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|--|---|-----------|--|-----------------|
| Product designation | | | | Power contactor |
| Product type designation | | | | BG09 |
| Contact characteristics | | | | |
| Number of poles | Nr. | | | 4 |
| Rated insulation voltage U_i IEC/EN | V | | | 690 |
| Rated impulse withstand voltage U_{imp} | kV | | | 6 |
| Operational frequency | min | Hz | | 25 |
| | max | Hz | | 400 |
| Operational current I_e | AC-1 ($\leq 40^\circ\text{C}$) | A | | 20 |
| | AC-1 ($\leq 55^\circ\text{C}$) | A | | 18 |
| | AC-1 ($\leq 70^\circ\text{C}$) | A | | 15 |
| | AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$) | A | | 9 |
| | AC-4 (400V) | A | | 4 |
| Rated operational power AC-1 ($T \leq 40^\circ\text{C}$) | 230V | kW | | 8 |
| | 400V | kW | | 14 |
| | 500V | kW | | 16 |
| | 690V | kW | | 22 |
| Short-time allowable current for 10s (IEC/EN60947-1) | A | | | 96 |
| Protection fuse | gG (IEC) | A | | 20 |
| | aM (IEC) | A | | 10 |
| Making capacity (RMS value) | A | | | 92 |
| Breaking capacity at voltage | 440V | A | | 72 |
| | 500V | A | | 72 |
| | 690V | A | | 72 |
| Resistance per pole (average value) | $\text{m}\Omega$ | | | 10 |
| Power dissipation per pole (average value) | I_{th} | W | | 4 |
| | AC-3 | W | | 0.81 |
| Tightening torque for terminals | min | Nm | | 0.8 |
| | max | Nm | | 1 |
| | min | I_{bin} | | 9 |
| | max | I_{bin} | | 9 |
| Tightening torque for coil terminal | min | Nm | | 0.8 |
| | max | Nm | | 1 |
| | min | I_{bin} | | 9 |
| | max | I_{bin} | | 9 |
| Max number of wires simultaneously connectable | Nr. | | | 2 |
| Conductor section | | | | |

| | | | | |
|---|-----------------------------|--|----------------------------|----------------------------------|
| AWG/Kcmil | | | max | 12 |
| Flexible w/o lug conductor section | | | min | mm ² 0.75 |
| | | | max | mm ² 2.5 |
| Flexible c/w lug conductor section | | | min | mm ² 1.5 |
| | | | max | mm ² 2.5 |
| Flexible with insulated spade lug conductor section | | | min | mm ² 1.5 |
| | | | max | mm ² 2.5 |
| Power terminal protection according to IEC/EN 60529 | | | | IP20 when properly wired |
| Mechanical features | | | | |
| Operating position | | | normal allowable | Vertical plan ±30° |
| Fixing | | | | Screw / DIN rail 35mm |
| Weight | | | | g 220 |
| Conductor section | AWG/kcmil conductor section | | max | 12 |
| Auxiliary contact characteristics | | | | |
| Thermal current I _{th} | | | A | 10 |
| Operations | | | | |
| Mechanical life | | | cycles | 20000000 |
| Electrical life | | | cycles | 500000 |
| Safety related data | | | | |
| Performance level B10d according to EN/ISO 13489-1 | | | rated load mechanical load | cycles 500000 cycles 20000000 |
| Mirror contacts according to IEC/EN 60947-4-1 | | | | YES |
| EMC compatibility | | | | yes |
| DC coil operating | | | | |
| DC rated control voltage | | | V | 48 |
| DC operating voltage | pick-up | | min | %Us 75 |
| | | | max | %Us 115 |
| | drop-out | | min | %Us 10 |
| | | | max | %Us 25 |
| Average coil consumption ≤20°C | | | in-rush holding | W 3.2 W 3.2 |
| Max cycles frequency | | | | |
| Mechanical operation | | | cycles/h | 3600 |
| Operating times | | | | |
| Average time for U _s control in AC | Closing NO | | min | ms 12 |

| | | | | |
|------------|--|-----|----|----|
| | | max | ms | 21 |
| Opening NO | | min | ms | 9 |
| | | max | ms | 18 |
| Closing NC | | min | ms | 17 |
| | | max | ms | 26 |
| Opening NC | | min | ms | 7 |
| | | max | ms | 17 |
| <hr/> | | | | |
| in DC | | | | |
| Closing NO | | min | ms | 18 |
| | | max | ms | 25 |
| Opening NO | | min | ms | 2 |
| | | max | ms | 3 |
| Closing NC | | min | ms | 3 |
| | | max | ms | 5 |
| Opening NC | | min | ms | 11 |
| | | max | ms | 17 |

UL technical data

Full-load current (FLA) for three-phase AC motor

| | | |
|---------|---|-----|
| at 480V | A | 7.6 |
| at 600V | A | 6.1 |

Yielded mechanical performance

for single-phase AC motor

| | | |
|----------|----|-----|
| 110/120V | HP | 0.5 |
| 230V | HP | 1.5 |

for three-phase AC motor

| | | |
|----------|----|---|
| 200/208V | HP | 2 |
| 220/230V | HP | 3 |
| 460/480V | HP | 5 |
| 575/600V | HP | 5 |

General USE

Contacteur

| | | |
|------------|---|----|
| AC current | A | 20 |
|------------|---|----|

Ambient conditions

Temperature

Operating temperature

| | | |
|-----|----|-----|
| min | °C | -50 |
| max | °C | +70 |

Storage temperature

| | | |
|-----|----|-----|
| min | °C | -60 |
| max | °C | +80 |

Max altitude

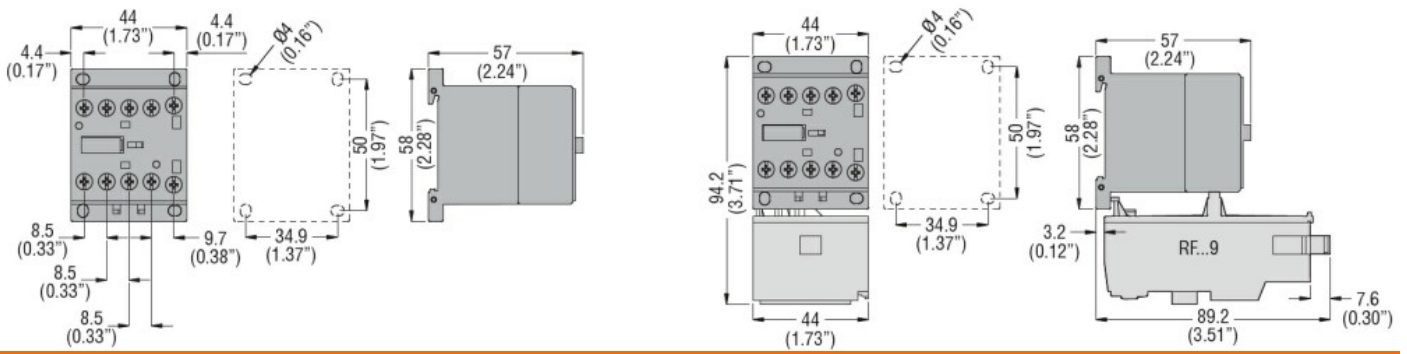
| | |
|---|------|
| m | 3000 |
|---|------|

Resistance & Protection

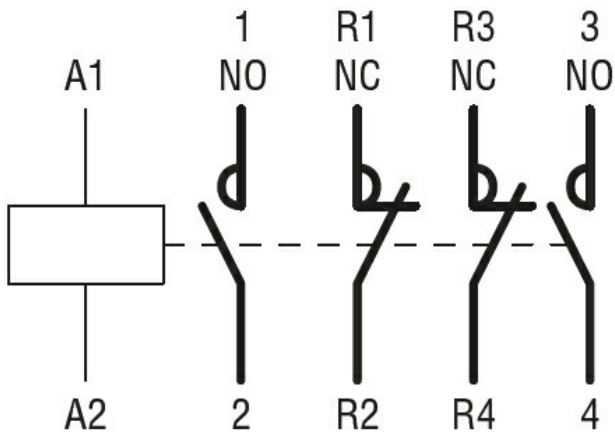
Pollution degree

3

Dimensions



Wiring diagrams



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