



| Product designation                                  |                    |              | Power contactor |
|--|--------------------|--------------|-----------------|
| Product type designation<br>Contact characteristics  |                    |              | BGP09           |
| Number of poles                                      |                    | Nr.          | 3               |
| Rated insulation voltage Ui IEC/EN                   |                    | V            | 500             |
| Rated impulse withstand voltage Uimp                 |                    | kV           | 6               |
| Operational frequency                                |                    | ΝV           | 0               |
| Operational frequency                                | min                | Hz           | 25              |
|  | max                | Hz           | 400             |
| IEC Conventional free air thermal current Ith        | Шал                | A            | 20              |
| Operational current le                               |                    |              | 20              |
|  | AC-1 (≤40°C)       | А            | 20              |
|  | AC-1 (≤55°C)       | A            | 18              |
|  | AC-1 (≤70°C)       | A            | 15              |
|  | AC-3 (≤440V ≤55°C) | A            | 9               |
|  | AC-4 (400V)        | A            | 4               |
| Rated operational power AC-3 (T≤55°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≤40°C)                |                    |              |                 |
|  | 230V               | kW           | 8               |
|  | 400V               | kW           | 14              |
|  | 500V               | kW           | 16              |
| Short-time allowable current for 10s (IEC/EN60947-1) |                    | А            | 96              |
| Protection fuse                                      |                    |              |                 |
|  | gG (IEC)           | А            | 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)                  |                    | mΩ           | 10              |
| Power dissipation per pole (average value)           |                    |              |                 |
|  | lth                | W            | 4               |
|  | AC-3               | W            | 0.81            |
| Tightening torque for terminals                      |                    | N I          | 0.0             |
|  | min                | Nm           | 0.8             |
|  | max                | Nm           | 1               |
|  | min                | lbin<br>Ibin | 9               |
| Tightening torque for coil terminal                  | max                | חוטו         | 9               |
| Tightening torque for coil terminal                  | min                | Nm           | 0.9             |
|  | min                | Nm           | 0.8             |



**11BGP0910D110** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 110VDC, 1NO AUXILIARY CONTACT, REAR PCB SOLDER PIN

|   |   | max   | Nm  | 1  |
|---|---|---|---|--|
|   |   | min   | Ibin  | 9  |
|   |   | max   | Ibin  | 9  |
|   | simultaneously connectable  | max   | Nr.   | 2  |
|   |   |   | INI.  | 2  |
| Conductor section   |   |   |   |  |
|   | AWG/Kcmil   |   |   |  |
|   |   | max   |   | 12   |
|   | Flexible w/o lug conductor section                                  |   |   |  |
|   |   | min   | mm²   | 0.8  |
|   |   | max   | mm²   | 2.5  |
|   | Flexible c/w lug conductor section                                  |   |   |  |
|   |   | min   | mm²   | 1.5  |
|   |   | max   | mm²   | 2.5  |
|   | Flexible with insulated spade lug conductor section                 |   |   |  |
|   |   | min   | mm²   | 1.5  |
|   |   | max   | mm²   | 2.5  |
| Power terminal protec   | tion according to IEC/EN 60529                                      | max   |   | IP00   |
| Vechanical features   |   |   |   |  |
|   |   |   |   |  |
| Operating position  |   |   |   | Manthe al al   |
|   |   | normal  |   | Vertical plan  |
|   |   | allowable   |   | ±30°   |
| Fixing  |   |   |   | Screw / DIN rail   |
|   |   |   |   | 35mm   |
| Weight  |   |   | g   | 240  |
| Conductor section   |   |   |   |  |
|   | AWG/kcmil conductor section   |   |   |  |
|   |   | max   |   | 12   |
|   |   | 111007  |   | · -  |
| Auxiliary contact chara   | acteristics   | max   |   |  |
|   | acteristics   | max   | А   |  |
| Thermal current Ith   |   |   | A   | 10   |
| Thermal current Ith<br>IEC/EN 60947-5-1 de  | signation   |   | A   |  |
| Thermal current lth<br>IEC/EN 60947-5-1 de  | signation   |   |   | 10<br>A600 - Q600  |
| Thermal current Ith<br>IEC/EN 60947-5-1 de  | signation   | 230V  | A   | 10<br>A600 - Q600<br>3   |
| Thermal current Ith<br>IEC/EN 60947-5-1 de  | signation   | 230V<br>400V  | A<br>A  | 10<br>A600 - Q600<br>3<br>1.9  |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup>   | signation<br>15   | 230V  | A   | 10<br>A600 - Q600<br>3   |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup>   | signation<br>15   | 230V<br>400V<br>500V  | A<br>A<br>A   | 10<br>A600 - Q600<br>3<br>1.9<br>1.4   |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>   | signation<br>15<br>12   | 230V<br>400V  | A<br>A  | 10<br>A600 - Q600<br>3<br>1.9  |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>  | signation<br>15<br>12   | 230V<br>400V<br>500V  | A<br>A<br>A   | 10<br>A600 - Q600<br>3<br>1.9<br>1.4   |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>  | signation<br>15<br>12   | 230V<br>400V<br>500V  | A<br>A<br>A   | 10<br>A600 - Q600<br>3<br>1.9<br>1.4   |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V  | A<br>A<br>A<br>A  | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9  |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>  | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V                                | A<br>A<br>A<br>A  | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4   |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>  | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V                         | A<br>A<br>A<br>A<br>A<br>A<br>A   | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1  |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V                 | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                               | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3   |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup>   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                          | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1  |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC<br>Operating current DC<br>Operating current DC   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V                 | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                               | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3   |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC<br>Operating current DC<br>Operating current DC   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6                                 |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operations<br>Mechanical life   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles      | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000                            |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Deperations<br>Mechanical life<br>Electrical life  | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6                                 |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC<br>Operating current DC<br>Operating current DC<br>Operations<br>Mechanical life<br>Electrical life<br>Safety related data  | signation<br>15<br>12<br>13   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles      | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000                            |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operations<br>Mechanical life<br>Electrical life<br>Safety related data   | signation<br>15<br>12   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles      | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000                            |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC<br>Operating current DC<br>Operating current DC<br>Operations<br>Mechanical life<br>Electrical life<br>Safety related data  | signation<br>15<br>12<br>13   | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V         | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles      | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000                            |
| Thermal current Ith<br>EC/EN 60947-5-1 de<br>Operating current AC<br>Operating current DC<br>Operating current DC<br>Operations<br>Mechanical life<br>Electrical life<br>Safety related data  | signation<br>15<br>12<br>13<br>0d according to EN/ISO 13489-1       | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V<br>600V | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles<br>cycles      | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000<br>500000                  |
| Thermal current Ith<br>IEC/EN 60947-5-1 de<br>Operating current AC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operating current DC <sup>2</sup><br>Operations<br>Mechanical life<br>Electrical life<br>Safety related data<br>Performance level B1 | signation<br>15<br>12<br>13<br>0d according to EN/ISO 13489-1<br>me | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V<br>600V | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles<br>cycles | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000<br>500000<br>500000 |
|   | signation<br>15<br>12<br>13<br>0d according to EN/ISO 13489-1       | 230V<br>400V<br>500V<br>110V<br>24V<br>48V<br>60V<br>125V<br>220V<br>600V | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>Cycles<br>cycles | 10<br>A600 - Q600<br>3<br>1.9<br>1.4<br>2.9<br>2.9<br>1.4<br>1.1<br>0.3<br>0.1<br>0.6<br>20000000<br>500000                  |

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## 11BGP0910D110 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 110VDC, 1NO AUXILIARY CONTACT, REAR PCB SOLDER PIN

| DC rated control voltage     V     110       DC operating voltage     pick-up     min     %Us     75       investige     min     %Us     10     max     %Us     10       Average coll consumption ≤20°C     invush     W     3.2     holding     W     3.2       Max cycles frequency     cycles frequency     cycles frequency     3600     0       Operating times     cycles frequency     3600     0     0       Average time for Us control in AC     min     ms     12     max     ms     12       Opening NO     min     ms     12     max     ms     13       Closing NC     min     ms     17     max     ms     16       Closing NC     min     ms     17     max     ms     17       in DC     Closing NO     min     ms     17     max     ms     16       Closing NO     min     ms     17     max     ms     17       in DC     Closing NO  | DC roted control value  |                          |            |          | N/       | 110  |
|---|-------------------------|--------------------------|------------|----------|----------|------|
| pick-up     min     %Us     75       drop-out     min     %Us     10       max     %Us     10       max     %Us     10       max     %Us     10       max     %Us     10       Average coll consumption ≤20°C     in-rush     W     3.2       Max cycles frequency     W     3.2       Max cycles frequency     W     3.2       Average time for Us control     in AC     rmin     ms     21       Opening NO     min     ms     21     max     ms     21       Opening NO     min     ms     13     12     max     ms     13       Closing NC     min     ms     17     max     ms     16       DC     Closing NO     min     ms     17     max     ms     17       in DC     Closing NO     min     ms     13     11     11     11     11     11     11     11     11     11     11   |                         | je                       |            |          | V        | 110  |
| min     %Us     75       drop-out     min     %Us     10       max     %Us     25       Average coll consumption \$20°C     in-rush     W     3.2       Max cycles fraguency     w     3.2       Mechanical operation     cycles/     3600       Opening NO     min     ms     12       Mechanical operation     cycles/     3600     3600       Opening NO     max     ms     12       Max     Closing NO     min     ms     12       Opening NO     min     ms     13       Max     max     ms     14     10       Opening NO     min     ms     17     16       Closing NC     min     ms     17     17       in DC     Closing NO     max     ms     25       Opening NO     min     ms     2     3       Opening NO     min     ms     17     10       U     Closing NC     max     ms   |                         | niek un                  |            |          |          |      |
| max     %US     115       drop-out     min     %US     10       Average coll consumption \$20°C     in-rush     W     3.2       Max cycles frequency     in-rush     W     3.2       Max cycles frequency     cycles/l     3600       Operating times     cycles/l     3600       Average time for Us control     min     ms     21       Opening NO     min     ms     12       Max     ms     21     0       Opening NO     min     ms     13       Max     ms     12     max     ms       Opening NO     min     ms     17       Max     ms     17     max     ms     17       Opening NC     min     ms     17     max     17       Opening NO     min     ms     18     max     17       Opening NO     min     ms     3     17       Opening NC     min     ms     3     17       Opening NC <td></td> <td>ріск-ир</td> <td></td> <td></td> <td>0/11-</td> <td>75</td>  |                         | ріск-ир                  |            |          | 0/11-    | 75   |
| drop-out     min     %Us     10<br>max       Average coil consumption ±20°C     in-rush W     3.2       Max cyclos frequency     worked with W     3.2       Max cyclos frequency     cycles/h     3600       Operating times     cycles/h     3600       Average time for Us control<br>in AC     cycles/h     3600       Closing NO     min     ms     12       Opening NO     min     ms     12       Max     ms     21     0       Opening NO     min     ms     17       max     ms     18     17       Opening NC     min     ms     7       max     ms     17     17       in DC     Closing NC     max     ms     25       Opening NO     min     ms     25     0       Max     ms     25     0     max     ms     3       Opening NO     min     ms     3     0     10     10     10       U.teconical data <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>  |                         |                          |            |          |          |      |
| min     %Us     10<br>max       Average coll consumption ≤20°C     in-rush<br>in-rush<br>W     3.2       Max cycles frequency     w     3.60       Operating frequency     w     3.60       Average time for Us control<br>in AC     min     ms     12       Opening NO     min     ms     9       max     ms     18     10       Closing NC     min     ms     17       max     ms     17     max     ms     25       Opening NC     min     ms     7     max     ms     25       Opening NO     min     ms     18     max     ms     3       Opening NO     min     ms     2     max     ms     3       Opening NO     min     ms     3     max     ms     3       Opening NC     min<   |                         |                          |            | max      | %US      | 115  |
| max     %Us     25       Average coil consumption ≤20°C     in-rush W     3.2<br>holding W     3.2<br>holding W     3.2<br>holding W       Max cycles frequency     w     3.2       Max cycles frequency     ocycles/h     3600       Average time for Us control<br>in AC     min     ms     12       Opening NO     min     ms     12       Max     max     ms     12       Opening NO     min     ms     18       Closing NC     min     ms     17       max     ms     17     17     17       Max     ms     16     17     17       Max     ms     17     17     17     17     17     17     17     17     17     17     17     18     17     18     17     18     17     18     17     18     17     18     17     18     16     18     17     16     16     17     16     16     17     16     16     17  |                         | arop-out                 |            |          | 0/11-    | 10   |
| Average coil consumption ≤20°C     in-rush W 3.2 holding W 3.2 holding W 3.2 holding W 3.2 holding W 3.2       Max cycles frequency     we show a state of the control or accession of the control of the   |                         |                          |            |          |          |      |
| in-rush<br>holding     W     3.2<br>bolding       Max-cycles frequency  | A                       | tian <00%0               |            | max      | %US      | 25   |
| holding     W     3.2       Max cycles frequency     cycles/h     3600       Operating times     cycles/h     3600       Average time for Us control<br>in AC     Closing NO     min     ms     12       Opening NO     min     ms     9     max     ms     12       Opening NO     min     ms     9     max     ms     13       Closing NC     min     ms     17     max     ms     16       Opening NC     min     ms     17     max     ms     17       in DC     Closing NC     min     ms     17     max     ms     17       In DC     Closing NO     min     ms     17     max     ms     17       Opening NO     min     ms     18     max     ms     25       Opening NC     max     max     ms     3     max     max     3       Opening NC     max     ms     3     max     11     max     12   | Average coll consump    | tion $\leq 20^{\circ}$ C |            | in much  | 147      | 2.0  |
| Max cycles frequency<br>Mechanical operation cycles/h 3600<br>Operating times<br>Average time for Us control<br>in AC<br>Closing NO<br>Closing NO<br>Closing NC<br>min ms 12<br>max ms 21<br>Opening NC<br>min ms 17<br>max ms 26<br>Opening NC<br>min ms 7<br>max ms 26<br>Opening NC<br>min ms 17<br>max ms 26<br>Opening NC<br>min ms 18<br>max ms 25<br>Opening NO<br>min ms 18<br>max ms 3<br>Closing NC<br>min ms 18<br>max ms 3<br>Closing NC<br>min ms 18<br>max ms 3<br>Closing NC<br>min ms 11<br>max ms 5<br>Opening NC<br>min ms 11<br>max ms 17<br>UL technical data<br>Full-load current (FLA) for three-phase AC motor<br>for single-phase AC motor<br>110/120V<br>HP 0.5<br>230V<br>HP 2<br>220/230V<br>HP 3<br>460/480V<br>HP 5  |                         |                          |            |          |          |      |
| Mechanical operation     cycles/h     3600       Operating times  |                         |                          |            | noiding  | VV       | 3.2  |
| Operating times       Average time for Us control       in AC       Closing NO       max     ms       Opening NO       max     ms       Opening NO       max     ms       Closing NC       min     ms       Opening NC     min       max     ms       Opening NC     min       max     ms       Opening NO     min       max     ms       Opening NC     min       max     ms       Opening NO     min       max     ms       Opening NO     min       max     ms       Opening NC     max       max     ms       Max     ms       Max     ms       Max     ms <td></td> <td></td> <td></td> <td></td> <td>1 //</td> <td>0000</td>  |                         |                          |            |          | 1 //     | 0000 |
| Average time for Us control<br>in AC     Closing NO     min     ms     12       Opening NO     min     ms     9       Opening NO     min     ms     9       Closing NC     min     ms     17       Opening NC     min     ms     7       Opening NC     min     ms     7       max     ms     17     17       Opening NC     min     ms     7       max     ms     17     17       Opening NC     max     ms     17       In DC     Closing NO     max     ms     18       Closing NO     max     ms     25     16       Opening NC     max     ms     3     17       Closing NC     max     ms     3     16       Opening NC     max     ms     5     16       Opening NC     max     ms     5     17       Opening NC     max     ms     5     17       Opening NC  |                         |                          |            |          | cycles/h | 3600 |
|   |                         | · •                      |            |          |          |      |
| Closing NO     max     ms     12       Opening NO     max     ms     21       Max     ms     9       max     ms     18       Closing NC     max     ms     12       max     ms     18       Closing NC     max     ms     26       max     ms     7       max     ms     7       max     ms     7       max     ms     17       max     ms     7       max     ms     18       Opening NO     min     ms     25       Opening NO     min     ms     25       Opening NC     max     ms     3       Closing NC     min     ms     3       Opening NC     max     ms     5       Opening NC     max     ms     17       U     technical current (FLA) for three-phase AC motor     max     ms     17       U     technical current (FLA) for three-phase AC moto  | Average time for Us co  |                          |            |          |          |      |
| Min     ms     12       Opening NO     max     ms     21       Max     ms     9     max     ms     18       Closing NC     min     ms     17     max     ms     17       Opening NC     min     ms     17     max     ms     17       In DC     Closing NO     min     ms     17     max     ms     17       In DC     Closing NO     min     ms     17     max     ms     17       In DC     Closing NO     min     ms     18     max     ms     12       Opening NO     min     ms     20     max     ms     3       Closing NC     min     ms     3     max     ms     1       UL technical data     Fill-load current (FLA) for three-phase AC motor     min     ms     110/120V     A     7.6       Tilded mechanical performance     if or three-phase AC motor     if or three-phase AC motor     110/120V     HP     1.5 <t< td=""><td></td><td>in AC</td><td><b>.</b></td><td></td><td></td><td></td></t<>   |                         | in AC                    | <b>.</b>   |          |          |      |
| Image: Second  |                         |                          | Closing NO | <u>-</u> |          | 10   |
| Opening NO     min     ms     9       max     ms     18       Closing NC     min     ms     17       max     ms     7       max     ms     17       in DC     Closing NO     min     ms       Opening NO     max     ms     25       Opening NO     max     ms     3       Closing NC     max     ms     3       Opening NC     max     ms     1       U     technical dat     max     ms     11       Full-load current (FLA) for three-phase AC motor     at 480V     A     6.1       Yielded mechanical performance     ta 600V     A     6.1       Yielded mechanical performance     tor three-phase AC motor     200/208V     HP     1.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  |                         |                          |            |          |          |      |
| min     ms     9       Closing NC     min     ms     18       Opening NC     min     ms     26       Opening NC     min     ms     7       in DC     Closing NO     min     ms     17       in DC     Closing NO     min     ms     17       Opening NO     min     ms     18       Opening NO     max     ms     25       Opening NO     min     ms     13       Opening NO     min     ms     3       Closing NC     min     ms     3       Opening NO     min     ms     3       Opening NC     min     ms     3       Opening NC     min     ms     11       Max     ms     17     11     11       Opening NC     min     ms     11     11       Max     ms     17     11     11     11       Full-load current (FLA) for three-phase AC motor     at 480V     A     7  |                         |                          |            | max      | ms       | 21   |
| Image: Market Arms     18       Closing NC     min     ms     17       Imax     ms     7     max     ms     17       In DC     Closing NO     min     ms     12       In DC     Closing NO     min     ms     12       Opening NO     min     ms     25       Opening NO     min     ms     25       Opening NO     min     ms     2       Closing NC     min     ms     2       Opening NO     max     ms     3       Closing NC     min     ms     3       Max     ms     5     0       Opening NC     min     ms     3       Max     ms     11     max     ms       Vielded current (FLA) for three-phase AC motor     min     ms     11       Yielded mechanical performance     t4800V     A     7.6       200V     max     ms     110/120V     HP     0.5       200V     HP     1   |                         |                          | Opening NO |          |          |      |
| Closing NC     min     ms     17       Max     ms     26       Opening NC     min     ms     7       in DC     Closing NO     min     ms     17       in DC     Closing NO     min     ms     18       Opening NO     min     ms     18       Opening NO     min     ms     21       Opening NO     min     ms     21       Opening NO     min     ms     3       Closing NC     min     ms     3       Opening NC     min     ms     11       Max     ms     11     max     ms     11       Vielded mechanical performance     at 480V     A     7.6     110/120V     HP     0.5       Yielded mechanical performance     for three-phase AC motor     200/208V     HP     3     20/2  |                         |                          |            |          |          |      |
| $\begin{tabular}{ c c c c c } \hline & & & & & & & & & & & & & & & & & & $  |                         |                          |            | max      | ms       | 18   |
| max     ms     26       min     ms     7       max     ms     17       in DC     Closing NO     min     ms     18       Closing NO     max     ms     25       Opening NO     min     ms     21       Max     ms     25     11       Opening NO     min     ms     21       Max     ms     3     11       Closing NC     max     ms     3       Closing NC     max     ms     5       Opening NC     max     ms     5       Opening NC     max     ms     11       Max     ms     11     11     11       Max     ms     11     11     11     11       Yielded mechanical performance     for three-phase AC motor     110/120V     HP     0.5       230V     HP     1.5     1.5     1.5     1.5       for three-phase AC motor     220/208V     HP     2.2     220/208V <td></td> <td></td> <td>Closing NC</td> <td></td> <td></td> <td></td>   |                         |                          | Closing NC |          |          |      |
| Opening NC     min     ms     7       in DC     Closing NO     min     ms     17       in DC     Closing NO     min     ms     18       Opening NO     min     ms     25       Opening NO     min     ms     2       max     ms     3       Closing NC     min     ms     3       Closing NC     min     ms     3       Opening NC     min     ms     3       Ut technical data     ms     11       Full-load current (FLA) for three-phase AC motor     at 480V     A     7.6       at 600V     A     6.1     110/120V     HP     0.5       Yielded mechanical performance     for three-phase AC motor     200/208V     HP     1.5       for three-phase AC motor     200/208V     HP     2     220/230V     HP     3       460/480V     HP     5     3     460/480V     HP     5   |                         |                          |            |          |          |      |
| $\begin{tabular}{ c c c c c } \hline min & ms & 7 & max & ms & 17 & max & ms & 18 & max & ms & 25 & 0pening NO & min & ms & 2 & max & ms & 3 & max & ms & 3 & max & ms & 3 & max & ms & 5 & 0pening NC & min & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 11 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms & 17 & max & ms & 11 & max & ms $   |                         |                          |            | max      | ms       | 26   |
| max     ms     17       in DC     Closing NO     min     ms     18       max     ms     25     max     ms     25       Opening NO     min     ms     2     max     ms     3       Closing NC     min     ms     3     max     ms     5       Opening NC     min     ms     3     max     ms     5       Opening NC     min     ms     11     max     ms     17       UL technical data     max     ms     17     max     ms     17       Full-load current (FLA) for three-phase AC motor     max     ms     17     10/120V     A     6.1       Yielded mechanical performance     r     r     6.1     110/120V     HP     0.5       230V     HP     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1.5     1  |                         |                          | Opening NC | _        |          | _    |
| in DC<br>Closing NO<br>min ms 18<br>max ms 25<br>Opening NO<br>min ms 2<br>max ms 3<br>Closing NC<br>min ms 3<br>max ms 5<br>Opening NC<br>min ms 11<br>max ms 17<br><u>VL technical data</u><br>Full-load current (FLA) for three-phase AC motor<br>at 480V A 7.6<br>at 600V A 6.1<br>Yielded mechanical performance<br>for single-phase AC motor<br><u>110/120V HP 0.5</u><br>200/208V HP 1.5<br>for three-phase AC motor<br><u>200/208V HP 2</u><br><u>220/230V HP 3</u><br>460/480V HP 5  |                         |                          |            |          |          |      |
| Closing NO     min     ms     18       max     ms     25       Opening NO     min     ms     2       min     ms     2       max     ms     3       Closing NC     min     ms     3       max     ms     5       Opening NC     min     ms     11       max     ms     11     ms     11       VL technical data     ms     17     11     11       Full-load current (FLA) for three-phase AC motor     at 480V     A     7.6       at 600V     A     6.1     110/120V     HP     0.5       Yielded mechanical performance     ro     230V     HP     1.5       for three-phase AC motor     200/208V     HP     1.5       for three-phase AC motor     200/208V     HP     3       460/480V     HP     5     5   |                         |                          |            | max      | ms       | 17   |
| min     ms     18<br>max       Max     ms     25       Opening NO     min     ms     2       max     ms     3     2       Closing NC     min     ms     3       Max     ms     5     3       Opening NC     min     ms     11       Max     ms     11     17       UL technical data     min     ms     17       Full-load current (FLA) for three-phase AC motor     at 480V     A     7.6       Yielded mechanical performance     at 600V     A     6.1       Yielded mechanical performance     110/120V     HP     0.5       230V     HP     1.5     15       for three-phase AC motor     200/208V     HP     2       220/230V     HP     3     460/480V     HP     5   |                         | in DC                    |            |          |          |      |
| max     ms     25       Opening NO     min     ms     2       max     ms     3       Closing NC     min     ms     3       Opening NC     min     ms     3       Opening NC     min     ms     11       Max     ms     11     max     ms     17       UL technical data     min     ms     11     ms     17       UL technical data     ms     17     110/120V     A     6.1       Yielded mechanical performance     for single-phase AC motor     110/120V     A     6.1       Yielded mechanical performance     ms     230V     HP     0.5       230V     HP     1.5     15     15       for three-phase AC motor     ms     120/208V     HP     2       220/230V     HP     3     460/480V     HP     5  |                         |                          | Closing NO | _        |          |      |
| Opening NO     min     ms     2       max     ms     3       Closing NC     min     ms     3       max     ms     3       Opening NC     min     ms     3       Opening NC     min     ms     11       UL technical data     ms     17       UL technical data     ms     17       Full-load current (FLA) for three-phase AC motor     at 480V     A     7.6       at 600V     A     6.1     110/120V     HP     0.5       Yielded mechanical performance     in three-phase AC motor     in three-phase AC motor     110/120V     HP     0.5       for three-phase AC motor     200/208V     HP     1.5     1.5       for three-phase AC motor     200/208V     HP     2     220/230V     HP     3       460/480V     HP     5     3     460/480V     HP     5  |                         |                          |            |          |          |      |
| $\begin{array}{c} & \mbox{min} & \mbox{ms} & 2 \\ & \mbox{max} & \mbox{ms} & 3 \\ & \mbox{min} & \mbox{ms} & 3 \\ & \mbox{max} & \mbox{ms} & 3 \\ & \mbox{max} & \mbox{ms} & 5 \\ & \mbox{Opening NC} & & & \\ & \mbox{min} & \mbox{ms} & 11 \\ & \mbox{max} & \mbox{ms} & 17 \\ \hline \\ $  |                         |                          | <b>a a</b> | max      | ms       | 25   |
| $\begin{array}{c} & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \\ & \begin{array}{c} & \end{array} & \end{array} & \end{array} & \\ & \end{array} & \end{array} & \end{array} & \end{array} & \end{array} & \end{array}$ |                         |                          | Opening NO | _        |          | _    |
| 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       Till/load current (FLA) for three-phase AC motor   |                         |                          |            |          |          |      |
| min     ms     3       max     ms     5       Opening NC     min     ms     11       max     ms     11     max     ms     17       UL technical data       Full-load current (FLA) for three-phase AC motor       Tielded mechanical performance       for single-phase AC motor     at 480V     A     7.6       110/120V     HP     0.5     230V     HP     1.5       For three-phase AC motor       200/208V     HP     2       200/208V     HP     2       220/230V     HP     3     460/480V     HP     5   |                         |                          |            | max      | ms       | 3    |
| Max     ms     5       Opening NC     min     ms     11       max     ms     17       UL technical data     ms     17       Full-load current (FLA) for three-phase AC motor     at 480V     A     7.6       Yielded mechanical performance     at 600V     A     6.1       Yielded mechanical performance     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   |                         |                          | Closing NC | <u>.</u> |          |      |
| Opening NC     min     ms     11       max     ms     17       UL technical data     x     x     x       Full-load current (FLA) for three-phase AC motor     at 480V     A     7.6       Yielded mechanical performance     at 600V     A     6.1       Yielded mechanical performance     110/120V     HP     0.5       230V     HP     1.5     110/120V     HP     2       for three-phase AC motor     200/208V     HP     2     220/230V     HP     3       460/480V     HP     5     5     3     3     3  |                         |                          |            |          |          |      |
| 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     6.1       Yielded mechanical performance     for single-phase AC motor     110/120V     HP     0.5       230V     HP     1.5     1.5     1.5       for three-phase AC motor       200/208V     HP     2       220/230V     HP     3       460/480V     HP     5  |                         |                          |            | max      | ms       | 5    |
| 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     110     1.5     1.5       for three-phase AC motor       200/208V     HP     2       220/230V     HP     3     460/480V     HP     5  |                         |                          | Opening NC | <u>-</u> |          |      |
| UL technical data     Full-load current (FLA) for three-phase AC motor     at 480V   A   7.6     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  |                         |                          |            |          |          |      |
| 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  |                         |                          |            | max      | ms       | 1/   |
| 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   |                         |                          |            |          |          |      |
| at 600V     A     6.1       Yielded mechanical performance<br>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  | Full-load current (FLA) | tor three-phase AC me    | otor       |          | -        |      |
| Yielded mechanical performance<br>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  |                         |                          |            |          |          |      |
| 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  |                         |                          |            | at 600V  | A        | 6.1  |
| 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  | Yielded mechanical pe   |                          |            |          |          |      |
| 230V     HP     1.5       for three-phase AC motor     200/208V     HP     2       220/230V     HP     3     3       460/480V     HP     5     5  |                         | tor single-phase AC      | motor      |          |          |      |
| for three-phase AC motor<br>200/208V HP 2<br>220/230V HP 3<br>460/480V HP 5   |                         |                          |            |          |          |      |
| 200/208V HP 2<br>220/230V HP 3<br>460/480V HP 5   |                         |                          |            | 230V     | HP       | 1.5  |
| 220/230V HP 3<br>460/480V HP 5  |                         | for three-phase AC m     | notor      |          |          |      |
| 460/480V HP 5   |                         |                          |            |          |          |      |
|   |                         |                          |            |          |          |      |
| 575/600V HP 5   |                         |                          |            |          |          |      |
|   |                         |                          |            | 575/600V | HP       | 5    |

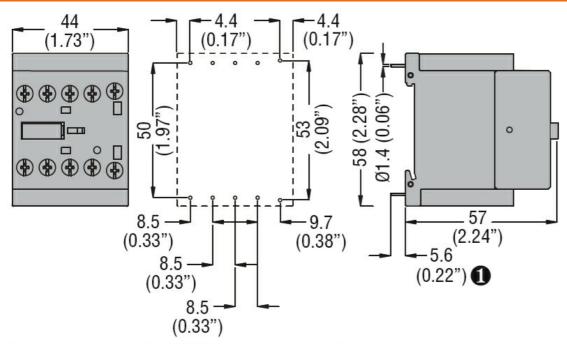
11BGP0910D110 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



**11BGP0910D110** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 110VDC, 1NO AUXILIARY CONTACT, REAR PCB SOLDER PIN

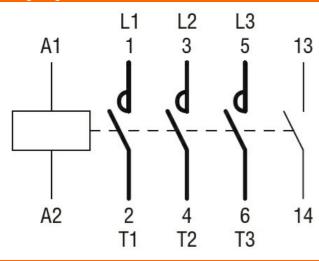
General USE

| Contactor                                   |           |         |    |             |
|---|-----------|---------|----|-------------|
|   | AC o      | current | А  | 20          |
| Contact rating of auxiliary contacts accord | ing to UL |         |    | A600 - Q600 |
| Ambient conditions                          |           |         |    |             |
| Temperature                                 |           |         |    |             |
| Operating temper                            | ature     |         |    |             |
|   |           | min     | °C | -50         |
|   |           | max     | °C | +70         |
| Storage temperat                            | ure       |         |    |             |
|   |           | min     | °C | -60         |
|   |           | max     | °C | +80         |
| Max altitude                                |           |         | m  | 3000        |
| Resistance & Protection                     |           |         |    |             |
| Pollution degree                            |           |         |    | 3           |
| Dimensions                                  |           |         |    |             |



Recommended PCB drillings 1.7-2mm.





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 |                        |                  |
|                     |                        | EC000066 -       |
| ETIM 8.0            |                        | Power contactor, |

Power contactor, AC switching