



| Product designation Product type designation | | | Power contactor B310 |
|--|--------------------|--------|-------------------------|
| Contact characteristics | | | D010 |
| 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 | 450 |
| Operational current le | | | |
| | AC-1 (=40°C) | Α | 450 |
| | AC-1 (=55°C) | Α | 370 |
| | AC-1 (=70°C) | Α | 300 |
| | AC-3 (=440V =55°C) | Α | 320 |
| | AC-4 (400V) | Α | 150 |
| Rated operational power AC-3 (T=55°C) | | | |
| | 230V | kW | 100 |
| | 400V | kW | 170 |
| | 415V | kW | 188 |
| | 440V | kW | 200 |
| | 500V | kW | 213 |
| | 690V | kW | 256 |
| | 1000V | kW | 180 |
| Rated operational power AC-1 (T=40°C) | | | |
| | 230V | kW | 158 |
| | 400V | kW | 270 |
| | 500V | kW | 350 |
| IFC many augment to in DC4 with 1/D. Amo with 4 males in paries | 690V | kW | 488 |
| IEC max current le in DC1 with L/R = 1ms with 1 poles in series | 75)/ | ^ | 075 |
| | 75V | A | 375 |
| | 110V | A | 195 |
| | 220V | A | |
| | 330V 460V | A A | |
| IEC max current le in DC1 with L/R = 1ms with 2 poles in series | 400 V | | |
| | 75V | Α | 375 |
| | 110V | A | 375 350 |
| | 220V | A | 300 |
| | 330V | A | |
| | 460V | A | |
| IEC max current le in DC1 with L/R = 1ms with 3 poles in series | 400 V | А | |
| 120 max surront to in 201 with 2/1 - 1110 with 5 poles in selles | 75V | Α | 375 |
| | 110V | A | 350 |
| | 220V | A | 350 |
| | 220 V | , , | 300 |



| | 330V | Α | 300 |
|--|----------|------|------|
| | 460V | Α | |
| IEC max current le in DC1 with L/R = 1ms with 4 poles in series | | | |
| | 75V | Α | 375 |
| | 110V | Α | 350 |
| | 220V | Α | 350 |
| | 330V | Α | 350 |
| | 460V | Α | 300 |
| IEC max current le in DC3-DC5 with L/R = 15ms with 1 poles in series | | | |
| | 75V | Α | 310 |
| | 110V | Α | 170 |
| | 220V | Α | |
| | 330V | Α | |
| | 460V | Α | |
| IEC max current le in DC3-DC5 with L/R = 15ms with 2 poles in series | | | |
| | 75V | Α | 310 |
| | 110V | Α | 290 |
| | 220V | Α | 230 |
| | 330V | Α | |
| | 460V | Α | |
| IEC max current le in DC3-DC5 with L/R = 15ms with 3 poles in series | | | |
| | 75V | Α | 310 |
| | 110V | Α | 310 |
| | 220V | Α | 290 |
| | 330V | Α | 230 |
| | 460V | Α | |
| IEC max current le in DC3-DC5 with L/R = 15ms with 4 poles in series | | | |
| | 75V | Α | 310 |
| | 110V | Α | 310 |
| | 220V | Α | 310 |
| | 330V | Α | 230 |
| | 460V | Α | 230 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 2900 |
| Protection fuse | | | |
| | gG (IEC) | Α | 500 |
| | aM (IEC) | Α | 400 |
| Making capacity (RMS value) | | Α | 3150 |
| Breaking capacity at voltage | | _ | |
| | 440V | Α | 3000 |
| | 500V | Α | 2700 |
| | 690V | Α | 2520 |
| Resistance per pole (average value) | | m? | 0.2 |
| Power dissipation per pole (average value) | •• | , | |
| | Ith | W | 40.5 |
| This is a few to the second of | AC3 | W | 20 |
| Tightening torque for terminals | | | 0.5 |
| | min | Nm | 35 |
| | max | Nm | 35 |
| | min | lbin | 25.8 |
| | max | lbin | 25.8 |
| Tightening torque for coil terminal | | | |
| | min | Nm | 1 |
| | max | Nm | 1 |
| | | | |



| | | min | lbin | 0.74 |
|-----------------------|---|---|--|--|
| | | max | Ibin | 0.74 |
| | simultaneously connectable | | Nr. | 2 |
| Conductor section | | | | |
| | AWG/Kcmil | | | |
| | | max | | 2x 3/0 |
| | tion according to IEC/EN 60529 | | | IP00 |
| Mechanical features | | | | |
| Operating position | | | | |
| | | normal | | Vertical plan |
| | | allowable | | ±30° |
| Fixing | | | | Screw |
| Weight | | | g | 9530 |
| Conductor section | | | | |
| | AWG/kcmil conductor section | | | 0.070 |
| 0 | | max | | 2x 3/0 |
| Operations | | | , | 40000000 |
| Mechanical life | | | cycles | 10000000 |
| Electrical life | | | cycles | 700000 |
| Safety related data | 01 | | | |
| Performance level B1 | 0d according to EN/ISO 13489-1 | | | |
| | | rated load | cycles | 700000 |
| | | mechanical load | cycles | 10000000 |
| | ng to IEC/EN 609474-4-1 | | | yes |
| EMC compatibility | | | | yes |
| AC coil operating | 0 (001) | | | |
| Rated AC voltage at 5 | 0/60Hz, 60Hz | | | |
| | | | | 000 |
| | | min | V | 380 |
| A C | | min max | V V | 380 415 |
| AC operating voltage | . (50/0011 | | | |
| AC operating voltage | of 50/60Hz coil powered at 50Hz | | | |
| AC operating voltage | of 50/60Hz coil powered at 50Hz pick-up | max | V | 415 |
| AC operating voltage | | max | V %Us | 415 80 |
| AC operating voltage | pick-up | max | V | 415 |
| AC operating voltage | | max min max | V %Us %Us | 80 110 |
| AC operating voltage | pick-up | max min max min | V %Us %Us %Us | 80 110 20 |
| AC operating voltage | pick-up drop-out | max min max | V %Us %Us | 80 110 |
| AC operating voltage | pick-up drop-out of 50/60Hz coil powered at 60Hz | max min max min | V %Us %Us %Us | 80 110 20 |
| AC operating voltage | pick-up drop-out | min max min max | V %Us %Us %Us %Us | 80 110 20 60 |
| AC operating voltage | pick-up drop-out of 50/60Hz coil powered at 60Hz | min max min max | %Us %Us %Us %Us | 80 110 20 60 |
| AC operating voltage | pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up | min max min max | V %Us %Us %Us %Us | 80 110 20 60 |
| AC operating voltage | pick-up drop-out of 50/60Hz coil powered at 60Hz | min max min max min max | %Us %Us %Us %Us %Us | 80 110 20 60 80 110 |
| AC operating voltage | pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up | min max min max min max min max min max | %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out | min max min max min max | %Us %Us %Us %Us %Us | 80 110 20 60 80 110 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out | min max min max min max min max min max | %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out | min max min max min max min max min max | %Us %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 60 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out | min max min max min max min max min max min max | %Us %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 60 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up | min max min max min max min max min max | %Us %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 60 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out | min max | %Us %Us %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 60 |
| AC operating voltage | of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out of 60Hz coil powered at 60Hz pick-up | min max min max min max min max min max min max | %Us %Us %Us %Us %Us %Us %Us | 80 110 20 60 80 110 20 60 |

AC average coil consumption at 20°C

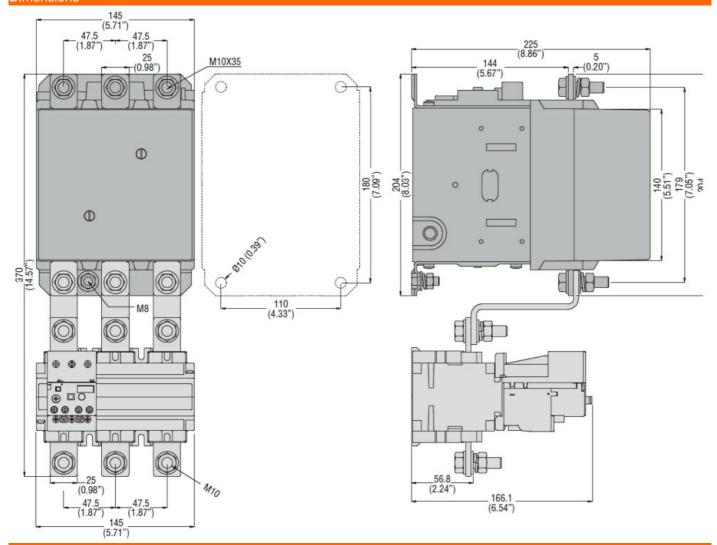
of 50/60Hz coil powered at 50Hz



| | | | in-rush | VA | 300 |
|---------------------------|----------------------|--------------|-----------------------|-----------|---------------|
| | | | holding | VA | 10 |
| | of 50/60Hz coil pow | ered at 60Hz | | | _ |
| | | | in-rush | VA | 300 |
| | | | holding | VA | 10 |
| Dissipation at holding | =20°C 50Hz | | | W | 10 |
| DC coil operating | | | | | |
| DC rated control voltage | ge | | | | |
| | | | min | V | 380 |
| | | | max | V | 415 |
| DC operating voltage | | | | | |
| 3 3 3 3 3 | pick-up | | | | |
| | p.o 3.p | | min | %Us | 80 |
| | | | max | %Us | 110 |
| | drop-out | | | ,,,,, | |
| | | | min | %Us | 20 |
| | | | max | %Us | 60 |
| Average coil consump | tion =20°C | | max | ,,,,, | - |
| , wordyo don donadnip | 1011 ZU U | | in-rush | W | 300 |
| | | | holding | W | 10 |
| Max cycles frequency | | | riolality | VV | 10 |
| Mechanical operation | | | | cycles/h | 2400 |
| Operating times | | | | Cycles/II | 2400 |
| Average time for Us co | ontrol | | | | |
| Average time for US CC | in AC | | | | |
| | In AC | Clasing NO | | | |
| | | Closing NO | min | m 0 | 0.0 |
| | | | min | ms | 80 |
| | | Opening NO | max | ms | 120 |
| | | Opening NO | min | 0 | 30 |
| | | | min | ms | |
| | in DC | | max | ms | 75 |
| | IN DC | Clasing NO | | | |
| | | Closing NO | min | m 0 | 0.0 |
| | | | min | ms | 80 120 |
| | | Opening NO | max | ms | 120 |
| | | Opening NO | min | me | 30 |
| | | | min | ms ms | 75 |
| UL technical data | | | max | ms | 10 |
| Full-load current (FLA) | for three phase AC = | notor | | | |
| i uli-loau cullelli (FLA) | noi unee-phase AC II | IOIOI | at 480V | ٨ | 301 |
| | | | at 480V | A A | 289 |
| Yielded mechanical pe | rformanco | | at 000V | ^ | 203 |
| пешей теспалісаі ре | | motor | | | |
| | for three-phase AC | IIIUUI | 200/208V | HP | 100 |
| | | | 200/208V 220/230V | HP | 125 |
| | | | 460/480V | HP | 250 |
| | | | 460/480V 575/600V | HP HP | 300 |
| Conoral LICE | | | 373/0007 | ПГ | 300 |
| General USE | Contactor | | | | |
| | Contactor | | A O | Λ | 450 |
| 01 - 4 - 2 - 2 - 2 - 2 | f 000\/ | | AC current | Α | 450 |
| Short-circuit protection | | | | | |
| | Standard fault | | | | |
| | | | Short circuit current | kA | 18 |
| | | | | | |

| | | Fuse rating | Α | 800 |
|-------------------------|-----------------------|-------------|----|------|
| | | Fuse class | | L |
| Ambient conditions | | | | |
| Temperature | | | | |
| | Operating temperature | | | |
| | | min | °C | -50 |
| | | max | °C | 70 |
| | Storage temperature | | | _ |
| | | min | °C | -60 |
| | | max | °C | 80 |
| Max altitude | | | m | 3000 |
| Resistance & Protection | | | | |
| Pollution degree | | | | 3 |

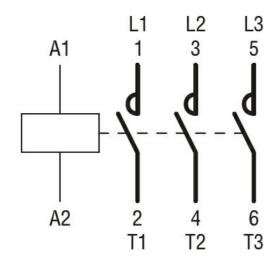
Dimensions



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 320A, AC/DC COIL, 380...415VAC/DC



| O 1100 1 | | | |
|------------|------------|------|--------|
| Certificat | ione and | comr | MIGNES |
| Cennicai | טונס מונטו | | шансе |
| | | | |

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