



## Main

|                           |                                 |
|---------------------------|---------------------------------|
| Range                     | TeSys                           |
| Product or component type | Contacteur                      |
| Device application        | Control                         |
| Contacteur application    | Resistive load<br>Motor control |

## Complementary

|   |   |
|---|---|
| Utilisation category                        | AC-3<br>AC-3e<br>AC-1<br>AC-4   |
| Poles description                           | 3P  |
| Power pole contact composition              | 3 NO  |
| [Ue] rated operational voltage              | Power circuit: $\leq$ 690 V AC $\leq$ 400 Hz<br>Signalling circuit: $\leq$ 690 V AC $\leq$ 400 Hz   |
| [Ie] rated operational current              | 9 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-3 for power circuit<br>9 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-3e for power circuit<br>20 A (at $\leq$ 60 °C) at $\leq$ 690 V AC AC-1 for power circuit   |
| Control circuit type                        | AC at 50/60 Hz  |
| [Uc] control circuit voltage                | 230 V AC 50/60 Hz   |
| Motor power kW                              | 2.2 kW at 220...230 V AC 50/60 Hz AC-3<br>4 kW at 380...415 V AC 50/60 Hz AC-3<br>4 kW at 440/690 V AC 50/60 Hz AC-3<br>2.2 kW at 220...230 V AC 50/60 Hz AC-3e<br>4 kW at 380...415 V AC 50/60 Hz AC-3e<br>4 kW at 440/690 V AC 50/60 Hz AC-3e<br>2.2 kW at 220...230 V AC 50/60 Hz AC-4<br>4 kW at 380...415 V AC 50/60 Hz AC-4<br>4 kW at 440/690 V AC 50/60 Hz AC-4 |
| Auxiliary contact composition               | 1 NO  |
| [Uimp] rated impulse withstand voltage      | 8 kV  |
| Overtoltage category                        | III   |
| [Ith] conventional free air thermal current | 20 A (at 60 °C) for power circuit<br>10 A (at 50 °C) for signalling circuit   |
| Irms rated making capacity                  | 110 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947   |
| Rated breaking capacity                     | 110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>110 A at 415 V conforming to IEC 60947<br>110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>70 A at 660...690 V conforming to IEC 60947  |

|   |   |
|---|---|
| [I <sub>cw</sub> ] rated short-time withstand current | 90 A 50 °C - 1 s for power circuit<br>85 A 50 °C - 5 s for power circuit<br>80 A 50 °C - 10 s for power circuit<br>60 A 50 °C - 30 s for power circuit<br>45 A 50 °C - 1 min for power circuit<br>40 A 50 °C - 3 min for power circuit<br>20 A 50 °C - >= 15 min for power circuit<br>80 A - 1 s for signalling circuit<br>90 A - 500 ms for signalling circuit<br>110 A - 100 ms for signalling circuit  |
| Associated fuse rating                                | 25 A gG at <= 440 V for power circuit<br>25 A aM for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947<br>10 A gG for signalling circuit conforming to VDE 0660   |
| Average impedance                                     | 3 mOhm - I <sub>th</sub> 20 A 50 Hz for power circuit   |
| Insulation resistance                                 | > 10 MOhm for signalling circuit  |
| Inrush power in VA                                    | 30 VA (at 20 °C)  |
| Hold-in power consumption in VA                       | 4.5 VA (at 20 °C)   |
| Heat dissipation                                      | 1.3 W   |
| Control circuit voltage limits                        | Operational: 0.8...1.15 U <sub>c</sub> (at <50 °C)<br>Drop-out: >= 0.20 U <sub>c</sub> (at <50 °C)  |
| Connections - terminals                               | Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> flexible with cable end<br>Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> solid<br>Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> flexible without cable end<br>Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> flexible with cable end  |
| Maximum operating rate                                | 3600 cyc/h  |
| Auxiliary contacts type                               | Type instantaneous 1 NO   |
| Signalling circuit frequency                          | <= 400 Hz   |
| Minimum switching current                             | 5 mA for signalling circuit   |
| Minimum switching voltage                             | 17 V for signalling circuit   |
| Operating time  | 10...20 ms coil de-energisation and NO opening<br>10...20 ms coil energisation and NO closing   |
| Safety reliability level                              | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1  |
| Non overlap distance                                  | 0.5 mm  |
| Mechanical durability                                 | 10 Mcycles  |
| Electrical durability                                 | 1.3 Mcycles 9 A AC-3 at U <sub>e</sub> <= 440 V<br>1.3 Mcycles 9 A AC-3e at U <sub>e</sub> <= 440 V<br>0.16 Mcycles 20 A AC-1 at U <sub>e</sub> <= 690 V<br>0.02 Mcycles 54 A AC-4 at U <sub>e</sub> <= 440 V   |
| Mechanical robustness                                 | Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 |
| Height  | 58 mm   |
| Width   | 45 mm   |
| Depth   | 57 mm   |

## Environment

|                        |  |
|------------------------|--|
| Standards              | EN/IEC 60947-4-1<br>GB/T 14048.4<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1                  |
| Product certifications | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA   |
| Protective treatment   | TC conforming to IEC 60068<br>TC conforming to DIN 50016   |
| Operating altitude     | 2000 m without derating  |
| Flame retardance       | V1 conforming to UL 94<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102 |

## Packing Units

|                              |            |
|------------------------------|------------|
| Unit Type of Package 1       | PCE        |
| Number of Units in Package 1 | 1          |
| Package 1 Height             | 5.000 cm   |
| Package 1 Width              | 6.000 cm   |
| Package 1 Length             | 6.500 cm   |
| Package 1 Weight             | 179.400 g  |
| Unit Type of Package 2       | S02        |
| Number of Units in Package 2 | 50         |
| Package 2 Height             | 15.000 cm  |
| Package 2 Width              | 30.000 cm  |
| Package 2 Length             | 40.000 cm  |
| Package 2 Weight             | 9.206 kg   |
| Unit Type of Package 3       | P06        |
| Number of Units in Package 3 | 800        |
| Package 3 Height             | 75.000 cm  |
| Package 3 Width              | 80.000 cm  |
| Package 3 Length             | 60.000 cm  |
| Package 3 Weight             | 155.292 kg |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</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 |
|----------|-----------|