

## Product data sheet

### Characteristics

## CAD50EL

TeSys; TeSys Deca, control relay, 5 NO, <= 690 V, 48 V DC low consumption coil



### Main

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

### Complementary

|   |  |
|---|--|
| Utilisation category                        | AC-14<br>DC-13<br>AC-15  |
| Pole contact composition                    | 5 NO   |
| [Ue] rated operational voltage              | <= 690 V AC 25...400 Hz  |
| Control circuit type                        | DC low consumption   |
| [Uc] control circuit voltage                | 48 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[RETURN]600 V CSA certified[RETURN]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                           | 1.2 N.M - on screw clamp terminals - with screwdriver Philips No 2<br>1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  |
| 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   |
| Operating time                              | 65...88 ms coil energisation and NO closing<br>14...25 ms coil de-energisation and NO opening  |
| Mechanical durability                       | 30 Mcycles   |
| Maximum operating rate                      | 180 cyc/mn   |
| Time constant                               | 40 ms  |
| Inrush power in W                           | 2.4 W (at 20 °C)   |
| Hold-in power consumption in W              | 2.4 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<br>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<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 |
| Height                    | 77 mm  |
| Width                     | 45 mm  |
| Depth                     | 93 mm  |
| Net weight                | 0.58 kg  |

## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | 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 |
| Product certifications                | CB<br>Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETURN]       |
| IP degree of protection               | IP2X conforming to VDE 0106   |
| Protective treatment                  | TH conforming to IEC 60068  |
| Ambient air temperature for operation | -40...60 °C<br>60...70 °C with derating   |
| Ambient air temperature for storage   | -60...80 °C   |
| Operating altitude                    | 0...3000 m  |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 4.9 cm  |
| Package 1 Width              | 11.1 cm |
| Package 1 Length             | 8.9 cm  |
| Package 1 Weight             | 362 g   |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| EU RoHS Directive          | Compliant  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes   |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information |  Yes   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins       |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|