



Product designation Power contactor Product type designation **BG06** Contact characteristics 3 Number of poles nr. Rated insulation voltage Ui IEC/EN ٧ 690 kV Rated impulse withstand voltage Uimp 6 Operational frequency min Нъ 25 max Hz 400 IEC Conventional free air thermal current Ith 16 Α Operational current le AC-1 (≤40°C) Α 16 AC-1 (≤55°C) Α 14 AC-1 (≤70°C) Α 12 AC-3 (≤440V ≤55°C) Α 6 AC-4 (400V) 3.3 Rated operational power AC-3 (T≤55°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≤40°C) 230V kW 6 400V kW 10 500V kW 13 690V kW 18 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V Α 9 48V Α 8 75V Α 4 110V 3 Α 220V Α IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V Α 12 48V Α 11 75V 7 Α 110V Α 6 220V Α IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V Α 14 14 48V Α 75V Α 8

110V

8



|   | 220V          | Α      | 1            |
|---|---------------|--------|--------------|
| IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series             | 220 V         |        |              |
| ILC max current le in DC i with L/K = ims with 4 poles in series            | ≤24V          | ۸      |              |
|   | ≤24 V<br>48 V | A<br>A | _            |
|   | 75V           | A      | _            |
|   | 110V          | A      | _            |
|   |               |        | _            |
| IFO many augment to in DOO DOE with 1 /D < 45 man with 4 nation in position | 220V          | A      |              |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series        | 40 AV /       | ۸      | 0            |
|   | ≤24V          | A      | 6            |
|   | 48V           | A      | 5            |
|   | 75V           | A      | 2            |
|   | 110V          | A      | 1            |
|   | 220V          | Α      | <del>-</del> |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series        |               |        |              |
|   | ≤24V          | Α      | 7            |
|   | 48V           | Α      | 7            |
|   | 75V           | Α      | 4            |
|   | 110V          | Α      | 3            |
|   | 220V          | Α      | _            |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series        |               |        |              |
|   | ≤24V          | Α      | 9            |
|   | 48V           | Α      | 9            |
|   | 75V           | Α      | 5            |
|   | 110V          | Α      | 4            |
|   | 220V          | Α      | 0.5          |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series        |               |        |              |
|   | ≤24V          | Α      | _            |
|   | 48V           | Α      | _            |
|   | 75V           | Α      | _            |
|   | 110V          | Α      | _            |
|   | 220V          | A      | _            |
| Short-time allowable current for 10s (IEC/EN60947-1)                        | 2201          | A      | 96           |
| Protection fuse   |               |        |              |
| Totodion ruso   | gG (IEC)      | Α      | 16           |
|   | aM (IEC)      | A      | 6            |
| Making capacity (RMS value)   | aivi (IEC)    |        | 92           |
|   |               | A      | 92           |
| Breaking capacity at voltage  | 4.4017        | ۸      | 70           |
|   | 440V          | A      | 72<br>72     |
|   | 500V          | A      | 72           |
|   | 690V          | Α      | 72           |
| Resistance per pole (average value)   |               | mΩ     | 10           |
| Power dissipation per pole (average value)                                  |               |        |              |
|   | Ith           | W      | 2.6          |
|   | AC3           | W      | 0.36         |
| Tightening torque for terminals   |               |        |              |
|   | min           | Nm     | 0.8          |
|   | max           | Nm     | 1            |
|   | min           | Ibin   | 0.59         |
|   | max           | Ibin   | 0.74         |
| Tightening torque for coil terminal   |               |        |              |
|   | min           | Nm     | 0.8          |
|   | max           | Nm     | 1            |
|   | min           | lbft   | 0.8          |
|   |               |        |              |



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| max   | lbft   | 0.74             |
|---|--------|------------------|
| Max number of wires simultaneously connectable      | nr.    | 2                |
| Conductor section                                   |        |                  |
| Flexible w/o lug conductor section                  |        |                  |
| mir   | mm²    | 0.75             |
| max   | mm²    | 2.5              |
| Flexible c/w lug conductor section                  |        | _                |
| mir   | mm²    | 1.5              |
| max   | mm²    | 2.5              |
| Flexible with insulated spade lug conductor section |        |                  |
| mir   |        | 1.5              |
| max   | mm²    | 2.5              |
| Power terminal protection according to IEC/EN 60529 |        | IP20 when wired  |
| Mechanical features                                 |        |                  |
| Operating position                                  |        |                  |
| norma   |        | Vertical plan    |
| allowable   |        | ±30°             |
| Fixing  |        | Screw / DIN rail |
| Walak   |        | 35mm             |
| Weight Auxiliary contact characteristics            | g      | 180              |
| ·   |        | 1 NC             |
| Type of contact Thermal current Ith                 | Α      | 10               |
|   | A      | A600 - Q600      |
| IEC/EN 60947-5-1 designation Operating current AC15 |        | A600 - Q600      |
| 230\  | A      | 3                |
| 400\  |        | 3<br>1.9         |
| 500\  |        | 1.4              |
| Operating current DC12                              |        | 1.7              |
| 110\  | Α      | 2.9              |
| Operating current DC13                              | ,,     | 2.0              |
| 24\   | Α      | 2.9              |
| 48\   |        | 1.4              |
| 60\   |        | 1.2              |
| 110\  |        | 0.6              |
| 125\  |        | 0.55             |
| 220\  | Α      | 0.3              |
| 600\  | Α      | 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  | •      | 500000           |
| mechanical load                                     | cycles | 20000000         |
| Mirror contats according to IEC/EN 609474-4-1       |        | yes              |
| EMC compatibility                                   |        | Yes              |
| Rated AC voltage at 60Hz                            | V      | 48               |
| AC coil operating                                   |        |                  |
| AC operating voltage                                |        |                  |
| of 60Hz coil powered at 60Hz                        |        |                  |

pick-up

min

%Us

75



|                           |                                 | may                | %Us      | 115        |
|---------------------------|---------------------------------|--------------------|----------|------------|
|                           | drop-out                        | max                | %US      | 115        |
|                           | αιορ-ουι                        | min                | %Us      | 20         |
|                           |                                 | max                | %Us      | 55         |
| AC average coil consu     | mption 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         |
|                           | of COUR coil powered at COUR    | holding            | VA       | 3          |
|                           | of 60Hz coil powered at 60Hz    | in-rush            | VA       | 30         |
|                           |                                 | holding            | VA       | 4          |
| Dissipation at holding s  | ≤20°C 50Hz                      | Holaing            | W        | 0.95       |
| Max cycles frequency      |                                 |                    |          | 0.00       |
| Mechanical operation      |                                 |                    | cycles/h | 3600       |
| Operating times           |                                 |                    |          |            |
| Average time for Us co    | ontrol                          |                    |          |            |
|                           | in AC                           |                    |          |            |
|                           | Closing NO                      |                    |          |            |
|                           |                                 | min                | ms       | 12         |
|                           | 0 : NO                          | max                | ms       | 21         |
|                           | Opening NO                      |                    |          | 0          |
|                           |                                 | min<br>max         | ms<br>ms | 9<br>18    |
|                           | Closing NC                      | max                | 1113     | 10         |
|                           | Closing NO                      | min                | ms       | 17         |
|                           |                                 | max                | ms       | 26         |
|                           | Opening NC                      |                    |          |            |
|                           |                                 | min                | ms       | 7          |
|                           |                                 | max                | ms       | 17         |
|                           | in DC                           |                    |          |            |
|                           | Closing NO                      |                    |          | 4.0        |
|                           |                                 | min                | ms       | 18         |
|                           | Opening NO                      | max                | ms       | 25         |
|                           | Opening NO                      | min                | ms       | 2          |
|                           |                                 | max                | ms       | 3          |
|                           | Closing NC                      |                    | 3        |            |
|                           | Ç                               | min                | ms       | 3          |
|                           |                                 | max                | ms       | 5          |
|                           | Opening NC                      |                    |          |            |
|                           |                                 | min                | ms       | 11         |
| III da alcada da la la de |                                 | max                | ms       | 17         |
| UL technical data         | for these share AO mater        |                    |          |            |
| rull-load current (FLA)   | for three-phase AC motor        | o+ 400V            | ٨        | 10         |
|                           |                                 | at 480V<br>at 600V | A<br>A   | 4.8<br>3.9 |
| Yielded mechanical pe     | rformance                       | at 000 V           |          | J.J        |
| nolada medianida pe       | for single-phase AC motor       |                    |          |            |
|                           | .o. omgre pridee No motor       | 110/120V           | HP       | 0.3        |
|                           |                                 | 230V               | HP       | 1          |
|                           | for three-phase AC motor        |                    |          |            |
|                           |                                 |                    |          |            |

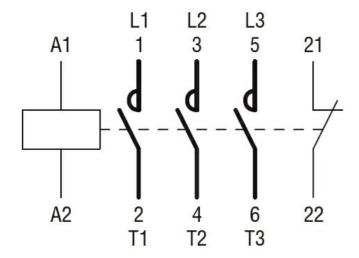


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| Contactor  |   | 200/208V              | HP | 1.5         |
|--|---|-----------------------|----|-------------|
| Standard fault   Short circuit current   Fuse rating   A   30  |   | 220/230V              | HP | 2           |
| General USE  Contactor  AC current A 16  Short-circuit protection fuse, 600V High fault  Short circuit current Fuse rating A 30 Fuse class J  Standard fault  Short circuit current Fuse rating A 30 Fuse rating A 30  Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions  |   |                       |    |             |
| Contactor  Short-circuit protection fuse, 600V High fault  Short circuit current Fuse rating A 30 Fuse class J  Standard fault  Short circuit current Fuse rating A 30 Fuse class J  Standard fault  Short circuit current Fuse rating A 30 Fuse class J  Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  Min °C -60 max °C +80  Max altitude  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions   |   | 575/600V              | HP | 3           |
| Short-circuit protection fuse, 600V High fault  Short circuit current Fuse rating Fuse class  Standard fault  Short circuit current Fuse rating Fuse class  Standard fault  Short circuit current Fuse rating A 30 Fuse class  J  Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions  |   |                       |    |             |
| 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  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  | Contactor   |                       |    |             |
| High fault  Short circuit current Fuse rating Fuse class  Standard fault  Standard fault  Short circuit current Fuse rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions   |   | AC current            | Α  | 16          |
| Short circuit current Fuse rating Fuse class J  Standard fault  Short circuit current Fuse rating A 30 Fuse class J  Standard fault  Short circuit current Fuse rating A 30  Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions   |   |                       |    |             |
| Standard fault  Short circuit current Fuse rating Fuse class  Standard fault  Short circuit current Fuse rating Fuse rating A 30  Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions  | High fault  | 0                     |    | 400         |
| Standard fault  Short circuit current Fuse rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  Max altitude  Max altitude  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions  |   |                       |    |             |
| Standard fault  Short circuit current Fuse rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude max °C +80  Max altitude max °C +80  Dimensions  Dimensions   |   |                       | А  |             |
| Short circuit current Fuse rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions   | 0(11(1(1(1(1(1(1(1(                                   | Fuse class            |    |             |
| Contact rating of auxiliary contacts according to UL  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  | Standard fault  | Chart singuit surrent | LΛ | E           |
| Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions  |   |                       |    |             |
| Ambient conditions  Temperature  Operating temperature  min °C -50 max °C +70  Storage temperature  min °C -60 max °C +80  Max altitude max °C +80  Max altitude max °C -80 max °C -90 max  | Contact rating of auxiliary contacts according to LII | ruse rating           | A  |             |
| 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  A44  A44  A44  A44  A44  A44  A44  A  | ·   |                       |    | A000 - Q000 |
| 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  444  444  444  444  444  444  444  |   |                       |    |             |
| min °C -50 max °C +70  |   |                       |    |             |
| Max altitude   m   3000  | Operating temperature                                 | min                   | °C | -50         |
| Storage temperature  min °C -60 max °C +80  Max altitude  Resistance & Protection  Pollution degree  3  Dimensions  44  44  (0.17")  (0.38 |   |                       |    |             |
| min °C -60 max °C +80  Max altitude m 3000  Resistance & Protection  Pollution degree 3  Dimensions  444 (1.73") (0.17") (0.17") (0.38") (1.37") (0.38") (0.38") (1.37") (0.38") (0.3  | Storage temperature                                   |                       |    |             |
| Max altitude       m 3000         Resistance & Protection       3         Pollution degree       3         Dimensions       3  | 3   | min                   | °C | -60         |
| Pollution degree 3  Dimensions  4.4  (0.17")  (0.38")  (  |   | max                   | °C | +80         |
| Pollution degree  Dimensions  4.4 (0.17")  (0.17")  (0.38")  (0.38")  (0.38")  Dimensions  3  4.4 (1.73")  (0.17")  (0.17")  (0.38")  (0.3 | Max altitude  |                       | m  | 3000        |
| Dimensions  4.4  (0.17")  (0.17")  (0.38")  (0.38")  (0.38")  (0.38")  (0.38")  (0.38")  (0.38")  (0.38")  (0.38")  (0.17")  | Resistance & Protection                               |                       |    |             |
| 4.4 (0.17") (0 | Pollution degree                                      |                       |    | 3           |
| (0.17")  | Dimensions  |                       |    |             |
| Wiring diagrams  |   |                       |    |             |



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## 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