



## 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>AC-15<br>DC-13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pole contact composition                    | 3 NO + 2 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Ue] rated operational voltage              | ≤ 690 V AC 25...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Control circuit type                        | DC standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Uc] control circuit voltage                | 12 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               | 690 V conforming to IEC 60947-5-1<br>600 V certifications UL<br>600 V certifications CSA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mounting support                            | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Connections - terminals                     | Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: 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 drop-out<br>0.7...1.25 Uc operational                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Operating time                              | 15...25 ms coil de-energisation and NC closing<br>53...72 ms coil energisation and NO closing<br>16...24 ms coil de-energisation and NO opening<br>47...63 ms coil energisation and NC opening                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Mechanical durability                       | 30 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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|                           |                                                                                                                                                                                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum switching current | 5 mA                                                                                                                                                                                                                                                     |
| Non-overlap time          | 1.5 ms on de-energisation (between NC and NO contact)<br>1.5 ms on energisation (between NC and NO contact)                                                                                                                                              |
| Insulation resistance     | > 10 MOhm                                                                                                                                                                                                                                                |
| Mechanical robustness     | Shocks control relay open 10 Gn for 11 ms IEC 60068-2-27<br>Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27<br>Vibrations control relay open 2 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations control relay closed 4 Gn, 5...300 Hz IEC 60068-2-6 |
| Height                    | 77 mm                                                                                                                                                                                                                                                    |
| Width                     | 45 mm                                                                                                                                                                                                                                                    |
| Depth                     | 93 mm                                                                                                                                                                                                                                                    |
| Product weight            | 0.58 kg                                                                                                                                                                                                                                                  |

## Environment

|                                       |                                                                   |
|---------------------------------------|-------------------------------------------------------------------|
| standards                             | VDE 0660<br>IEC 60947-5-1<br>NF C 63-140<br>BS 4794<br>EN 60947-5 |
| product certifications                | CSA<br>UL                                                         |
| IP degree of protection               | IP2x front face conforming to VDE 0106                            |
| 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                    | 3000 m without derating in temperature                            |

## Offer Sustainability

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                 |
| RoHS (date code: YYWW)           | Compliant - since 0627 - Schneider Electric declaration of conformity |
| REACH                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available                                                             |
| Product end of life instructions | Available                                                             |