



| Product type designation Contact characteristics Number of poles nr. 3 Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min max Hz 25 max IEC Conventional free air thermal current Ith A 16 Operational current Ie AC-1 (≤40°C) A 16 AC-3 (≤440V ≤55°C) A 130 AC-3 (≤440V ≤55°C) A 6 AC-4 (400V) A 3.3 Rated operational power AC-3 (T≤55°C) 230V kW 1.5 400V kW 2.2 415V kW 2.4 440V kW 2.5 |
|--|
| Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min Hz 25 max Hz 400 IEC Conventional free air thermal current Ith A 16 Operational current Ie AC-1 (≤40°C) A 16 AC-1 (≤55°C) A 130 AC-3 (≤440V ≤55°C) A 6 AC-4 (400V) A 3.3 Rated operational power AC-3 (T≤55°C) Rated operational power AC-3 (T≤55°C) 230V kW 1.5 400V kW 2.2 415V kW 2.4 |
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| EC Conventional free air thermal current Ith |
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| 230V kW 1.5 400V kW 2.2 415V kW 2.4 |
| 400V kW 2.2 415V kW 2.4 |
| 415V kW 2.4 |
| |
| 440V kW 2.5 |
| |
| 500V kW 3 |
| 690V kW 3 |
| Rated operational power AC-1 (T≤40°C) |
| 230V kW 6 |
| 400V kW 10 |
| 500V kW 13 |
| 690V kW 18 |
| Short-time allowable current for 10s (IEC/EN60947-1) A 96 |
| Protection fuse |
| gG (IEC) A 16 |
| aM (IEC) A 6 |
| Making capacity (RMS value) A 92 |
| Breaking capacity at voltage |
| 440V A 72 |
| 500V A 72 |
| 690V A 72 |
| Resistance per pole (average value) $m\Omega$ 10 |
| Power dissipation per pole (average value) |
| Ith W 2.6 |
| AC3 W 0.36 |
| Tightening torque for terminals |
| min Nm 0.8 |
| max Nm 1 |
| min Ibin 0.59 |
| max Ibin 0.74 |



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| Lightening forgue for coll forming | | | |
|---|---|--------------------------------------|--|
| Tightening torque for coil terminal | | Nima | 0.0 |
| | min | Nm | 0.8 |
| | max | Nm | 1 |
| | min | lbft | 0.8 |
| | max | lbft | 0.74 |
| Max number of wires simultaneously connectable | | nr. | 2 |
| Conductor section | | | |
| Flexible w/o lug conductor section | | | |
| | min | mm² | 0.75 |
| | max | mm² | 2.5 |
| Flexible c/w lug conductor section | | | |
| | min | mm² | 1.5 |
| | max | mm² | 2.5 |
| Flexible with insulated spade lug conductor section | | | |
| | min | mm² | 1.5 |
| | max | mm² | 2.5 |
| Power terminal protection according to IEC/EN 60529 | | | IP20 when wired |
| Mechanical features | | | |
| Operating position | | | |
| | normal | | vertical plan |
| | allowable | | ±30° |
| | | | Screw / DIN rail |
| Fixing | | | 35mm |
| Weight | | g | 177 |
| Auxiliary contact characteristics | | 9 | 177 |
| Type of contact | | | 1 NO |
| Thermal current Ith | | Α | 10 |
| | | A | |
| IEC/EN 60947-5-1 designation | | | A600 - Q600 |
| Operating current AC15 | 0001/ | | |
| | 230V | Α | 3 |
| | 400V | Α | 1.9 |
| | 500V | Α | 1.4 |
| Operating current DC12 | | | |
| | 110V | Α | 2.9 |
| | | | 2.0 |
| Operating current DC13 | | | |
| Operating current DC13 | 24V | А | 2.9 |
| Operating current DC13 | | | |
| Operating current DC13 | 24V | А | 2.9 |
| Operating current DC13 | 24V 48V | A A | 2.9 1.4 |
| Operating current DC13 | 24V 48V 60V 110V | A A A | 2.9 1.4 1.2 0.6 |
| Operating current DC13 | 24V 48V 60V 110V 125V | A A A A | 2.9 1.4 1.2 0.6 0.55 |
| Operating current DC13 | 24V 48V 60V 110V 125V 220V | A A A A | 2.9 1.4 1.2 0.6 0.55 0.3 |
| | 24V 48V 60V 110V 125V | A A A A | 2.9 1.4 1.2 0.6 0.55 |
| Operations | 24V 48V 60V 110V 125V 220V | A A A A A | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Operations Mechanical life | 24V 48V 60V 110V 125V 220V | A A A A A A cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Operations Mechanical life Electrical life | 24V 48V 60V 110V 125V 220V | A A A A A | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Operations Mechanical life Electrical life Safety related data | 24V 48V 60V 110V 125V 220V | A A A A A A cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Operations Mechanical life Electrical life Safety related data | 24V 48V 60V 110V 125V 220V 600V | A A A A A A Cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 |
| Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 | 24V 48V 60V 110V 125V 220V 600V | A A A A A A Cycles cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 |
| Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mech | 24V 48V 60V 110V 125V 220V 600V | A A A A A A Cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 |
| Mirror contats according to IEC/EN 609474-4-1 | 24V 48V 60V 110V 125V 220V 600V | A A A A A A Cycles cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000 20000000 yes |
| Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mech | 24V 48V 60V 110V 125V 220V 600V | A A A A A A Cycles cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 |
| Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mech Mirror contats according to IEC/EN 609474-4-1 | 24V 48V 60V 110V 125V 220V 600V | A A A A A A Cycles cycles | 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000 20000000 yes |



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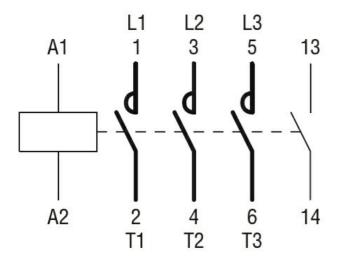
| | | min | V | 12 |
|--|--|--|--|---|
| | | max | V | 575 |
| AC operating voltage | | | | |
| | of 50/60Hz coil powered at 50Hz | | | |
| | pick-up | | 0/11 | 7-5 |
| | | min | %Us | 75 445 |
| | drop-out | max | %Us | 115 |
| | arop-out | min | %Us | 20 |
| | | max | %Us | 55 |
| | of 50/60Hz coil powered at 60Hz | | ,,,,, | |
| | pick-up | | | |
| | · | min | %Us | 80 |
| | | max | %Us | 115 |
| | drop-out | | | |
| | | min | %Us | 20 |
| | | max | %Us | 55 |
| AC operating voltage | | | | |
| | of 50/60Hz coil powered at 50Hz | |) /A | 20 |
| | | in-rush | VA | 30 |
| | of 50/60Hz coil powered at 60Hz | holding | VA | 4 |
| | of 50/60Hz coil powered at 60Hz | in-rush | VA | 25 |
| | | holding | VA | 3 |
| | of 60Hz coil powered at 60Hz | - I o i di i i g | • | |
| | o. co co poc. ca a. co | in-rush | VA | 30 |
| | | holding | VA | 4 |
| Dissipation at holding | ≤20°C 50Hz | | W | 0.95 |
| DC coil operating | | | | |
| DC rated control volta | ge | | | |
| | | min | V | 6 |
| | | | | |
| | | max | V | 250 |
| Average coil consump | otion ≤20°C | max | V | |
| Average coil consump | otion ≤20°C | max in-rush | V W | 3.2 |
| | | max | V | |
| Max cycles frequency | | max in-rush | W W | 3.2 3.2 |
| Max cycles frequency Mechanical operations | | max in-rush | V W | 3.2 3.2 |
| Max cycles frequency Mechanical operations Operating times | S | max in-rush | W W | 3.2 3.2 |
| Max cycles frequency Mechanical operations | ontrol | max in-rush | W W | 3.2 3.2 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC | max in-rush | W W | 3.2 3.2 |
| Max cycles frequency Mechanical operations Operating times | ontrol | max in-rush | W W | 3.2 3.2 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC | in-rush holding | W W cycles/h | 3.2 3.2 3600 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC | in-rush holding min | V W W cycles/h | 3.2 3.2 3600 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO | in-rush holding min | W W cycles/h ms ms | 3.2 3.2 3600 12 21 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO | in-rush holding min max | W W cycles/h ms | 3.2 3.2 3600 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO | in-rush holding min max min max | W W cycles/h ms ms | 3.2 3.2 3600 12 21 9 18 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO | in-rush holding min max min max min max | W W Cycles/h ms ms ms | 3.2 3.2 3600 12 21 9 18 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO Closing NC | in-rush holding min max min max | W W cycles/h ms ms | 3.2 3.2 3600 12 21 9 18 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO | in-rush holding min max min max min max min max | W W cycles/h ms ms ms | 3.2 3.2 3600 12 21 9 18 17 26 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO Closing NC | in-rush holding min max min max min max min max min max | W W Cycles/h ms ms ms ms | 3.2 3.2 3600 12 21 9 18 17 26 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO Closing NC Opening NC | in-rush holding min max min max min max min max | W W cycles/h ms ms ms | 3.2 3.2 3600 12 21 9 18 17 26 |
| Max cycles frequency Mechanical operations Operating times | ontrol in AC Closing NO Opening NO Closing NC | in-rush holding min max min max min max min max min max | W W cycles/h ms ms ms ms ms | 3.2 3.2 3600 12 21 9 18 17 26 |



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| | | min | ms | 18 |
|--|--|--------------------------|--|-------------------------------------|
| | | max | ms | 25 |
| | Opening N | 10 | | |
| | | min | ms | 2 |
| | | max | ms | 3 |
| | Closing N | C | | |
| | | min | ms | 3 |
| | | max | ms | 5 |
| | Opening N | IC | | |
| | | min | ms | 11 |
| | | max | ms | 17 |
| UL technical data | | | | |
| Full-load current (FLA | a) for three-phase AC motor | | | |
| | | at 480V | Α | 4.8 |
| | | at 600V | Α | 3.9 |
| Yielded mechanical p | erformance | | | |
| · | for single-phase AC motor | | | |
| | | 110/120V | hp | 0.3 |
| | | 230V | hp | 1 |
| | for three-phase AC motor | | • | |
| | · | 200/208V | hp | 1.5 |
| | | 220/230V | hp | 2 |
| | | 460/480V | hp | 3 |
| | | 575/600V | hp | 3 |
| Contact rating of auxil | iary contacts according to UL | | · · | A600 - Q600 |
| | | | | |
| General USE | | | | |
| General USE | Contactor | | | |
| General USE | Contactor | AC current | А | 16 |
| | Contactor | AC current | Α | 16 |
| Ambient conditions | Contactor | AC current | Α | 16 |
| | | AC current | Α | 16 |
| Ambient conditions | Contactor Operating temperature | AC current | A °C | -40 |
| Ambient conditions | | | | |
| Ambient conditions | | min | °C | -40 |
| Ambient conditions | Operating temperature | min max | °C | -40 60 |
| Ambient conditions | Operating temperature | min | °C °C | -40 |
| Ambient conditions | Operating temperature | min max min | °C °C | -40 60 -55 70 |
| Ambient conditions Temperature Max altitude | Operating temperature Storage temperature | min max min | °C °C | -40 60 -55 |
| Ambient conditions Temperature Max altitude Resistance & Protect | Operating temperature Storage temperature | min max min | °C °C | -40 60 -55 70 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree | Operating temperature Storage temperature | min max min | °C °C | -40 60 -55 70 3000 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree Dimensions | Operating temperature Storage temperature | min max min max | °C °C | -40 60 -55 70 3000 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree | Operating temperature Storage temperature | min max min max | °C °C °C m | -40 60 -55 70 3000 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree Dimensions | Operating temperature Storage temperature | min max min max | °C °C °C m | -40 60 -55 70 3000 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree Dimensions 44 (0.17") 44 (0.17") | Operating temperature Storage temperature | min max min max | °C ° | -40 60 -55 70 3000 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree Dimensions 44 (0.17") (0.17") (0.38") | Operating temperature Storage temperature | min max min max | °C ° | -40 60 -55 70 3000 3 |
| Ambient conditions Temperature Max altitude Resistance & Protect Pollution degree Dimensions 44 (0.17") (0.17") (0.17") (0.17") | Operating temperature Storage temperature | min max min max | °C ° | -40 60 -55 70 3000 3 |





Certifications and compliance

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|--------|----|----|----|----|
| Com | nı | ıa | nr | ۵۰ |
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CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching