



## Main

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

## Complementary

|                                             |                                                                                                                                               |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Utilisation category                        | DC-13<br>AC-14<br>AC-15                                                                                                                       |
| Pole contact composition                    | 5 NO                                                                                                                                          |
| [Ue] rated operational voltage              | $\leq 690$ V AC 25...400 Hz                                                                                                                   |
| Control circuit type                        | DC standard                                                                                                                                   |
| [Uc] control circuit voltage                | 24 V DC                                                                                                                                       |
| Coil technology                             | With integral suppression device                                                                                                              |
| [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               | 690 V conforming to IEC 60947-5-1                                                                                                             |
| Mounting support                            | Plate<br>Rail                                                                                                                                 |
| Connections - terminals                     | Lugs-ring terminals (external diameter: 9.5 mm)                                                                                               |
| Tightening torque                           | 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5<br>1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 |
| Control circuit voltage limits              | 0.1...0.25 Uc (-40...70 °C):drop-out DC<br>0.7...1.25 Uc (-40...70 °C):operational DC                                                         |
| Operating time                              | 53...72 ms coil energisation and NO closing<br>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<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            | 0.32 kg                                                                                                                                                                                                                                                                                                              |

## Environment

|                                       |                                                                                                     |
|---------------------------------------|-----------------------------------------------------------------------------------------------------|
| Standards                             | EN 45545: R22 HL3<br>EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1 |
| Product certifications                | CB[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]UKCA                                 |
| IP degree of protection               | IP20 front face conforming to IEC 60529                                                             |
| Protective treatment                  | TH conforming to IEC 60068                                                                          |
| Ambient air temperature for operation | -40...70 °C                                                                                         |
| Ambient air temperature for storage   | -60...80 °C                                                                                         |
| Operating altitude                    | 0...3000 m                                                                                          |
| Fire resistance                       | 850 °C conforming to IEC 60695-2-1                                                                  |
| Flame retardance                      | V0 conforming to UL 94                                                                              |

## Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                             |
| REACH Regulation           |  <a href="#">REACH Declaration</a>              |
| EU RoHS Directive          | Compliant with Exemptions                                                                                                         |
| Mercury free               | Yes                                                                                                                               |
| RoHS exemption information |  <a href="#">Yes</a>                           |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile        | No need of specific recycling operations                                                                                          |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins       |