



| Product designation Product type designation | | | Power contactor B630 |
|---|--------------------|-----|-------------------------|
| Contact characteristics | | | |
| Number of poles | | Nr. | 3 |
| Rated insulation voltage Ui IEC/EN | | V | 1000 |
| Rated impulse withstand voltage Uimp | | kV | 8 |
| Operational frequency | | | |
| | min | Hz | 25 |
| | max | Hz | 400 |
| IEC Conventional free air thermal current Ith | | Α | 800 |
| Operational current le | | | |
| • | AC-1 (≤40°C) | Α | 800 |
| | AC-1 (≤55°C) | Α | 640 |
| | AC-1 (≤70°C) | Α | 540 |
| | AC-3 (≤440V ≤55°C) | Α | 630 |
| | AC-4 (400V) | Α | 260 |
| Rated operational power AC-3 (T≤55°C) | | | |
| | 230V | kW | 198 |
| | 400V | kW | 355 |
| | 415V | kW | 368 |
| | 440V | kW | 368 |
| | 500V | kW | 368 |
| | 690V | kW | 440 |
| | 1000V | kW | 368 |
| Rated operational power AC-1 (T≤40°C) | | | |
| | 230V | kW | 288 |
| | 400V | kW | 500 |
| | 500V | kW | 655 |
| | 690V | kW | 860 |
| IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series | | | |
| | 75V | Α | 800 |
| | 110V | Α | 460 |
| | 220V | Α | |
| | 330V | Α | |
| | 460V | Α | |
| IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series | | | |
| | 75V | Α | 800 |
| | 110V | Α | 800 |
| | 220V | Α | 700 |
| | 330V | Α | |
| | 460V | Α | |
| IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series | | | |
| | 75V | Α | 800 |
| | 110V | Α | 800 |
| | 220V | Α | 800 |
| | | | |



| | 330V | Α | 700 |
|---|----------|-------|---------|
| | 460V | Α | |
| IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series | | | |
| | 75V | Α | 800 |
| | 110V | Α | 800 |
| | 220V | Α | 800 |
| | 330V | Α | 750 |
| | 460V | Α | 700 |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series | | | |
| | 75V | Α | 800 |
| | 110V | Α | 460 |
| | 220V | Α | |
| | 330V | Α | |
| | 460V | Α | |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series | | | |
| , | 75V | Α | 800 |
| | 110V | Α | 800 |
| | 220V | Α | 700 |
| | 330V | A | |
| | 460V | Α | |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series | 100 1 | - , , | |
| TEO HEAR OUT OF THE DOOR DOO WILLT E/TY = TOTHO WILLT O POICE IT SOLICE | 75V | Α | 800 |
| | 110V | A | 800 |
| | 220V | A | 800 |
| | 330V | A | 650 |
| | 460V | A | |
| IEC may current to in DC2 DC5 with L/D < 15mg with 4 poles in parise | 400 V | ^ | |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series | 75\/ | ۸ | 000 |
| | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 800 |
| | 330V | A | 650 |
| Object times allowable assumed for 40s (IEO/ENICO047.4) | 460V | A | 700 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 5040 |
| Protection fuse | | | |
| | gG (IEC) | Α | 1000 |
| | aM (IEC) | Α | 630 |
| Making capacity (RMS value) | | Α | 6300 |
| Breaking capacity at voltage | | | |
| | 440V | Α | 6300 |
| | 500V | Α | 5600 |
| | 690V | Α | 5000 |
| Resistance per pole (average value) | | mΩ | 0.14 |
| Power dissipation per pole (average value) | | | |
| | Ith | W | 90 |
| | AC-3 | W | 56 |
| Tightening torque for terminals | | | |
| | min | Nm | 55 |
| | max | Nm | 55 |
| | min | lbin | 40.6 |
| | max | lbin | 40.6 |
| Tightening torque for coil terminal | | | |
| | min | Nm | 1 |
| | max | Nm | 1 |
| | | • • | |



| | | i | IIa i a | 0.74 |
|--------------------------|---------------------------------|-------------------|-------------------|----------------|
| | | min max | lbin Ibin | 0.74 0.74 |
| May number of wires si | multaneously connectable | IIIdX | Nr. | 2 |
| Conductor section | Thurtaneously connectable | | INI. | 2 |
| Conductor Section | AWG/Kcmil | | | |
| | AWG/Remii | max | | 2x 600 kcmil |
| Power terminal protecti | on according to IEC/EN 60529 | max | | IP00 |
| Mechanical features | on according to 12 6/211 cocco | | | 00 |
| Operating position | | | | |
| 1 01 | | normal | | Vertical plan |
| | | allowable | | ±30° |
| Fixing | | | | Screw |
| Weight | | | g | 1862 |
| Conductor section | | | | |
| | AWG/kcmil conductor section | | | |
| | | max | | 2x 600 kcmil |
| Operations | | | | |
| Mechanical life | | | cycles | 5000000 |
| Electrical life | | | cycles | 700000 |
| Safety related data | | | | |
| Performance level B10 | d according to EN/ISO 13489-1 | | | |
| | | rated load | cycles | 700000 |
| | | mechanical load | cycles | 5000000 |
| Mirror contats according | g to IEC/EN 609474-4-1 | | | yes |
| EMC compatibility | | | | yes |
| AC coil operating | | | | |
| Rated AC voltage at 50 | /60Hz, 60Hz | | | |
| | | min | V | 110 |
| | | max | V | 125 |
| AC operating voltage | | | | |
| | of 50/60Hz coil powered at 50Hz | | | |
| | pick-up | . • | 0/11- | 00 |
| | | min | | |
| | alon | max | %Us | 110 |
| | drop-out | | 0/11- | 20 |
| | | min | %Us %Us | 20 |
| | of 50/60Hz coil powered at 60Hz | max | %Us | 60 |
| | • | | | |
| | pick-up | min | %Us | 80 |
| | | max | %Us | 110 |
| | drop-out | IIIdX | /005 | 110 |
| | αιορ-σαι | min | %Us | 20 |
| | | max | %Us | 60 |
| | of 60Hz coil powered at 60Hz | IIIdA | /003 | 00 |
| | pick-up | | | |
| | ριοκ-αρ | min | %Us | 80 |
| | | | | 110 |
| | dron-out | Παλ | /003 | 110 |
| | Grop-out | min | %l le | 20 |
| | | | | 60 |
| AC average coil consul | drop-out | max min max | %Us %Us %Us | 1 ² |

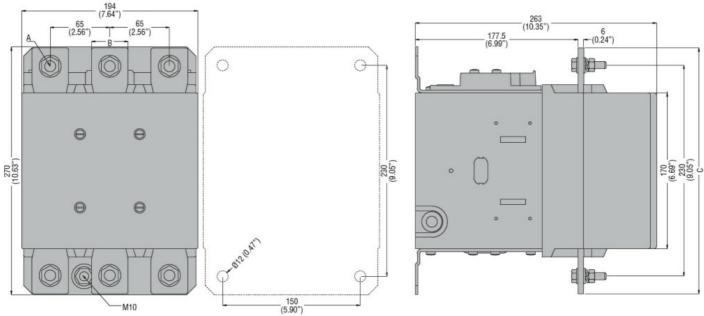
AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz



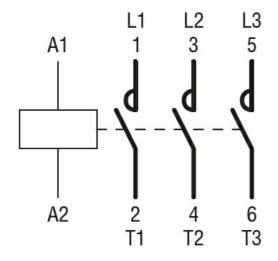
| | | | in-rush | VA | 400 |
|--------------------------|----------------------------|------------|-----------------------|--------------|------|
| | | | holding | VA | 18 |
| | of 50/60Hz coil powere | ed at 60Hz | | | |
| | | | in-rush | VA | 400 |
| | | | holding | VA | 18 |
| Dissipation at holding | <20°C 50Hz | | Holding | W | 18 |
| | 320 C 30HZ | | | VV | 10 |
| DC coil operating | | | | | |
| DC rated control voltage | ge | | _ | | |
| | | | min | V | 110 |
| | | | max | V | 125 |
| DC operating voltage | | | | | |
| | pick-up | | | | |
| | • | | min | %Us | 80 |
| | | | max | %Us | 110 |
| | drop out | | ПСХ | 7003 | 110 |
| | drop-out | | | 0/11- | 20 |
| | | | min | %Us | 20 |
| | | | max | %Us | 60 |
| Average coil consump | tion ≤20°C | | | | |
| | | | in-rush | W | 400 |
| | | | holding | W | 18 |
| Max cycles frequency | | | | | |
| Mechanical operation | | | | cycles/h | 1200 |
| Operating times | | | | 0 9 010 0/11 | 1200 |
| | ontrol | | | | |
| Average time for Us co | | | | | |
| | in AC | | | | |
| | | Closing NO | | | |
| | | | min | ms | 110 |
| | | | max | ms | 180 |
| | | Opening NO | | | |
| | | | min | ms | 60 |
| | | | max | ms | 100 |
| | in DC | | | | |
| | III DO | Closing NO | | | |
| | | Closing NO | | | 110 |
| | | | min | ms | 110 |
| | | | max | ms | 180 |
| | | Opening NO | | | |
| | | | min | ms | 60 |
| | | | max | ms | 100 |
| UL technical data | | | | | |
| General USE | | | | | |
| | Contactor | | | | |
| | | | AC current | Α | 800 |
| Short-circuit protection | fuse 600V | | 7.0 Guiridit | / \ | |
| onon-oncon protection | | | | | |
| | Standard fault | | 01 | | 4.0 |
| | | | Short circuit current | kA | 18 |
| | | | Fuse rating | Α | 1500 |
| | | | Fuse class | | L |
| Ambient conditions | | | | | |
| Temperature | | | | | |
| • | Operating temperature |) | | | |
| | 1. 2 2 Q 12 p 2 . 3 14 . 9 | | min | °C | -50 |
| | | | max | °C | 70 |
| | Ctorogo tomporations | | IIIax | | 10 |
| | Storage temperature | | | ۰. | 00 |
| | | | min | °C | -60 |
| | | | | | |

| | max | °C | 80 |
|-------------------------|-----|----|------|
| Max altitude | | m | 3000 |
| Resistance & Protection | | | |
| Pollution degree | | | 3 |
| Dimensions | | | |
| 194 (7.64") | 263 | | |



| 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

Compliance

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



11B63000110

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 630A, AC/DC COIL, 110...125VAC/DC

| cULus | | | |
|-------|--|--|--|
| FAC | | | |

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching