlap Time | 1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact |
| Insulation Resistance | > 10 MOhm |
| Mechanical Robustness | 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 |
| Height | 77 mm |
| Width | 45 mm |
| Depth | 93 mm |
| Net Weight | 0.58 kg |

Environment

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|---------------------------------------|---|
| Standards | EN/IEC 60947-5-1 GB/T 14048.5 UL 60947-5-1 CSA C22.2 No 60947-5-1 JIS C8201-5-1 |
| Product Certifications | CB CCC UL CSA EAC CE UKCA |
| Ip Degree Of Protection | IP2X front face conforming to VDE 0106 |
| Protective Treatment | TH conforming to IEC 60068 |
| Ambient Air Temperature For Operation | -40...60 °C 60...70 °C with derating |
| Ambient Air Temperature For Storage | -60...80 °C |
| Operating Altitude | 0...3000 m |

Packing Units

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|------------------------------|-----------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 5.000 cm |
| Package 1 Width | 9.200 cm |
| Package 1 Length | 11.200 cm |
| Package 1 Weight | 526.000 g |
| Unit Type Of Package 2 | S02 |

| | |
|------------------------------|-----------|
| Number Of Units In Package 2 | 15 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 8.220 kg |

Contractual warranty

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| Warranty | 18 months |
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

Certifications & Standards

| | |
|---------------------------|---|
| Reach Regulation | REACH Declaration |
| Eu Rohs Directive | Compliant with Exemptions |
| China Rohs Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | Product Environmental Profile |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile | End of Life Information |
| 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 www.P65Warnings.ca.gov |