ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 630A, AC/DC COIL, 380... 415VAC/DC



| Product designation | | | Power contactor |
|---|--|------|-----------------|
| Product type designation | | | B630 |
| Contact characteristics | | | |
| Number of poles | | nr. | 3 |
| Rated insulation voltage Ui | | V | 1000 |
| Rated impulse withstand voltage Uimp | | kV | 8 |
| Operating frequency | | | |
| | Operational frequency min | Hz | 25 |
| | Operational frequency max | Hz | 400 |
| Conventional free air thermal current Ith | | Α | 800 |
| Operating current | | | |
| | Operational current AC1 (≤40°C) | Α | 800 |
| | Operational current AC3 (≤440V ≤55°C) | Α | 630 |
| | Operational current AC4 (400V) | Α | 210 |
| Rated operational power AC1 (T≤40°C) | | | |
| | 230V | kW | 288 |
| | 400V | kW | 500 |
| | 500V | kW | 655 |
| | 690V | kW | 860 |
| Rated operational power AC3 (T≤55°C) | | | |
| | 230V | kW | 198 |
| | 400V | kW | 335 |
| | 415V | kW | 368 |
| | 440V | kW | 368 |
| | 500V | kW | 368 |
| | 690V | kW | 440 |
| | 1000V | kW | 360 |
| Short-time allowable current for 10s (IEC/EN6 | Α | 5040 | |
| Protection fuse | | | |
| | gG (IEC) | Α | 1000 |
| | aM (IEC) | A | 630 |
| Making capacity (RMS value) | | Α | 6300 |
| Breaking capacity at voltage | | | |
| | Breaking capacity 440V | Α | 6300 |
| | Breaking capacity 500V | Α | 5600 |
| | Breaking capacity 690V | A | 5000 |
| Resistance per pole (average value) | | mΩ | 0.14 |
| Power dissipation per pole (average value) | | | |
| | Power dissipation pole (average value) Ith | W | 90 |
| | AC3 | W | 56 |
| Tightening torque for terminals | | | |
| | min | Nm | 55 |
| | max | Nm | 55 |
| | min | lbft | 40.6 |
| | max | lbft | 40.6 |
| | | | |



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| | -!It | | | 0 |
|---|--|---|---|---|
| | simultaneously connectable | | nr. | 2 |
| Conductor section | AMC | | | |
| | AWG | | | Ov. COO Isamil |
| D (| (' | max | | 2x 600 kcmil |
| | tion according to IEC/EN 60529 | | | IP00 |
| Auxiliary contact chara | | | ^ | 000 |
| Operational current AC | | | Α | 800 |
| Operating current DC | 13 | 44014 | | |
| | | 110V | Α | Screw |
| Ambient conditions | | | | |
| Temperature | _ | | | |
| | Operating temperature | | | |
| | | min | °C | -50 |
| | | max | °C | 70 |
| | Storage temperature | | | |
| | | min | °C | -60 |
| | | max | °C | 80 |
| Max altitude | | | m | 3000 |
| Operating position | | | | |
| | | normal | | Vertical plan |
| | | allowable | | ±30° |
| Mounting | | | | Screw |
| Weight | | | g | 18.88 |
| Operations | | | | |
| Mechanical life | | | Cycles | 5000000 |
| Electrical life | | | Cycles | 700000 |
| Safety related data | | | | |
| Performance level B1 | 0d according to FN/ICO 12400 1 | | | |
| | 00 according to EN/150 13469-1 | | | |
| | od according to EN/ISO 13469-1 | rated load | Cicli | 700000 |
| | od according to EN/ISO 13469-1 | rated load mechanical load | Cicli Cicli | 700000 5000000 |
| Mirror contats accordi | | rated load mechanical load | Cicli Cicli | 5000000 |
| | ng to IEC/EN 609474-4-1 | | | 5000000 yes |
| EMC compatibility | | | | 5000000 |
| EMC compatibility AC coil operating | | | | 5000000 yes |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 | | | 5000000 yes |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz | | | 5000000 yes |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 | mechanical load | Cicli | 5000000 yes yes |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz | mechanical load | Cicli %Us | 5000000 yes yes |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz pick-up | mechanical load | Cicli | 5000000 yes yes |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz | mechanical load min max | Cicli %Us %Us | 5000000 yes yes 0.8 1.1 |
| EMC compatibility AC coil operating | ng to IEC/EN 609474-4-1 of 50/60Hz coil powered at 50Hz pick-up | mechanical load min max min | Cicli %Us %Us %Us | 5000000 yes yes 0.8 1.1 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up | mechanical load min max | Cicli %Us %Us | 5000000 yes yes 0.8 1.1 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz | mechanical load min max min | Cicli %Us %Us %Us | 5000000 yes yes 0.8 1.1 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up | mechanical load min max min max | %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz | mechanical load min max min max min | %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up | mechanical load min max min max | %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz | mechanical load min max min max min max | %Us %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 |
| EMC compatibility AC coil operating | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up | mechanical load min max min max min max min max | %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 0.8 1.1 |
| EMC compatibility AC coil operating AC operating voltage | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up | mechanical load min max min max min max | %Us %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 |
| EMC compatibility AC coil operating AC operating voltage | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out | mechanical load min max min max min max min max | %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 0.8 1.1 |
| EMC compatibility AC coil operating AC operating voltage | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up | mechanical load min max min max min max min max | %Us %Us %Us %Us %Us %Us %Us | 5000000 yes yes yes 0.8 1.1 0.2 0.6 0.8 1.1 0.2 0.6 |
| Mirror contats accordi EMC compatibility AC coil operating AC operating voltage AC operating voltage | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out | mechanical load min max min max min max min max | %Us %Us %Us %Us %Us | 5000000 yes yes 0.8 1.1 0.2 0.6 0.8 1.1 |



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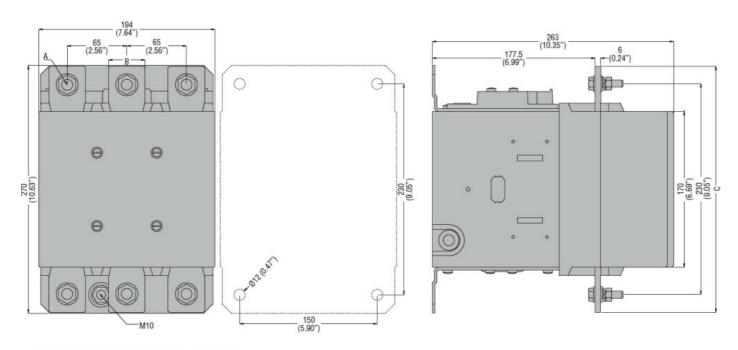
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in-rush VA 400 holding VA 18 Dissipation at holding ≤20°C 50Hz W 18 DC coil operating DC rated control voltage 24 min DC operating voltage pick-up %Us 8.0 min %Us 1.10 max drop-out %Us 0.2 min %Us 0.60 max Average coil consuption ≤20°C in-rush W 400 holding W 18 Max cycles frequency Mechanical operations Cycles/h 1200 Operating times Average time for Us control in AC Closing NO min ms 110 180 max ms Opening NO min ms 60 100 max ms in DC Closing NO 110 min ms 180 max ms Opening NO 60 min ms 100 max ms UL technical data General USE Contactor AC current 800 Α Other features Pollution degree 3

Dimensions

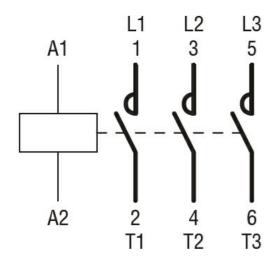
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| CONTACTOR TYPE | A | В | С |
|----------------|-----|------------|--------------|
| B500 | M10 | 35 (1.38") | 265 (10.43") |
| B630 | M12 | 40 (1.57") | 270 (10.63") |

Wiring diagrams



Certifications and compliance

Certifications

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

Compliance

CCC

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching