



| Product designation                                 |   |              |      | Auxiliary contactor      |
|---|---|--------------|------|--------------------------|
| Product type designation                            |   |              |      | BF00                     |
| Contact characteristic                              |   |              |      |                          |
| Number of poles                                     |   |              | Nr.  | 4                        |
| Rated insulation voltage                            | ge Ui IEC/EN  |              | V    | 690                      |
| Rated impulse withsta                               |   |              | kV   | 6                        |
| Operational frequency                               | /   |              |      |                          |
|   |   | min          | Hz   | 25                       |
|   |   | max          | Hz   | 400                      |
| IEC Conventional free                               | air thermal current Ith                             |              | Α    | 10                       |
| Operational current le                              |   |              |      |                          |
|   |   | AC-1 (≤55°C) | Α    | 0                        |
| Protection fuse                                     |   |              |      |                          |
|   |   | gG (IEC)     | Α    | 25                       |
| Tightening torque for t                             | terminals   |              |      |                          |
|   |   | min          | Nm   | 1.5                      |
|   |   | max          | Nm   | 1.8                      |
|   |   | min          | lbin | 1.1                      |
|   |   | max          | lbin | 1.5                      |
| Tightening torque for o                             | Tightening torque for coil terminal                 |              |      |                          |
|   |   | min          | Nm   | 0.8                      |
|   |   | max          | Nm   | 1                        |
|   |   | min          | Ibin | 0.8                      |
|   |   | max          | Ibin | 0.74                     |
| Max number of wires simultaneously connectable      |   | Nr.          | 2    |                          |
| Conductor section                                   |   |              |      |                          |
|   | AWG/Kcmil   |              |      |                          |
|   |   | max          |      | 10                       |
|   | Flexible w/o lug conductor section                  |              |      |                          |
|   |   | min          | mm²  | 1                        |
|   |   | max          | mm²  | 6                        |
|   | Flexible c/w lug conductor section                  |              |      |                          |
|   |   | min          | mm²  | 1                        |
|   |   | max          | mm²  | 4                        |
|   | Flexible with insulated spade lug conductor section |              | •    |                          |
|   |   | min          | mm²  | 1                        |
|   |   | max          | mm²  | 4                        |
| Power terminal protection according to IEC/EN 60529 |   |              |      | IP20 when properly wired |
| Mechanical features                                 |   |              |      |                          |
| Operating position                                  |   |              |      |                          |
|   |   | normal       |      | Vertical plan            |
|   |   | allowable    |      | ±30°                     |



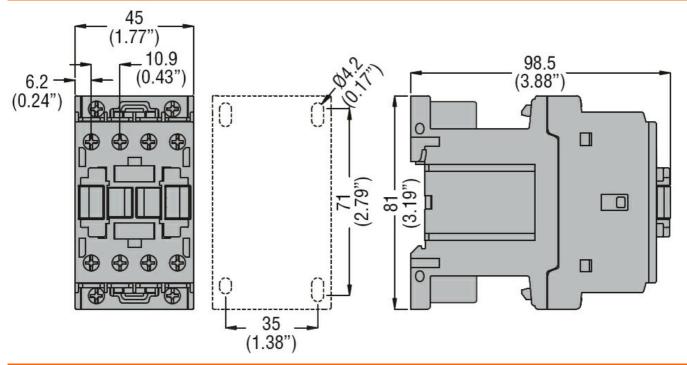
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| Fixing  |   |            |  |                                      | Screw / DIN ra<br>35mm                         |
|---|---|------------|--|--------------------------------------|--|
| Weight  |   |            |  | g                                    | 490  |
| Conductor section   |   |            |  |                                      |  |
|   | AWG/kcmil conductor s                                     | section    |  |                                      |  |
|   |   |            | max  |                                      | 10   |
| Auxiliary contact chara   | cteristics  |            |  |                                      |  |
| Thermal current Ith   |   |            |  | Α                                    | 10   |
| IEC/EN 60947-5-1 des  | signation   |            |  |                                      | A600 - P600                                    |
| Operating current AC1   | 5   |            |  |                                      |  |
|   |   |            | 230V   | Α                                    | 3  |
|   |   |            | 400V   | Α                                    | 1.9  |
|   |   |            | 500V   | Α                                    | 1.4  |
| Operating current DC1   | 2   |            |  |                                      |  |
| . 0   |   |            | 110V   | Α                                    | 5.7  |
| Operating current DC1   | 3   |            |  |                                      |  |
| , 3   |   |            | 24V  | Α                                    | 5.7  |
|   |   |            | 48V  | A                                    | 2.9  |
|   |   |            | 60V  | A                                    | 2.3  |
|   |   |            | 110V   | A                                    | 1.25   |
|   |   |            | 125V   | Α                                    | 1.1  |
|   |   |            | 220V   | Α                                    | 0.55   |
|   |   |            | 600V   | Α                                    | 0.2  |
|   |   |            |  |                                      |  |
| Operations  |   |            |  |                                      |  |
|   |   |            |  | cvcles                               | 20000000                                       |
| Operations Mechanical life Safety related data  |   |            |  | cycles                               | 20000000                                       |
| Mechanical life Safety related data   | )d according to FN/ISO                                    | 13489-1    |  | cycles                               | 20000000                                       |
| Mechanical life Safety related data   | Od according to EN/ISO                                    | 13489-1    | mechanical load                                |                                      |  |
| Mechanical life<br>Safety related data<br>Performance level B10   |   |            | mechanical load                                | cycles                               | 20000000                                       |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin   | Od according to EN/ISO on the IEC/EN 609474-4-1           |            | mechanical load                                |                                      | 20000000<br>YES                                |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility   |   |            | mechanical load                                |                                      | 20000000                                       |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating   | ng to IEC/EN 609474-4-1                                   |            | mechanical load                                | cycles                               | 20000000<br>YES<br>yes                         |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1                                   |            | mechanical load                                |                                      | 20000000<br>YES                                |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1<br>ge                             |            | mechanical load                                | cycles                               | 20000000<br>YES<br>yes                         |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1                                   |            |  | cycles                               | 20000000<br>YES<br>yes                         |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1<br>ge                             |            | min  | cycles  V                            | 20000000<br>YES<br>yes<br>110                  |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1                                   |            |  | cycles                               | 20000000<br>YES<br>yes                         |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1<br>ge                             |            | min<br>max                                     | cycles  V  %Us %Us                   | 20000000 YES yes 110 70 125                    |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage  | ng to IEC/EN 609474-4-1                                   |            | min<br>max<br>min                              | cycles  V  %Us %Us %Us               | 20000000<br>YES<br>yes<br>110<br>70<br>125     |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage   | ng to IEC/EN 609474-4-1 ge pick-up drop-out               |            | min<br>max                                     | cycles  V  %Us %Us                   | 20000000 YES yes 110 70 125                    |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage   | ng to IEC/EN 609474-4-1 ge pick-up drop-out               |            | min<br>max<br>min<br>max                       | cycles  V  %Us %Us %Us %Us %Us       | 20000000 YES yes 110 70 125 10 40              |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage   | ng to IEC/EN 609474-4-1 ge pick-up drop-out               |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W         | 20000000 YES yes 110 70 125 10 40 5.4          |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage   | ng to IEC/EN 609474-4-1 ge pick-up drop-out               |            | min<br>max<br>min<br>max                       | cycles  V  %Us %Us %Us %Us %Us       | 20000000 YES yes 110 70 125 10 40              |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  | ng to IEC/EN 609474-4-1 ge pick-up drop-out               |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W W       | 20000000 YES yes 110 70 125 10 40 5.4 5.4      |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  Max cycles frequency Mechanical operation                 | ng to IEC/EN 609474-4-1 ge pick-up drop-out               |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W         | 20000000 YES yes 110 70 125 10 40 5.4 5.4      |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  Max cycles frequency Mechanical operation Operating times | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W W       | 20000000 YES yes 110 70 125 10 40 5.4 5.4      |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  Max cycles frequency Mechanical operation Operating times | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W W       | 20000000 YES yes 110 70 125 10 40 5.4 5.4      |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times   | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W W       | 20000000 YES yes 110 70 125 10 40 5.4 5.4      |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  Max cycles frequency Mechanical operation Operating times | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C |            | min<br>max<br>min<br>max<br>in-rush<br>holding | cycles  V  %Us %Us %Us %Us W W       | 20000000 YES yes 110 70 125 10 40 5.4 5.4      |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  Max cycles frequency Mechanical operation                 | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C |            | min<br>max<br>min<br>max<br>in-rush            | cycles  V  %Us %Us %Us %Us W W       | 20000000 YES yes 110 70 125 10 40 5.4 5.4 3600 |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times   | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C | Closing NO | min<br>max<br>min<br>max<br>in-rush<br>holding | cycles  V  %Us %Us %Us W W  cycles/h | 20000000 YES yes 110 70 125 10 40 5.4 5.4 3600 |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage Average coil consumpt Max cycles frequency Mechanical operation Operating times   | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C |            | min<br>max<br>min<br>max<br>in-rush<br>holding | cycles  V  %Us %Us %Us W W  cycles/h | 20000000 YES yes 110 70 125 10 40 5.4 5.4 3600 |
| Mechanical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility DC coil operating DC rated control voltage DC operating voltage  Average coil consumpt  Max cycles frequency Mechanical operation Operating times | ng to IEC/EN 609474-4-1 ge  pick-up  drop-out  tion ≤20°C | Closing NO | min<br>max<br>min<br>max<br>in-rush<br>holding | cycles  V  %Us %Us %Us W W  cycles/h | 20000000 YES yes 110 70 125 10 40 5.4 5.4 3600 |



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|                          | Closing NC                   |            |    |             |
|--------------------------|------------------------------|------------|----|-------------|
|                          | -                            | min        | ms | 24          |
|                          |                              | max        | ms | 30          |
|                          | Opening NC                   |            |    |             |
|                          | · ·                          | min        | ms | 47          |
|                          |                              | max        | ms | 57          |
| UL technical data        |                              |            |    |             |
| General USE              |                              |            |    |             |
|                          | Auxiliary contacts           |            |    |             |
|                          |                              | AC current | Α  | 10          |
| Contact rating of auxili | ary contacts according to UL |            |    | A600 - P600 |
| 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  | on                           |            |    |             |
| Pollution degree         |                              |            |    | 3           |

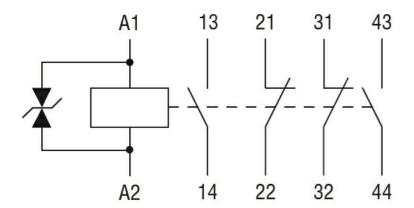


Wiring diagrams

**Dimensions** 



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## Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-5-1

IEC/EN 60947-1

IEC/EN 60947-5-1

UL 60947-1

UL 60947-5-1

Certificates

CCC

cULus

EAC

## ETIM classification

**ETIM 8.0** 

EC000196 -Contactor relay