



Auxiliary  
contactor  
BGF00

Product designation

Product type designation

### Contact characteristics

|                                                      |                                       |                                                   |
|------------------------------------------------------|---------------------------------------|---------------------------------------------------|
| Number of poles                                      | Nr.                                   | 4                                                 |
| Rated insulation voltage $U_i$ IEC/EN                | V                                     | 690                                               |
| Rated impulse withstand voltage $U_{imp}$            | kV                                    | 6                                                 |
| Operational frequency                                | min<br>max                            | Hz<br>Hz<br>25<br>400                             |
| IEC Conventional free air thermal current $I_{th}$   | A                                     | 10                                                |
| Operational current $I_e$                            | AC-1 ( $\leq 40^\circ\text{C}$ )<br>A | 160<br>0                                          |
| Short-time allowable current for 10s (IEC/EN60947-1) | A                                     | 0                                                 |
| Protection fuse                                      | gG (IEC)<br>A                         | 16                                                |
| Tightening torque for terminals                      | min<br>max<br>min<br>max              | Nm<br>Nm<br>lbin<br>lbin<br>0.8<br>1<br>9<br>9    |
| Tightening torque for coil terminal                  | min<br>max<br>min<br>max              | Nm<br>Nm<br>lbin<br>lbin<br>0.8<br>1<br>9<br>9    |
| Max number of wires simultaneously connectable       | Nr.                                   | 2                                                 |
| Conductor section                                    | AWG/Kcmil                             |                                                   |
|                                                      | max                                   | 12                                                |
| Flexible w/o lug conductor section                   | min<br>max                            | mm <sup>2</sup><br>mm <sup>2</sup><br>0.75<br>2.5 |
| Flexible c/w lug conductor section                   | min<br>max                            | mm <sup>2</sup><br>mm <sup>2</sup><br>1.5<br>2.5  |
| Flexible with insulated spade lug conductor section  | min<br>max                            | mm <sup>2</sup><br>mm <sup>2</sup><br>1.5<br>2.5  |
| Power terminal protection according to IEC/EN 60529  |                                       | IP20 when wired                                   |

### Mechanical features

Operating position

normal  
allowable  
Vertical plan  
 $\pm 30^\circ$

|                                                    |                                 |          |          |
|----------------------------------------------------|---------------------------------|----------|----------|
| Fixing                                             | Screw / DIN rail<br>35mm        |          |          |
| Weight                                             | g                               | 178      |          |
| Conductor section                                  | AWG/kcmil conductor section     |          |          |
|                                                    | max                             | 12       |          |
| Auxiliary contact characteristics                  |                                 |          |          |
| Thermal current I <sub>th</sub>                    | A                               | 10       |          |
| IEC/EN 60947-5-1 designation                       | A600 - Q600                     |          |          |
| Operating current AC15                             | 230V                            | A        | 3        |
|                                                    | 400V                            | A        | 1.9      |
|                                                    | 500V                            | A        | 1.4      |
| Operating current DC12                             | 110V                            | A        | 2.9      |
| Operating current DC13                             | 24V                             | A        | 2.9      |
|                                                    | 48V                             | A        | 1.4      |
|                                                    | 60V                             | A        | 1.1      |
|                                                    | 125V                            | A        | 0.3      |
|                                                    | 220V                            | A        | 0.1      |
|                                                    | 600V                            | A        | 0.6      |
| Operations                                         |                                 |          |          |
| Mechanical life                                    | cycles                          | 20000000 |          |
| Safety related data                                |                                 |          |          |
| Performance level B10d according to EN/ISO 13489-1 | mechanical load                 | cycles   | 20000000 |
| Mirror contats according to IEC/EN 60947-4-1       | YES                             |          |          |
| EMC compatibility                                  | yes                             |          |          |
| AC coil operating                                  |                                 |          |          |
| Rated AC voltage at 60Hz                           | V                               | 120      |          |
| AC operating voltage                               | of 60Hz coil powered at 60Hz    |          |          |
|                                                    | pick-up                         |          |          |
|                                                    | min                             | %Us      | 75       |
|                                                    | max                             | %Us      | 115      |
|                                                    | drop-out                        |          |          |
|                                                    | min                             | %Us      | 20       |
|                                                    | max                             | %Us      | 55       |
| AC average coil consumption 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       |
|                                                    | holding                         | VA       | 3        |
|                                                    | of 60Hz coil powered at 60Hz    |          |          |
|                                                    | in-rush                         | VA       | 30       |
|                                                    | holding                         | VA       | 4        |
| Dissipation at holding ≤20°C 50Hz                  | W                               | 0.95     |          |
| Max cycles frequency                               |                                 |          |          |
| Mechanical operation                               | cycles/h                        | 3600     |          |
| Operating times                                    |                                 |          |          |

Average time for Us control  
in AC

|            |     |    |    |
|------------|-----|----|----|
| Closing NO | min | ms | 12 |
|            | max | ms | 21 |
| Opening NO | min | ms | 9  |
|            | max | ms | 18 |
| Closing NC | min | ms | 17 |
|            | max | ms | 26 |
| Opening NC | min | ms | 7  |
|            | max | ms | 17 |

in DC

|            |     |    |    |
|------------|-----|----|----|
| Closing NO | min | ms | 18 |
|            | max | ms | 25 |
| Opening NO | min | ms | 2  |
|            | max | ms | 3  |
| Closing NC | min | ms | 3  |
|            | max | ms | 5  |
| Opening NC | min | ms | 11 |
|            | max | ms | 17 |

#### UL technical data

General USE

Contactor

AC current A 160

Contact rating of auxiliary contacts according to UL A600 - Q600

#### Ambient conditions

Temperature

Operating temperature

min °C -50  
max °C +70

Storage temperature

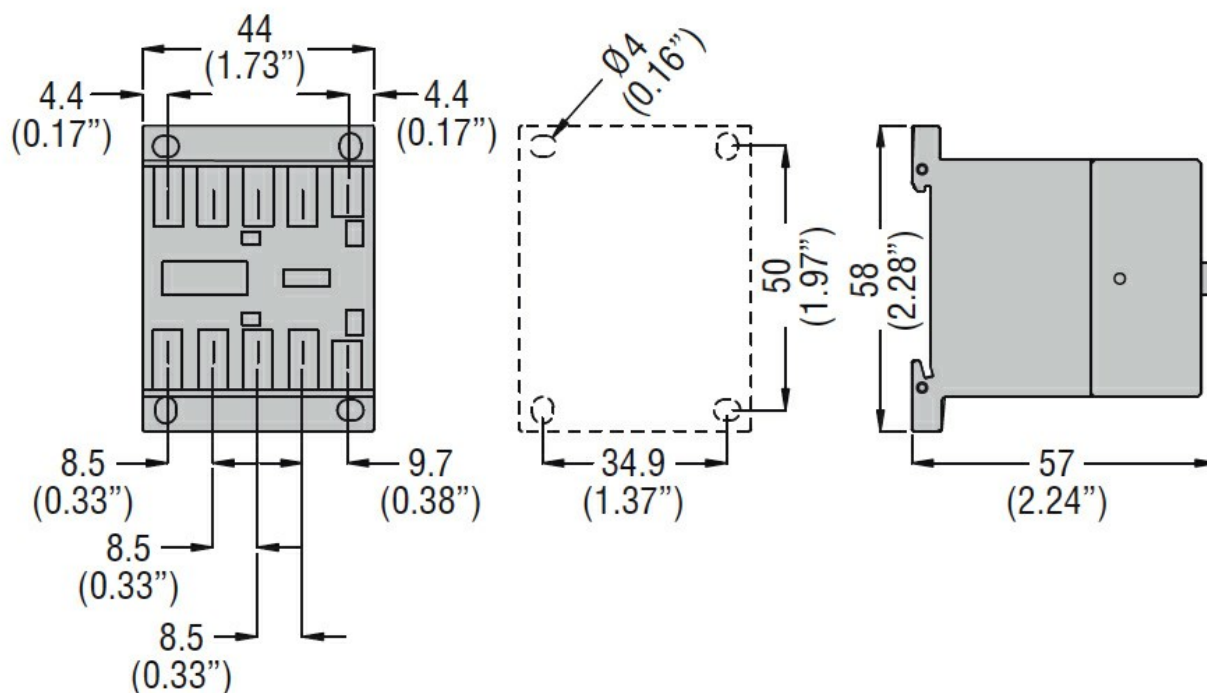
min °C -60  
max °C +80

Max altitude m 3000

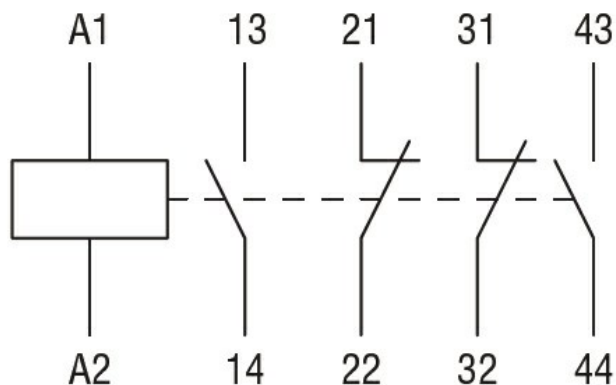
#### Resistance & Protection

Pollution degree 3

#### Dimensions



#### Wiring diagrams



#### 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