## Product data sheet Characteristics

# LC1K1201P7

TeSys K contactor - 3P - AC-3 <= 440 V 12 A - 1 NC aux. - 230 V AC coil





| Main                      |                                 |
|---------------------------|---------------------------------|
| Range                     | TeSys                           |
| Product or component type | Contactor                       |
| Product name              | TeSys K                         |
| Device short name         | LC1K                            |
| Device application        | Control                         |
| Contactor application     | Resistive load<br>Motor control |

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| Utilisation category                        | AC-1   |
|---|--|
|   | AC-3<br>AC-4   |
| Poles description                           | 3P   |
| Power pole contact composition              | 3 NO   |
| [Ue] rated operational voltage              | Power circuit: 690 V AC 50/60 Hz<br>Signalling circuit: <= 690 V AC 50/60 Hz   |
| [le] rated operational current              | 20 A (at <50 °C) at <= 440 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit 16 A (at <70 °C) at 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                              | 4 KW at 480 V AC 50/60 Hz AC-3 4 KW at 500600 V AC 50/60 Hz AC-3 4 KW at 660690 V AC 50/60 Hz AC-3 2.2 KW at 400 V AC 50/60 Hz AC-4 3 KW at 220230 V AC 50/60 Hz AC-3 5.5 KW at 380415 V AC 50/60 Hz AC-3 5.5 kW at 440 V AC 50/60 Hz AC-3   |
| Auxiliary contact composition               | 1 NC   |
| [Uimp] rated impulse withstand voltage      | 8 kV   |
| Overvoltage category                        | III  |
| [Ith] conventional free air thermal current | 20 A (at 50 °C) for power circuit<br>10 A (at 50 °C) for signalling circuit  |
| Irms rated making capacity                  | 110 A AC for signalling circuit conforming to IEC 60947 144 A AC for power circuit conforming to NF C 63-110 144 A AC for power circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>70 A at 660690 V conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit 25 A 50 °C - >= 15 min for power circuit |

| 25 A alt for power circuit 10 A g G for signalling circuit conforming to IEC 60947 10 A g G for signalling circuit conforming to VDE 0660  Average impedance 3 m Ohn - Ith 20 A 9 Int for power circuit  Power circuit. 500 V conforming to ILE 508 Power circuit. 500 V conforming to ILE 50947-4-1 Signalling circuit. 600 V conforming to ILE 50947-5-1 Signalling circuit. 600 V conforming to ILE 5094 V old Signalling circuit. 600 V conforming to ILE 5094 V o       |                                       |   |  |
|--|---------------------------------------|---|--|
| 10 A g 6 for signalling circuit conforming to IEC 60947 10 A g 6 for signalling circuit conforming to IEC 60947 10 A g 6 for signalling circuit conforming to IEC 60947 10 A g 6 for signalling circuit conforming to IEC 60947-61 10 Signalling circuit 680 V conforming to IEC 60947-61 11 Signalling circuit 680 V conforming to IEC 60947-61 12 Signalling circuit 680 V conforming to IEC 60947-61 13 Signalling circuit 680 V conforming to IEC 60947-61 13 Signalling circuit 680 V conforming to IEC 60947-61 14 Signalling circuit 680 V conforming to CSA C22.2 No 14 15 Signalling circuit 600 V conforming to CSA C22.2 No 14 15 Signalling circuit 600 V conforming to CSA C22.2 No 14 16 Signalling circuit 600 V conforming to CSA C22.2 No 14 17 Signalling circuit 600 V conforming to CSA C22.2 No 14 18 Signalling circuit 600 V conforming to CSA C22.2 No 14 18 Signalling circuit 600 V conforming to CSA C22.2 No 14 18 Signalling circuit 600 V conforming to CSA C22.2 No 14 18 Signalling circuit 600 V conforming to CSA C22.2 No 14 18 Signalling circuit 600 V conforming to CSA C22.2 No 14 18 Signalling circuit voltage limits 19 Conforming to CSA C22.2 No 14 18 Signalling circuit voltage limits 20 Connections - terminals 20 Signalling circuit voltage limits 20 Connections - terminals 20 Signalling circuit voltage limits 20 Connections - terminals 20 Signalling circuit feaguency 20 Signalling circuit feaguency 300 Cych       | Associated fuse rating                | 25 A gG at <= 440 V for power circuit                                 |  |
| Average impedance 3 mOhm - Ith 20 A 50 Hz for power circuit (UI) rated insulation voltage Power circuit: 600 V conforming to UL 508 Power circuit: 600 V conforming to UE 60847.4-1 Signalling circuit: 600 V conforming to IE 60847.6-1 Signalling circuit: 600 V conforming to UE 60847.6-1 Signalling        |                                       |   |  |
| Power circuit. 900 V conforming to UL.508   Power circuit. 500 V conforming to UL.508   Power circuit. 500 V conforming to IEC 60947-4-1   Signalling circuit. 600 V conforming to IEC 60947-4-1   Signalling circuit. 600 V conforming to IEC 60947-4-1   Signalling circuit. 600 V conforming to IEC 60947-5-1   Signalling circuit. 600 V conforming to UE.508   Power circuit. 600 V conforming to UE.508   Power circuit. 600 V conforming to UE.508   Power circuit. 600 V conforming to CSA C22.2 No 14   Signalling circuit. 600 V conforming to CSA C22.2 No 14   Power consumption in VA   30 VA (at 20 °C)   Power consumption in VA   4.5 VA (at 20 °C)   Power consumption in VA   4.5 VA (at 20 °C)   Power consumption in VA   4.5 VA (at 20 °C)   Power consumption in VA   Power consumption in VA   4.5 VA (at 20 °C)   Power consumption in VA   Power consum         |                                       | 10 A gG for signalling circuit conforming to VDE 0660                 |  |
| Power circuit. 690 V conforming to IEC 60947-4-1 Signalling circuit. 690 V conforming to IEC 60947-4-1 Signalling circuit. 690 V conforming to IEC 60947-6-1 Signalling circuit. 690 V conforming to IEC 60948-6-1 Signalling circuit. 690 V conforming to IEC 60948-6-2-6 Nove IEC 6094-6-1 Signalling circuit. 690 V conforming to IEC 60948-2-8 Signalling circuit. 690 V conforming to IEC 60968-2-8 Signalling circuit. 690 V conforming to IEC 60968-2-7 Shocks contactor with mechanical load conforming to IEC 60968-2-7 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-7 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-7 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-7 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-7 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-7 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-7 Shocks contactor closed, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-8 S       | Average impedance                     | 3 mOhm - Ith 20 A 50 Hz for power circuit                             |  |
| Signalling circuit 690 V conforming to IEC 60947-4-1 Signalling circuit 600 V conforming to IEC 60947-5-1 Signalling circuit 600 V conforming to IEC 60947-5-1 Signalling circuit 600 V conforming to IEC 60947-5-1 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming cir       | [Ui] rated insulation voltage         |   |  |
| Signalling circuit. 600 V conforming to ILC 60947-5-1 Signalling circuit. 600 V conforming to ILC 60947-5-1 Signalling circuit. 600 V conforming to ICC 508 C922. No 14  Insulation resistance  > 10 MOhm for signalling circuit.  Inrush power in VA  30 VA (at 20 °C)  Heat dissipation  1.3 W  Control circuit voltage limits  Operational: 0.81.15 Uc (at <50 °C)  Drop-out 0.2075 Uc (at <50 °C)  Connections - terminals  Screw damp terminals 1 cable(s) 1.54 mm²solid  Screw damp terminals 1 cable(s) 0.754 mm²solid  Screw damp terminals 2 cabl   |                                       |   |  |
| Power circuit: 600 V conforming to CSA C22.2 No 14 Signalling circuit 600 V conforming to CSA C22.2 No 14 Insulation resistance  > 10 MOhm for signalling circuit Incush power in VA  30 VA (at 20 °C)  Heat dissipation  1.3 W  Control circuit voltage limits  Operational: 0.81.15 Uc (at <50 °C)  Connections - terminals  Screw damp terminals 1 cable(s) 1.54 mm*lexible without cable end Screw damp terminals 1 cable(s) 1.54 mm*lexible without cable end Screw damp terminals 1 cable(s) 0.754 mm*lexible without cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.754 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.75 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.75 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.75 mm*lexible with cable end Screw damp terminals 2 cable(s) 0.75 mm*lexible with c  |                                       | Signalling circuit: 690 V conforming to IEC 60947-5-1                 |  |
| insulation resistance   > 10 MOhm for signalling circuit. 600 V conforming to CSA C22.2 No 14   Insulation resistance   > 10 MOhm for signalling circuit.   Insulation resistance   10 MOhm for signalling circuit.   Insu       |                                       |   |  |
| Insulation resistance > 10 MOhm for signalling circuit Inrush power in VA 30 VA (at 20 °C) Heat dissipation 1.3 W Control circuit voltage limits Operational: 0.81,15 Uc (at <50 °C) Drop-out: 0.20,75 Uc (at <50 °C) Connections - terminals Canada (as a control circuit voltage limits Operational: 0.81,15 Uc (at <50 °C) Connections - terminals Canada (as a control circuit voltage limits Operational: 0.81,15 Uc (at <50 °C) Connections - terminals Canada (as a control circuit voltage limits Operational: 0.81,15 Uc (at <50 °C) Connections - terminals Canada (as a control circuit voltage limits Operational: 0.81,15 Uc (at <50 °C) Connections - terminals Canada (as a control circuit voltage limits Operational (as a control circuit voltage limits of Canada (as a control circuit voltage limits of Canada (as a control circuit voltage limits of Canada (as a control circuit voltage and control circuit voltage (as a control circuit voltage) (as a control circuit voltage and control circuit voltage (as a control circuit voltage) (as a c                         |                                       |   |  |
| Held-in power consumption in VA  4.5 VA (at 20 °C) Heat dissipation  1.3 W  Control circuit voltage limits  Operational: 0.81.15 Uc (at <50 °C) Propout: 0.20.75 Uc (at <50 °C) Propout: 0.30.75 Uc (at <50  | Insulation resistance                 |   |  |
| Department   1.3 W   Departm         | nrush power in VA                     | 30 VA (at 20 °C)  |  |
| Control circuit voltage limits  Operational: 0.81.15 Uc (at <50 °C) Drop-out: 0.20.75 Uc (at <50 °C) Connections - terminals  Screw clamp terminals 1 cable(s) 1.54 mm*solid Screw clamp terminals 1 cable(s) 0.754 mm*lexible with cable end Screw clamp terminals 1 cable(s) 0.341.25 mm*flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm*solid Screw clamp terminals 2 cable(s) 1.54 mm*solid Screw clamp terminals 2 cable(s) 1.54 mm*lexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.1.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.1.5 mm*flexible with cable end Screw clamp terminals 2 cable(s) 0.341.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.   | Hold-in power consumption in VA       | 4.5 VA (at 20 °C)   |  |
| Drop-out: 0.2. 0.75 Lot (at <60 °C)  Connections - terminals  Screw clamp terminals 1 cable(s) 1.54 mm²solid  Screw clamp terminals 1 cable(s) 0.754 mm²fexible without cable end  Screw clamp terminals 2 cable(s) 0.754 mm²fexible with cable end  Screw clamp terminals 2 cable(s) 0.754 mm²flexible with cable end  Screw clamp terminals 2 cable(s) 0.754 mm²flexible with cable end  Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end  Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end  Maximum operating rate  3600 cych  Auxiliary contacts type  Type instantaneous 1 NC  Signalling circuit frequency  <= 400 Hz  Minimum switching current  5 mA for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Minimum switching voltage  18 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M on s  | Heat dissipation                      | 1.3 W   |  |
| Screw clamp terminals 1 cable(s) 1.54 mm³solid Screw clamp terminals 1 cable(s) 0.754 mm³solid Screw clamp terminals 1 cable(s) 0.754 mm³solid Screw clamp terminals 2 cable(s) 0.754 mm³solid Screw clamp terminals 2 cable(s) 1.54 mm³solid Screw clamp terminals 2 cable(s) 1.54 mm³solid Screw clamp terminals 2 cable(s) 0.341.5 mm³flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm³flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm³flexible with cable end Maximum operating rate  3800 cych  Auxiliary contacts type  Type instantaneous 1 NC Signalling circuit frequency  <= 400 Hz  Fighting circuit frequency  = 400 Hz  Fail Flate  Mounting support  Rail Flate  Mounting support  Rail Flate  Tightening torque  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil ed-energisation and NO opening 1020 ms coil ed-energisation and NO closing  Safety reliability level  B10d = 1398963 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 S10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 S10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 S10d = 20000000 cycles contactor obsed, on X axis: 10 Gn for 11 ms conforming to EC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened; 2 Gn, 5300 Hz conform   | Control circuit voltage limits        | Operational: 0.81.15 Uc (at <50 °C)                                   |  |
| Screw clamp terminals 1 cable(s) 0.754 mm*flexblow without cable end Screw clamp terminals 1 cable(s) 0.342 s mm*flexblow without cable end Screw clamp terminals 2 cable(s) 1.54 mm*flexblow without cable end Screw clamp terminals 2 cable(s) 0.754 mm*flexblow without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm*flexblow with cable end Screw clamp terminals 2 cable(s) 0.3 mm 2 cable 2 cable(s) 0.35 mm 2 cable 2   |                                       | Drop-out: 0.20.75 Uc (at <50 °C)                                      |  |
| Screw clamp terminals 1 cable(s) 0.342 fb. mrfflexible with cable end Screw clamp terminals 2 cable(s) 0.754 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible without cable end Maximum operating rate  3600 cyc/h Auxiliary contacts type  Type instantaneous 1 NC  Signalling circuit frequency  <= 400 Hz  Minimum switching current  5 mA for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Mounting support  Rail Plate  Tightening torque  1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat 0 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO opening 1020 ms coil energisation and NO closing  Safety reliability level  810d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1  810d = 1369863 cycles contactor with mechanical load conforming to EN/ISO 13849-1  Non overlap distance  0.5 mm  Mechanical durability  10 Mcycles  21 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycles 12 A.C-3 at Ue <= 440 V 1.3 Mcycle                               | Connections - terminals               |   |  |
| Screw clamp terminals 2 cable(s) 1.54 mm <sup>2</sup> solid Screw clamp terminals 2 cable(s) 0.754 mm <sup>2</sup> flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm <sup>2</sup> flexible with cable end 3600 cyc/h Auxiliary contacts type Type instantaneous 1 NC Signalling circuit frequency <= 400 Hz Minimum switching current 5 mA for signalling circuit Minimum switching current 5 mA for signalling circuit Minimum switching voltage 17 V for signalling circuit Minimum switching voltage 17 V for signalling circuit Tightening torque 13 N.M on screw clamp terminals - with screwdriver Philips No 2 13 N.M on screw clamp terminals - with screwdriver Philips No 2 13 N.M on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time 1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO opening 1020 ms coil energisation and NO closing  Safety reliability level B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 Non overlap distance 0.5 mm Mechanical durability 10 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1. |                                       |   |  |
| Screw clamp terminals 2 cable(s) 0.341.5 mm³flexible with cable end  Maximum operating rate 3600 cyc/h  Auxiliary contacts type Type instantaneous 1 NC  Signalling circuit frequency <= 400 Hz  Minimum switching current 5 mA for signalling circuit  Minimum switching voltage 17 V for signalling circuit  Rail Plate  Tightening torque 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time 1020 ms coil de-energisation and NO opening 1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO opening 1020 ms coil energisation and NO opening 13849-1  B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1  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 10 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 20 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles                       |                                       | Screw clamp terminals 2 cable(s) 1.54 mm²solid                        |  |
| Maximum operating rate  3600 cyc/h  Auxiliary contacts type  Type instantaneous 1 NC  \$\text{Signalling circuit frequency}} \( \text{signalling circuit} \)  Minimum switching current  5 mA for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Minimum switching voltage  18 N.M. on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M. on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M. on screw clamp terminals - with screwdriver Philips No 2  1.3 N.M. on screw clamp terminals - with screwdriver flat \( \text{\$\text{\$0\$}}\) 6 mm  Operating time  10 20 ms coil de-energisation and NO opening 10 20 ms coil energisation and NO opening 10 20 ms coil energisation and NO opening 10 20 ms coil energisation and NO opening 10 energisation and                   |                                       |   |  |
| Auxiliary contacts type Type instantaneous 1 NC  = 400 Hz  fright frequency  = 400 Hz  Signalling circuit frequency  = 400 Hz  SmA for signalling circuit  Minimum switching current  Fall Mounting support  Rail Plate  Tightening torque  1.3 N.M on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing  Safety reliability level  B10d = 1369863 scycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on X axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz con                            | Maximum operating rate                |   |  |
| Signalling circuit frequency <= 400 Hz  Minimum switching current  5 mA for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Rail Plate  Tightening torque  1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver        | · · ·                                 |   |  |
| Minimum switching current  5 mA for signalling circuit  Minimum switching voltage  17 V for signalling circuit  Mounting support  Rail Plate  Tightening torque  1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO opening 1020 ms coil energisation and NO opening 1020 ms coil energisation and NO opening 13849-1  B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1  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  10 Mcycles  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Vibrations contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60088-2-27  Vibrations contactor opened; 2 Gn, 5300 Hz conforming to IEC 60088-2-6  Width  45 mm  Depth  57 mm  | · · · · · · · · · · · · · · · · · · · |   |  |
| Minimum switching voltage  17 V for signalling circuit  Rail Plate  1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing  Bande = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened; 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Wibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Wibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Wibrations contactor opened: 2 Gn, 5300 Hz conforming                          | , ,                                   |   |  |
| Rail Plate  Tightening torque  1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing  Safety reliability level  B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 On overlap distance  0.5 mm  Mechanical durability  10 Mcycles Electrical durability  10 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue <= 440 V 1.3 Mcycles 12 AC-3 at Ue             |                                       |   |  |
| Plate  Tightening torque  1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.M - on screw clamp terminals - with screwdriver flat Ø 6 mm  Operating time  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing  Safety reliability level  B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 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  0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 450 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue              |                                       |   |  |
| 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing  Safety reliability level  B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 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  0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Mechanical robustness  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrati   | g cappert                             |   |  |
| 1020 ms coil energisation and NO closing  Safety reliability level  B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 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  0.3 Mcycles 20 A AC-1 at Ue <= 440 V  | Tightening torque                     |   |  |
| 13849-1 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 0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Mechanical robustness Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  | Operating time                        |   |  |
| 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  0.3 Mcycles 20 A AC-1 at Ue <= 440 V  1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Mechanical robustness  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27  Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27  Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27  Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27  Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27  Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27  Vibrations contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6  Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6   | Safety reliability level              | ·   |  |
| Non overlap distance  0.5 mm  Mechanical durability  10 Mcycles  Electrical durability  0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Mechanical robustness  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5  |                                       |   |  |
| Mechanical durability  10 Mcycles  20 A AC-1 at Ue <= 440 V  1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Mechanical robustness  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Width  45 mm  Depth  57 mm   |                                       |   |  |
| Electrical durability  0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Width  58 mm Width 57 mm   | Non overlap distance                  | 0.5 mm  |  |
| 1.3 Mcycles 12 A AC-3 at Ue <= 440 V  Mechanical robustness  Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height  S8 mm  Width  57 mm  | Mechanical durability                 | 10 Mcycles  |  |
| Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height  58 mm  Width  57 mm  | Electrical durability                 | 0.3 Mcycles 20 A AC-1 at Ue <= 440 V                                  |  |
| 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm   |                                       | 1.3 Mcycles 12 A AC-3 at Ue <= 440 V                                  |  |
| Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm  | Mechanical robustness                 |   |  |
| 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height  58 mm Width  45 mm  Depth  57 mm  |                                       |   |  |
| 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm   |                                       | •   |  |
| Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm   |                                       | ,   |  |
| Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm   |                                       |   |  |
| 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm   |                                       | 60068-2-27  |  |
| Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm  |                                       | · · · · · · · · · · · · · · · · · · ·                                 |  |
| Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm   |                                       | Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC |  |
| Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Height 58 mm Width 45 mm Depth 57 mm  |                                       |   |  |
| Height         58 mm           Width         45 mm           Depth         57 mm   |                                       | •   |  |
| Width 45 mm Depth 57 mm  | Height                                |   |  |
|  | Width                                 | 45 mm   |  |
| Net weight 0.18 kg   | Depth                                 | 57 mm   |  |
|  | Net weight                            | 0.18 kg   |  |

#### Environment

| Standards                           | BS 5424                                 |  |
|-------------------------------------|---|--|
|                                     | IEC 60947                               |  |
|                                     | NF C 63-110                             |  |
|                                     | VDE 0660                                |  |
| Product certifications              | CSA                                     |  |
|                                     | UL                                      |  |
| IP degree of protection             | IP2x conforming to VDE 0106             |  |
| Protective treatment                | TC conforming to IEC 60068              |  |
|                                     | TC conforming to DIN 50016              |  |
| Ambient air temperature for storage | -5080 °C                                |  |
| Operating altitude                  | 2000 m without derating                 |  |
| Flame retardance                    | V1 conforming to UL 94                  |  |
|                                     | Requirement 2 conforming to NF F 16-101 |  |
|                                     | 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 Weight             | 178 g    |
| Package 1 Height             | 4.8 cm   |
| Package 1 width              | 6.2 cm   |
| Package 1 Length             | 6.6 cm   |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 50       |
| Package 2 Weight             | 9.326 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

#### Offer Sustainability

| Sustainable offer status   | Green Premium product   |
|----------------------------|---|
| REACh Regulation           | ☑ REACh Declaration   |
| REACh free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant EEU RoHS Declaration  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | ₽¥Yes   |
| China RoHS Regulation      | ☐ China RoHS Declaration  |
| Environmental Disclosure   | Product Environmental Profile   |
| Circularity Profile        | End Of Life Information   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

#### Contractual warranty

| Contraction Warranty | _         |
|----------------------|-----------|
| Warranty             | 18 months |