

## Main

|                                |                         |
|--------------------------------|-------------------------|
| Range                          | TeSys                   |
| Product name                   | TeSys CAD               |
| Product or component type      | Control relay           |
| Device short name              | CAD                     |
| Contactor application          | Control circuit         |
| 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           | AC 50/60 Hz             |
| Control circuit voltage        | 220 V AC 50/60 Hz       |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [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                  | 250 A DC conforming to IEC 60947-5-1<br>140 A AC conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                       |
| [Icw] rated short-time withstand current    | 140 A 100 ms<br>120 A 500 ms<br>100 A 1 s                                                                                                                                                                                                                                                                                                                                                                          |
| 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 CSA<br>600 V certifications UL                                                                                                                                                                                                                                                                                                                           |
| Mounting support                            | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                      |
| Connections - terminals                     | Spring terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Spring terminals 1 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Spring terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Spring terminals 1 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end |
| Control circuit voltage limits              | 0.3...0.6 Uc drop-out<br>0.85...1.1 Uc operational 60 Hz<br>0.8...1.1 Uc operational 50 Hz                                                                                                                                                                                                                                                                                                                         |
| Operating time                              | 6...17 ms coil de-energisation and NC closing<br>4...19 ms coil energisation and NC opening<br>4...12 ms coil de-energisation and NO opening<br>12...22 ms coil energisation and NO closing                                                                                                                                                                                                                        |
| Mechanical durability                       | 30 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operating rate                              | 180 cyc/mn                                                                                                                                                                                                                                                                                                                                                                                                         |
| Inrush power in VA                          | 70 VA at 20 °C 50 Hz                                                                                                                                                                                                                                                                                                                                                                                               |
| Hold-in power consumption in VA             | 8 VA at 20 °C 50 Hz                                                                                                                                                                                                                                                                                                                                                                                                |
| Minimum switching voltage                   | 17 V                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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                                                                                                                                                                                                                                                                                                                                                                                                          |
| Height                                      | 99 mm                                                                                                                                                                                                                                                                                                                                                                                                              |
| Width                                       | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                              |

|                |         |
|----------------|---------|
| Depth          | 84 mm   |
| Product weight | 0.58 kg |

## Environment

|                                       |                                                                                                                                                                                                                                                          |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | BS 4794<br>EN 60947-5<br>IEC 60947-5-1<br>NF C 63-140<br>VDE 0660                                                                                                                                                                                        |
| 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                                                                                                                                                                                                                   |
| Mechanical robustness                 | Vibrations control relay closed 4 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations control relay open 2 Gn, 5...300 Hz IEC 60068-2-6<br>Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27<br>Shocks control relay open 10 Gn for 11 ms IEC 60068-2-27 |