



## 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-15<br>AC-14<br>DC-13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pole contact composition                    | 3 NO + 2 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Ue] rated operational voltage              | ≤ 690 V AC 25...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Control circuit type                        | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Uc] control circuit voltage                | 42 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to 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...158 °F (-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...140 °F (-40...60 °C) operational AC 60 Hz<br>1...1.1 Uc 140...158 °F (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<br>4...19 ms coil energisation and NC opening<br>6...17 ms coil de-energisation and NC closing                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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 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...3000 m                                                            |

## Ordering and shipping details

|                       |                         |
|-----------------------|-------------------------|
| Category              | 22371 - RELAYS, CONTROL |
| Discount Schedule     | I12                     |
| GTIN                  | 00785901708131          |
| 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             | 1.97 in (5 cm)           |
| Package 1 width              | 3.62 in (9.2 cm)         |
| Package 1 Length             | 4.45 in (11.3 cm)        |
| Unit Type of Package 2       | S02                      |
| Number of Units in Package 2 | 20                       |
| Package 2 Weight             | 16.61 lb(US) (7.535 kg)  |
| Package 2 Height             | 5.91 in (15 cm)          |
| Package 2 width              | 11.81 in (30 cm)         |
| Package 2 Length             | 15.75 in (40 cm)         |
| Unit Type of Package 3       | P06                      |
| Number of Units in Package 3 | 160                      |
| Package 3 Weight             | 153.75 lb(US) (69.74 kg) |
| Package 3 Height             | 17.72 in (45 cm)         |
| Package 3 width              | 31.50 in (80 cm)         |
| Package 3 Length             | 23.62 in (60 cm)         |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                     |
| 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>                                                                                                                                                                                                                    |
| 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 |
|----------|-----------|