



## 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                        | AC-15<br>DC-13<br>AC-14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Pole contact composition                    | 5 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ue] rated operational voltage              | <= 690 V AC 25...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control circuit type                        | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [Uc] control circuit voltage                | 115 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [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                           | 1.2 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<br>1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2                                                                                                                                                                                                                                                                                                   |
| Control circuit voltage limits              | 0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz<br>0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz<br>1...1.1 Uc (60...70 °C):operational AC 50/60 Hz                                                                                                                                                                                                                                                                                                        |
| Operating time                              | 12...22 ms coil energisation and NO closing<br>4...12 ms coil de-energisation and NO opening                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Mechanical durability                       | 30 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum operating rate                      | 180 cyc/mn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Inrush power in VA                          | 70 VA 50 Hz (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Hold-in power consumption in VA             | 8 VA 50 Hz (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                     | 84 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[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]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<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             | 5.500 cm  |
| Package 1 Width              | 8.000 cm  |
| Package 1 Length             | 9.500 cm  |
| Package 1 Weight             | 356.000 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 20        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 7.502 kg  |

## Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                             |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive          | Compliant with Exemptions                                                                                                         |
| Mercury free               | Yes                                                                                                                               |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information |  <a href="#">Yes</a>                           |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile        |  <a href="#">End Of Life Information</a>       |
| 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 |
|----------|-----------|