



| | | | |
|---|---|-----|-----|
| Product designation | Power contactor | | |
| Product type designation | BG06 | | |
| Contact characteristics | | | |
| Number of poles | Nr. | 3 | |
| Rated insulation voltage Ui IEC/EN | V | 690 | |
| Rated impulse withstand voltage $Uimp$ | kV | 6 | |
| Operational frequency | min | Hz | 25 |
| | max | Hz | 400 |
| IEC Conventional free air thermal current Ith | | A | 16 |
| Operational current le | | | |
| | AC-1 ($\leq 40^{\circ}\text{C}$) | A | 16 |
| | AC-1 ($\leq 55^{\circ}\text{C}$) | A | 14 |
| | AC-1 ($\leq 70^{\circ}\text{C}$) | A | 12 |
| | AC-3 ($\leq 440\text{V} \leq 55^{\circ}\text{C}$) | A | 6 |
| | AC-4 (400V) | A | 3.3 |
| Rated operational power AC-3 ($T \leq 55^{\circ}\text{C}$) | 230V | kW | 1.5 |
| | 400V | kW | 2.2 |
| | 415V | kW | 2.4 |
| | 440V | kW | 2.5 |
| | 500V | kW | 3 |
| | 690V | kW | 3 |
| Rated operational power AC-1 ($T \leq 40^{\circ}\text{C}$) | 230V | kW | 6 |
| | 400V | kW | 10 |
| | 500V | kW | 13 |
| | 690V | kW | 18 |
| IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series | $\leq 24\text{V}$ | A | 9 |
| | 48V | A | 8 |
| | 75V | A | 4 |
| | 110V | A | 3 |
| | 220V | A | — |
| IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series | $\leq 24\text{V}$ | A | 12 |
| | 48V | A | 11 |
| | 75V | A | 7 |
| | 110V | A | 6 |
| | 220V | A | — |
| IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | $\leq 24\text{V}$ | A | 14 |
| | 48V | A | 14 |
| | 75V | A | 8 |
| | 110V | A | 8 |

| | 220V | A | 1 |
|---|--|--|-------------------------|
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series | $\leq 24V$ 48V 75V 110V 220V | A A A A A | — — — — — |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series | $\leq 24V$ 48V 75V 110V 220V | A A A A A | 6 5 2 1 — |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series | $\leq 24V$ 48V 75V 110V 220V | A A A A A | 7 7 4 3 — |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series | $\leq 24V$ 48V 75V 110V 220V | A A A A A | 9 9 5 4 0,5 |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series | $\leq 24V$ 48V 75V 110V 220V | A A A A A | — — — — — |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 96 |
| Protection fuse | gG (IEC) aM (IEC) | A A | 16 6 |
| Making capacity (RMS value) | | A | 92 |
| Breaking capacity at voltage | 440V 500V 690V | A A A | 72 72 72 |
| Resistance per pole (average value) | | $\text{m}\Omega$ | 10 |
| Power dissipation per pole (average value) | I _{th} AC-3 | W W | 2.6 0.36 |
| Tightening torque for terminals | min max min max | Nm Nm I _{bin} I _{bin} | 0.8 1 9 9 |
| Tightening torque for coil terminal | min max min | Nm Nm I _{bin} | 0.8 1 9 |

| | | | |
|---|---------------------|-----------------|--------------------------|
| | max | Ibin | 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 | | 180 |
| Auxiliary contact characteristics | | | |
| Thermal current I _{th} | A | | 10 |
| IEC/EN 60947-5-1 designation | | | A600 - Q600 |
| Operating current AC15 | | | |
| | 230V | A | 3 |
| | 400V | A | 1.9 |
| | 500V | A | 1.4 |
| Operating current DC12 | 110V | A | 2.9 |
| Operating current DC13 | | | |
| | 24V | A | 2.9 |
| | 48V | A | 1.4 |
| | 60V | A | 1.2 |
| | 110V | A | 0.6 |
| | 125V | A | 0.55 |
| | 220V | A | 0.3 |
| | 600V | A | 0.1 |
| Operations | | | |
| Mechanical life | cycles | | 20000000 |
| Electrical life | cycles | | 500000 |
| Safety related data | | | |
| Performance level B10d according to EN/ISO 13489-1 | | | |
| | rated load | cycles | 500000 |
| | mechanical load | cycles | 20000000 |
| EMC compatibility | | | yes |
| AC coil operating | | | |
| Rated AC voltage at 60Hz | V | | 24 |
| AC operating voltage | | | |
| of 60Hz coil powered at 60Hz | | | |
| pick-up | | | |

| | | | | |
|--|----------|-----|----------|------|
| | | min | %Us | 75 |
| | | max | %Us | 115 |
| drop-out | | | | |
| | | min | %Us | 20 |
| | | max | %Us | 55 |
| AC average coil consumption at 20°C | | | | |
| of 50/60Hz coil powered at 50Hz | | | | |
| | in-rush | VA | 30 | |
| | holding | VA | 4 | |
| of 50/60Hz coil powered at 60Hz | | | | |
| | in-rush | VA | 25 | |
| | holding | VA | 3 | |
| of 60Hz coil powered at 60Hz | | | | |
| | in-rush | VA | 30 | |
| | holding | VA | 4 | |
| Dissipation at holding ≤20°C 50Hz | | | W | 0.95 |
| Max cycles frequency | | | | |
| Mechanical operation | | | cycles/h | 3600 |
| Operating times | | | | |
| Average time for Us 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 | |
| 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 | | | | |
| Rated operational voltage AC (UL) | | | V | 600 |
| Full-load current (FLA) for three-phase AC motor | | | | |
| | at 480V | A | 4.8 | |
| | at 600V | A | 3.9 | |
| Yielded mechanical performance | | | | |
| for single-phase AC motor | | | | |
| | 110/120V | HP | 0.3 | |

| | 230V | HP | 1 |
|--------------------------|----------|----|-----|
| for three-phase AC motor | | | |
| | 200/208V | HP | 1.5 |
| | 220/230V | HP | 2 |
| | 460/480V | HP | 3 |
| | 575/600V | HP | 3 |

General USE

| | | | |
|-------------------------------------|-----------------------|----|-----|
| Contactor | AC current | A | 16 |
| Short-circuit protection fuse, 600V | | | |
| High fault | Short circuit current | kA | 100 |
| | Fuse rating | A | 30 |
| | Fuse class | | J |
| Standard fault | Short circuit current | kA | 5 |
| | Fuse rating | A | 30 |

Contact rating of auxiliary contacts according to UL

A600 - Q600

Ambient conditions

Temperature

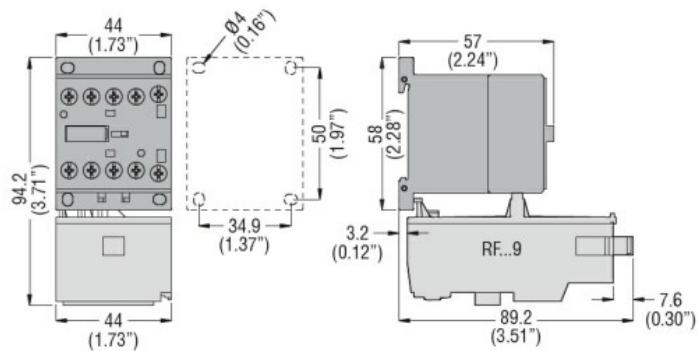
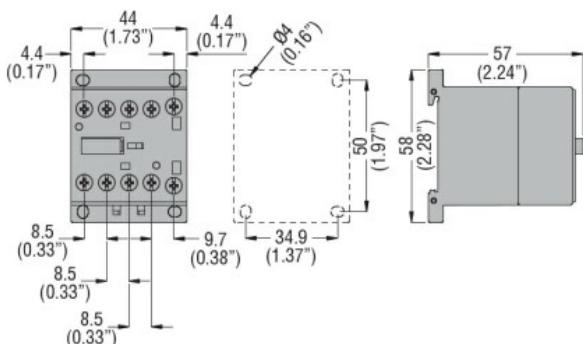
| | | | |
|-----------------------|-----|----|------|
| Operating temperature | min | °C | -50 |
| | max | °C | +70 |
| Storage temperature | min | °C | -60 |
| | max | °C | +80 |
| Max altitude | | m | 3000 |

Max altitude

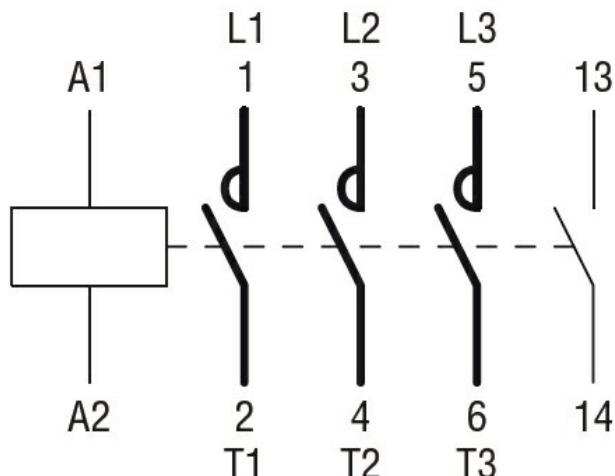
Resistance & Protection

Pollution degree

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