

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 |
| Contact 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 mm ² flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm ² solid 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 |

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| Control circuit voltage limits | 0.1...0.25 U _c (-40...70 °C):drop-out DC 0.7...1.25 U _c (-40...60 °C):operational DC 1...1.25 U _c (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 |
| 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 Scheme 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 |

Offer Sustainability

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|-----------------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| 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 |

Contractual warranty

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| Warranty | 18 months |
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Recommended replacement(s)