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|---|--------------------------------------|----|-----|
| Product designation | Power contactor | | |
| Product type designation | B630 | | |
| Contact characteristics | | | |
| Number of poles | Nr. 3 | | |
| Rated insulation voltage U_i IEC/EN | V 1000 | | |
| Rated impulse withstand voltage U_{imp} | kV 8 | | |
| Operational frequency | min | Hz | 25 |
| | max | Hz | 400 |
| IEC Conventional free air thermal current I_{th} | A 800 | | |
| Operational current I_e | | | |
| | AC-1 ($\leq 40^\circ C$) | A | 800 |
| | AC-1 ($\leq 55^\circ C$) | A | 640 |
| | AC-1 ($\leq 70^\circ C$) | A | 540 |
| | AC-3 ($\leq 440V \leq 55^\circ C$) | A | 630 |
| | AC-4 (400V) | A | 260 |
| Rated operational power AC-3 ($T \leq 55^\circ C$) | 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 ($T \leq 40^\circ C$) | 230V | kW | 288 |
| | 400V | kW | 500 |
| | 500V | kW | 655 |
| | 690V | kW | 860 |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series | 75V | A | 800 |
| | 110V | A | 460 |
| | 220V | A | -- |
| | 330V | A | -- |
| | 460V | A | -- |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 700 |
| | 330V | A | -- |
| | 460V | A | -- |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 800 |

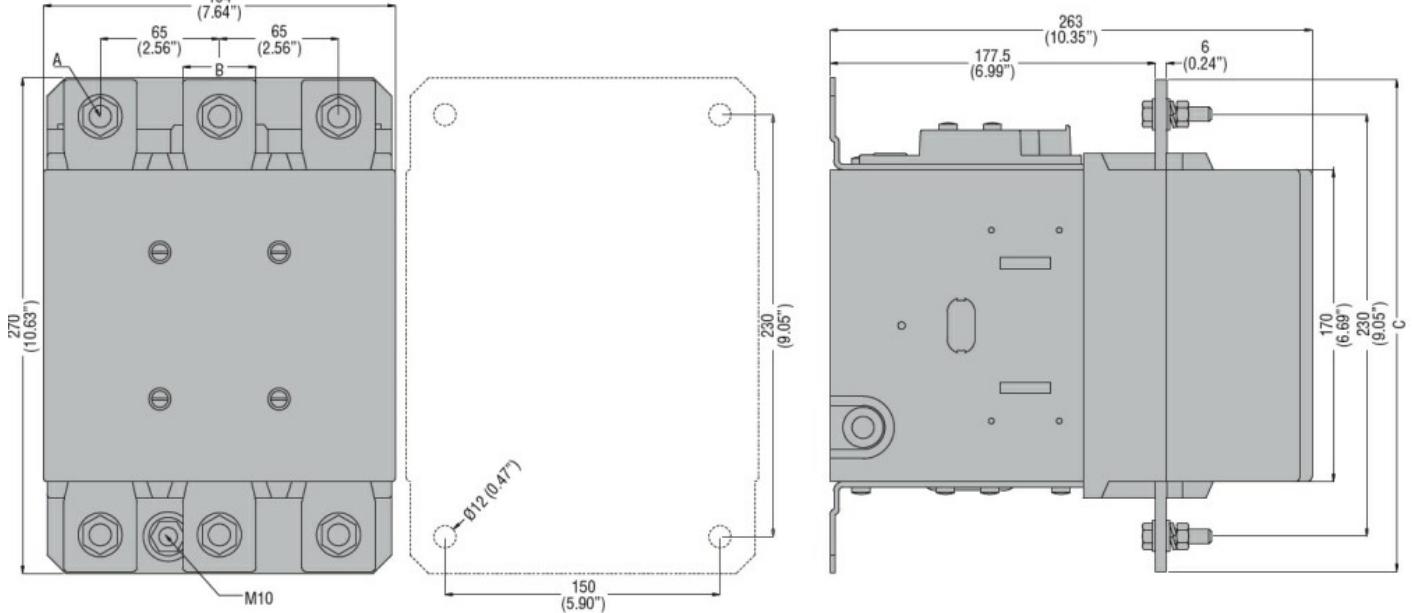
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|---|-----------------|------|---------|
| | 330V | A | 700 |
| | 460V | A | -- |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series | | | |
| | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 800 |
| | 330V | A | 750 |
| | 460V | A | 700 |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series | | | |
| | 75V | A | 800 |
| | 110V | A | 460 |
| | 220V | A | -- |
| | 330V | A | -- |
| | 460V | A | -- |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series | | | |
| | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 700 |
| | 330V | A | -- |
| | 460V | A | -- |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series | | | |
| | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 800 |
| | 330V | A | 650 |
| | 460V | A | -- |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series | | | |
| | 75V | A | 800 |
| | 110V | A | 800 |
| | 220V | A | 800 |
| | 330V | A | 650 |
| | 460V | A | 700 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | | A 5040 |
| Protection fuse | | | |
| | gG (IEC) | A | 1000 |
| | aM (IEC) | A | 630 |
| Making capacity (RMS value) | | | A 6300 |
| Breaking capacity at voltage | | | |
| | 440V | A | 6300 |
| | 500V | A | 5600 |
| | 690V | A | 5000 |
| Resistance per pole (average value) | | | m? 0.14 |
| Power dissipation per pole (average value) | | | |
| | I _{th} | W | 90 |
| | AC3 | 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 |

| | | | | | |
|---|-------------------------------|-----------------------|-------------------|--|--|
| | min | Ibin | 0.74 | | |
| | max | Ibin | 0.74 | | |
| Max number of wires simultaneously connectable | Nr. 2 | | | | |
| Conductor section | | | | | |
| AWG/Kcmil | max | 2x 600 kcmil | | | |
| Power terminal protection according to IEC/EN 60529 | IP00 | | | | |
| Mechanical features | | | | | |
| Operating position | normal allowable | Vertical plan ±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 B10d according to EN/ISO 13489-1 | rated load mechanical load | cycles | 700000 5000000 | | |
| Mirror contacts according to IEC/EN 609474-4-1 | yes | | | | |
| EMC compatibility | yes | | | | |
| AC coil operating | | | | | |
| Rated AC voltage at 50/60Hz, 60Hz | min max | V V | 110 125 | | |
| AC operating voltage | | | | | |
| of 50/60Hz coil powered at 50Hz | | | | | |
| pick-up | min max | %Us %Us | 80 110 | | |
| drop-out | min max | %Us %Us | 20 60 | | |
| of 50/60Hz coil powered at 60Hz | | | | | |
| pick-up | min max | %Us %Us | 80 110 | | |
| drop-out | min max | %Us %Us | 20 60 | | |
| of 60Hz coil powered at 60Hz | | | | | |
| pick-up | min max | %Us %Us | 80 110 | | |
| drop-out | min max | %Us %Us | 20 60 | | |
| 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 powered at 60Hz | | | |
| | in-rush | VA | 400 |
| | holding | VA | 18 |
| Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz | | W | 18 |
| DC coil operating | | | |
| DC rated control voltage | | | |
| | min | V | 110 |
| | max | V | 125 |
| DC operating voltage | | | |
| pick-up | | | |
| | min | %Us | 80 |
| | max | %Us | 110 |
| drop-out | | | |
| | min | %Us | 20 |
| | max | %Us | 60 |
| Average coil consumption $\leq 20^{\circ}\text{C}$ | | | |
| | in-rush | W | 400 |
| | holding | W | 18 |
| Max cycles frequency | | | |
| Mechanical operation | | cycles/h | 1200 |
| Operating times | | | |
| Average time for Us control | | | |
| in AC | | | |
| Closing NO | | | |
| | min | ms | 110 |
| | max | ms | 180 |
| Opening NO | | | |
| | min | ms | 60 |
| | max | ms | 100 |
| in DC | | | |
| Closing NO | | | |
| | min | ms | 110 |
| | max | ms | 180 |
| Opening NO | | | |
| | min | ms | 60 |
| | max | ms | 100 |
| UL technical data | | | |
| General USE | | | |
| Contactor | | AC current | A |
| | | | 800 |
| Short-circuit protection fuse, 600V | | | |
| Standard fault | | Short circuit current | kA |
| | | | 18 |
| | | Fuse rating | A |
| | | | 1500 |
| | | Fuse class | L |
| Ambient conditions | | | |
| Temperature | | | |
| Operating temperature | | | |
| | min | $^{\circ}\text{C}$ | -50 |
| | max | $^{\circ}\text{C}$ | 70 |
| Storage temperature | | | |
| | min | $^{\circ}\text{C}$ | -60 |

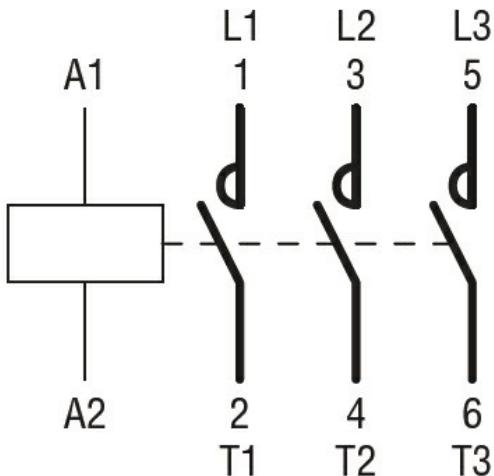
| | | | |
|-------------------------|-----|----|------|
| | max | °C | 80 |
| Max altitude | m | | 3000 |
| Resistance & Protection | | | |
| Pollution degree | | | 3 |

Dimensions



| CONTACTOR TYPE | A | B | C |
|----------------|-----|------------|--------------|
| 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

cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching