



## Main

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

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Utilisation category                        | DC-13<br>AC-14<br>AC-15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pole contact composition                    | 5 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ue] rated operational voltage              | ≤ 690 V AC 25...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Control circuit type                        | AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Uc] control circuit voltage                | 48 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Uimp] rated impulse withstand voltage      | 6 kV IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Irms rated making capacity                  | 140 A AC IEC 60947-5-1<br>250 A DC 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 IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [Ui] rated insulation voltage               | 600 V UL<br>600 V CSA<br>690 V IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mounting support                            | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Connections - terminals                     | Screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end<br>Screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end<br>Screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end |
| Tightening torque                           | 10.62 Lbf.in (1.2 N.m) screw clamp terminals Philips No 2<br>10.62 lbf.in (1.2 N.m) screw clamp terminals flat Ø 6 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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...140 °F (-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 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Hold-in power consumption in VA             | 8 VA 50 Hz 68 °F (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 open10 Gn for 11 ms IEC 60068-2-27<br>Shocks control relay closed15 Gn for 11 ms IEC 60068-2-27<br>Vibrations control relay open2 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations control relay closed4 Gn, 5...300 Hz IEC 60068-2-6 |
| Height                | 3.03 in (77 mm)                                                                                                                                                                                                                                      |
| Width                 | 1.77 in (45 mm)                                                                                                                                                                                                                                      |
| Maximum Depth         | 3.31 in (84 mm)                                                                                                                                                                                                                                      |
| Net Weight            | 1.28 lb(US) (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                | UL<br>CSA                                                             |
| IP degree of protection               | IP2x front face VDE 0106                                              |
| Protective treatment                  | TH conforming to IEC 60068                                            |
| Ambient air temperature for operation | -40...140 °F (-40...60 °C)<br>140...158 °F (60...70 °C) with derating |
| Ambient air temperature for storage   | -76...176 °F (-60...80 °C)                                            |
| Operating altitude                    | 0...9842.52 ft (0...3000 m)                                           |

## Ordering and shipping details

|                       |                         |
|-----------------------|-------------------------|
| Category              | 22371 - RELAYS, CONTROL |
| Discount Schedule     | I12                     |
| GTIN                  | 00785901667223          |
| Nbr. of units in pkg. | 1                       |
| Package weight(Lbs)   | 1.28 lb(US) (0.58 kg)   |
| Returnability         | No                      |
| Country of origin     | FR                      |

## Packing Units

|                        |                   |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE               |
| Package 1 Height       | 2.01 in (5.1 cm)  |
| Package 1 width        | 3.62 in (9.2 cm)  |
| Package 1 Length       | 4.37 in (11.1 cm) |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                                                                                     |
| EU RoHS Directive          | Compliant  <a href="#">EU RoHS Declaration</a>                                                                                                                         |
| Mercury free               | Yes                                                                                                                                                                                                                                                       |
| RoHS exemption information |  <a href="#">Yes</a>                                                                                                                                                   |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</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 |
|----------|-----------|