



| Product designation | | | Power contactor |
|---|--------------------|-----|---------------------------------------|
| Product type designation Contact characteristics | | | BG09 |
| Number of poles | | Nr. | 3 |
| Rated insulation voltage Ui IEC/EN | | V | 690 |
| Rated impulse withstand voltage Uimp | | kV | 6 |
| Operational frequency | | ΚV | |
| Operational frequency | min | Hz | 25 |
| | max | Hz | 400 |
| IEC Conventional free air thermal current Ith | max | A | 20 |
| Operational current le | | | |
| oporational outron to | AC-1 (≤40°C) | Α | 20 |
| | AC-1 (≤55°C) | Α | 18 |
| | AC-1 (≤70°C) | Α | 15 |
| | AC-3 (≤440V ≤55°C) | A | 9 |
| | AC-4 (400V) | A | 4 |
| Rated operational power AC-3 (T≤55°C) | 7.0 1 (1001) | | · · · · · · · · · · · · · · · · · · · |
| ration operational power rie o (1=00 o) | 230V | kW | 2.2 |
| | 400V | kW | 4 |
| | 415V | kW | 4.3 |
| | 440V | kW | 4.5 |
| | 500V | kW | 5 |
| | 690V | kW | 5 |
| Rated operational power AC-1 (T≤40°C) | | | |
| 1 1 2 (2 2) | 230V | kW | 8 |
| | 400V | kW | 14 |
| | 500V | kW | 16 |
| | 690V | kW | 22 |
| IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series | | | _ |
| · | ≤24V | Α | 12 |
| | 48V | Α | 10 |
| | 75V | Α | 4 |
| | 110V | Α | 3 |
| | 220V | Α | _ |
| IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series | | | |
| | ≤24V | Α | 15 |
| | 48V | Α | 14 |
| | 75V | Α | 9 |
| | 110V | Α | 8 |
| | 220V | Α | _ |
| IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series | | | |
| | ≤24V | Α | 16 |
| | 48V | Α | 16 |
| | 75V | Α | 10 |
| | 110V | Α | 10 |
| | | | |





| | 220V | Α | 2 |
|---|---------------|-------|--------------|
| IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series | | | |
| | ≤24V | Α | 16 |
| | 48V | Α | 16 |
| | 75V | A | 10 |
| | 110V | A | 10 |
| | 220V | A | 2 |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series | 220 V | | |
| ILO MAX current le in DO3-DO3 with L/TC3 Toms with 1 poles in series | ~ 04\/ | ۸ | 7 |
| | ≤24V | A | 7 |
| | 48V | Α | 6 |
| | 75V | Α | 2 |
| | 110V | Α | 1 |
| | 220V | Α | _ |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series | | | |
| | ≤24V | Α | 8 |
| | 48V | Α | 8 |
| | 75V | Α | 5 |
| | 110V | Α | 4 |
| | 220V | A | _ |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series | ZZU V | | - |
| TEO may content to in 200-2003 with E/K > 13ms with 3 poles in series | -01V | ۸ | 10 |
| | ≤24V | A | 10 |
| | 48V | Α | 10 |
| | 75V | Α | 6 |
| | 110V | Α | 5 |
| | 220V | Α | 0,8 |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series | | | |
| | ≤24V | Α | 10 |
| | 48V | Α | 10 |
| | 75V | Α | 6 |
| | 110V | Α | 5 |
| | 220V | A | 0,8 |
| Short time allowable current for 10s (IEC/ENG0047.1) | 220 V | A | 96 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 90 |
| Protection fuse | . 0 (150) | | 00 |
| | gG (IEC) | Α | 20 |
| | aM (IEC) | A | 10 |
| Making capacity (RMS value) | | Α | 92 |
| Breaking capacity at voltage | | | |
| | 440V | Α | 72 |
| | 500V | Α | 72 |
| | 690V | Α | 72 |
| Resistance per pole (average value) | | mΩ | 10 |
| Power dissipation per pole (average value) | | | . • |
| . 5.1.5. Glospation por poro (avorago valuo) | Ith | W | 4 |
| | AC-3 | W | 0.81 |
| Tightoning targue for terminals | AU-3 | ٧٧ | U.O I |
| Tightening torque for terminals | | | 0.0 |
| | 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 |
| | 111111 | 15111 | • |
| | | | |



| | | max | lbin | 9 |
|--|--|---|---|---|
| | simultaneously connectable | | Nr. | 2 |
| Conductor section | | | | |
| | AWG/Kcmil | | | 40 |
| | Fly 21 to 1/2 to | max | | 12 |
| | Flexible w/o lug conductor section | | | 0.75 |
| | | min | mm² | 0.75 2.5 |
| | Flexible c/w lug conductor section | max | mm² | 2.5 |
| | Flexible C/W lug colludctor section | min | mm² | 1.5 |
| | | max | mm² | 2.5 |
| | Flexible with insulated spade lug conductor section | | 111111 | 2.0 |
| | Tionible Will inculated opade tag contactor coolien | min | mm² | 1.5 |
| | | max | mm² | 2.5 |
| | | | | IP20 when |
| Power terminal protect | ction according to IEC/EN 60529 | | | properly wired |
| Mechanical features | | | | |
| Operating position | | | | |
| | | normal | | Vertical plan |
| | | allowable | | ±30° |
| Fixing | | | | Screw / DIN rail |
| | | | | 35mm |
| Weight | | | g | 214 |
| Conductor section | | | | |
| | AWG/kcmil conductor section | | | |
| | | | | 4.0 |
| | | max | | 12 |
| Auxiliary contact chara | acteristics | max | | |
| Thermal current Ith | | max | A | 10 |
| Thermal current Ith IEC/EN 60947-5-1 de | signation | max | A | |
| Thermal current Ith | signation | | | 10 A600 - Q600 |
| Thermal current lth IEC/EN 60947-5-1 de | signation | 230V | A | 10 A600 - Q600 |
| Thermal current Ith IEC/EN 60947-5-1 de | signation | 230V 400V | A A | 10 A600 - Q600 3 1.9 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V | A | 10 A600 - Q600 |
| Thermal current Ith IEC/EN 60947-5-1 de | signation 15 | 230V 400V 500V | A A A | 10 A600 - Q600 3 1.9 1.4 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V | A A | 10 A600 - Q600 3 1.9 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V | A A A | 10 A600 - Q600 3 1.9 1.4 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V | A A A | 10 A600 - Q600 3 1.9 1.4 2.9 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V 24V 48V | A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V 24V 48V 60V | A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V | A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V 125V | A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V | A A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V | A A A A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V | A A A A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V | A A A A A A A | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Mechanical life | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V | A A A A A A A Cycles | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data | signation 15 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V | A A A A A A A Cycles | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data | esignation 15 12 13 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V | A A A A A A A Cycles | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data | 15 12 13 Od according to EN/ISO 13489-1 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V | A A A A A A A A Cycles cycles | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC | 15 12 13 Od according to EN/ISO 13489-1 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V | A A A A A A A A Cycles cycles | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 |
| Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC | od according to EN/ISO 13489-1 | 230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V | A A A A A A A A Cycles cycles | 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000 |





| DC rated control voltage | ie | | | V | 220 |
|----------------------------|-----------------------|--------------|------------|----------|-------------|
| DC operating voltage | | | | <u> </u> | |
| , , | pick-up | | | | |
| | | | min | %Us | 75 |
| | | | max | %Us | 115 |
| | drop-out | | | | |
| | | | min | %Us | 10 |
| Average coil consumpt | ion <20°C | | max | %Us | 25 |
| Average con consump | 1011 <u>2</u> 20 C | | in-rush | W | 3.2 |
| | | | holding | W | 3.2 |
| Max cycles frequency | | | | | 3. 2 |
| Mechanical operation | | | | cycles/h | 3600 |
| Operating times | | | | | |
| Average time for Us co | ntrol | | | | |
| | in AC | | | | |
| | | Closing NO | | | |
| | | | min | ms | 12 |
| | | Opening NO | max | ms | 21 |
| | | Opening NO | min | me | 9 |
| | | | min max | ms ms | 9 18 |
| | | Closing NC | max | 1113 | 10 |
| | | G.00g 0 | min | ms | 17 |
| | | | max | ms | 26 |
| | | Opening NC | | | |
| | | | min | ms | 7 |
| | | | max | ms | 17 |
| | in DC | 01 : 110 | | | |
| | | Closing NO | min | ma | 18 |
| | | | max | ms ms | 25 |
| | | Opening NO | max | 1113 | 25 |
| | | opolinig 110 | min | ms | 2 |
| | | | max | ms | 3 |
| | | Closing NC | | | |
| | | | min | ms | 3 |
| | | _ | max | ms | 5 |
| | | Opening NC | <u>-</u> | | 44 |
| | | | min | ms | 11 |
| UL technical data | | | max | ms | 17 |
| Full-load current (FLA) | for three-phase AC m | otor | | | |
| i dii ioda carierit (i LA) | ioi unoc-phase Ao III | | at 480V | Α | 7.6 |
| | | | at 600V | A | 6.1 |
| Yielded mechanical pe | rformance | | | | |
| 1 - | for single-phase AC | motor | | | |
| | | | 110/120V | HP | 0.5 |
| | | | 230V | HP | 1.5 |
| | for three-phase AC r | notor | | | |
| | | | 200/208V | HP | 2 |
| | | | 220/230V | HP | 3 |
| | | | 460/480V | HP HP | 5 5 |
| | | | 575/600V | | J |

| General USE | | | | |
|-----------------------------|----------------------------------|---|-------|---------------------|
| | Contactor | | | |
| | | AC current | Α | 20 |
| Short-circuit protect | ion fuse, 600V | | | |
| | High fault | | | |
| | | Short circuit current | kA | 100 |
| | | Fuse rating | Α | 30 |
| | | Fuse class | | J |
| | Standard fault | | | |
| | | Short circuit current | kA | 5 |
| | | Fuse rating | Α | 30 |
| | | Fuse class | | RK5 |
| Contact rating of au | xiliary contacts according to UL | | | A600 - Q600 |
| Ambient conditions | · · | | | |
| Temperature | | | | |
| • | Operating temperature | | | |
| | , , , | min | °C | -50 |
| | | max | °C | +70 |
| | Storage temperature | | | |
| | 2 1 3 1 1 p | min | °C | -60 |
| | | max | °C | +80 |
| Max altitude | | | m | 3000 |
| Resistance & Prote | ction | | | |
| Pollution degree | | | | 3 |
| Dimensions | | | | |
| | | | | |
| (1.73") (0.1 | 7") | (1.73") O (1.73") | r (a | 57 .24") |
| (0.17") | (2.24") | 0 0 0 | (2 | .24") |
| \$ \$ \$ \$ \$ | | | - | |
| | 50 (1.97") 58 (2.28") | (1.57) | (2.28 | |
| ⊕ ⊕ ⊕ ⊕ | | (3.71°) (3.71°) (4.8 (4.8 (4.8)) (5.71°) (6.8 (4.8)) (7.71°) (8.8 (4.8)) (9.71°) (1.8) (1. | 6 | |
| <u>Ф н н Ф</u> | <u> </u> | 04.0 | | |
| 8.5 (0.33") 9.7 (0.38 | 34.9 — (1.37") | (1.37") 3.2 · (0.12" |) | RF9 |
| 8.5 (0.33") | | 5 | | 7.6 |
| 8.5 (0.33") | | 44 | _ | 89.2 (3.51") 7.6 |
| Wiring diagrams | | (1.73") | | (3.51) |

A1 13 A2 T1 T2

Certifications and compliance

Compliance

CSA C22.2 n° 60947-1



11BG0910D220

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 220VDC, **1NO AUXILIARY CONTACT**

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