



| | | | | |
|--|---|------|--|-----------------|
| Product designation | | | | Power contactor |
| Product type designation | | | | BGP09 |
| Contact characteristics | | | | |
| Number of poles | Nr. | | | 3 |
| Rated insulation voltage U_i IEC/EN | V | | | 500 |
| Rated impulse withstand voltage U_{imp} | kV | | | 6 |
| Operational frequency | min | Hz | | 25 |
| | max | Hz | | 400 |
| IEC Conventional free air thermal current I_{th} | A | | | 20 |
| 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-3 ($T \leq 55^\circ\text{C}$) | 230V | kW | | 2.2 |
| | 400V | kW | | 4 |
| | 415V | kW | | 4.3 |
| | 440V | kW | | 4.5 |
| | 500V | kW | | 5 |
| Rated operational power AC-1 ($T \leq 40^\circ\text{C}$) | 230V | kW | | 8 |
| | 400V | kW | | 14 |
| | 500V | kW | | 16 |
| 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 |
| Resistance per pole (average value) | $m\Omega$ | | | 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 | lbin | | 9 |
| | max | lbin | | 9 |
| Tightening torque for coil terminal | min | Nm | | 0.8 |

| | | | | |
|---|---|------------------|-----------------|-----------------------|
| | | max | Nm | 1 |
| | | min | lbin | 9 |
| | | max | lbin | 9 |
| Max number of wires simultaneously connectable | | | Nr. | 2 |
| Conductor section | AWG/Kcmil | max | | 12 |
| | Flexible w/o lug conductor section | min | mm ² | 0.8 |
| | | 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 | | | | IP00 |
| Mechanical features | | | | |
| Operating position | | normal allowable | | Vertical plan ±30° |
| Fixing | | | | Screw / DIN rail 35mm |
| Weight | | | g | 240 |
| Conductor section | AWG/kcmil conductor section | max | | 12 |
| 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 | 1.1 |
| | | 125V | A | 0.3 |
| | | 220V | A | 0.1 |
| | | 600V | A | 0.6 |
| 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 |
| Mirror contacts according to IEC/EN 60947-4-1 | | | | yes |
| EMC compatibility | | | | yes |
| DC coil operating | | | | |

| | | | |
|--------------------------------|----------|-----|---------|
| DC rated control voltage | | V | 12 |
| 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 | W | 3.2 |
| | holding | W | 3.2 |

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

| | | | |
|--|---------|---|-----|
| 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

Contactor

AC current A 20

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

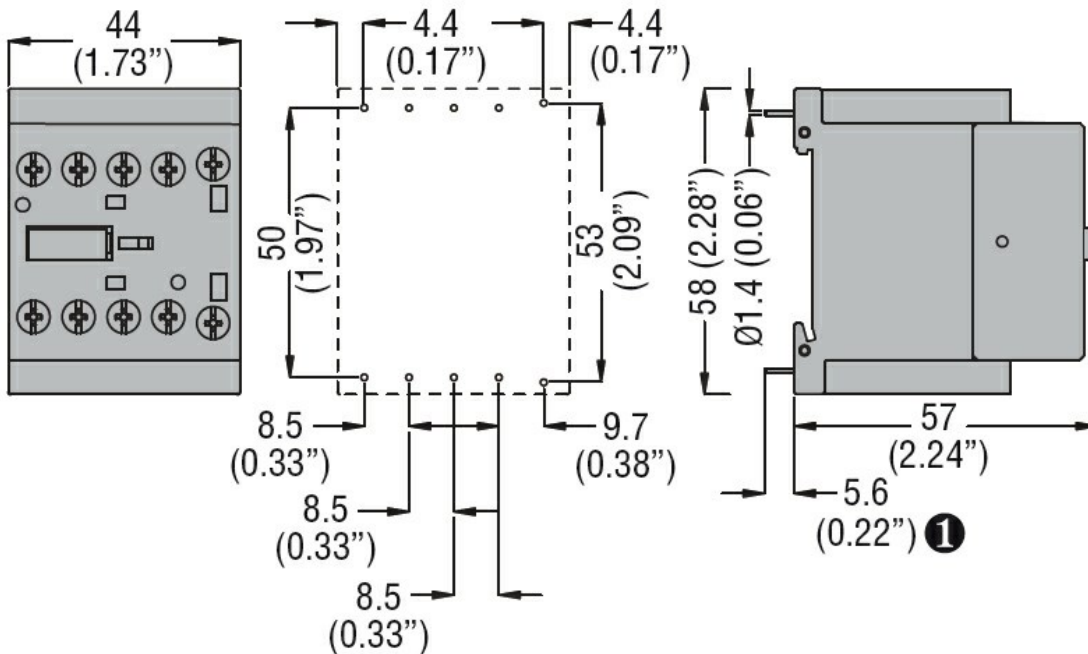
m 3000

Resistance & Protection

Pollution degree

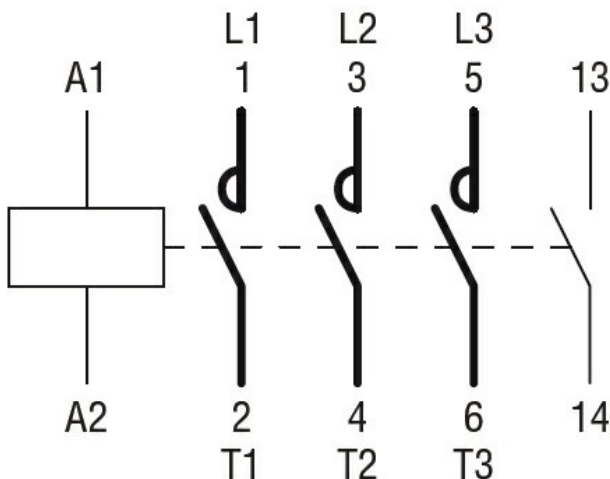
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Dimensions



① Recommended PCB drillings 1.7-2mm.

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

cURus

EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching