



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                                             |
| Short-time allowable current for 10s (IEC/EN60947-1) | A                        | 0                                              |
| Protection fuse                                      | gG (IEC)                 | A<br>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<br>allowable | Vertical plan<br>±30°    |
| Fixing |                     | Screw / DIN rail<br>35mm |
| Weight | g                   | 180                      |

## 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 contacts according to IEC/EN 60947-4-1 YES

EMC compatibility yes

## AC coil operating

Rated AC voltage at 60Hz V 48

## AC operating voltage

of 60Hz coil powered at 60Hz  
pick-up

|     |                 |     |
|-----|-----------------|-----|
| min | %U <sub>s</sub> | 75  |
| max | %U <sub>s</sub> | 115 |

drop-out

|     |                 |    |
|-----|-----------------|----|
| min | %U <sub>s</sub> | 20 |
| max | %U <sub>s</sub> | 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 U<sub>s</sub> control

in AC

Closing NO

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

Contact rating of auxiliary contacts according to UL A600 - Q600

#### Ambient conditions

##### Temperature

##### Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -50 |
| max | °C | +70 |

##### Storage temperature

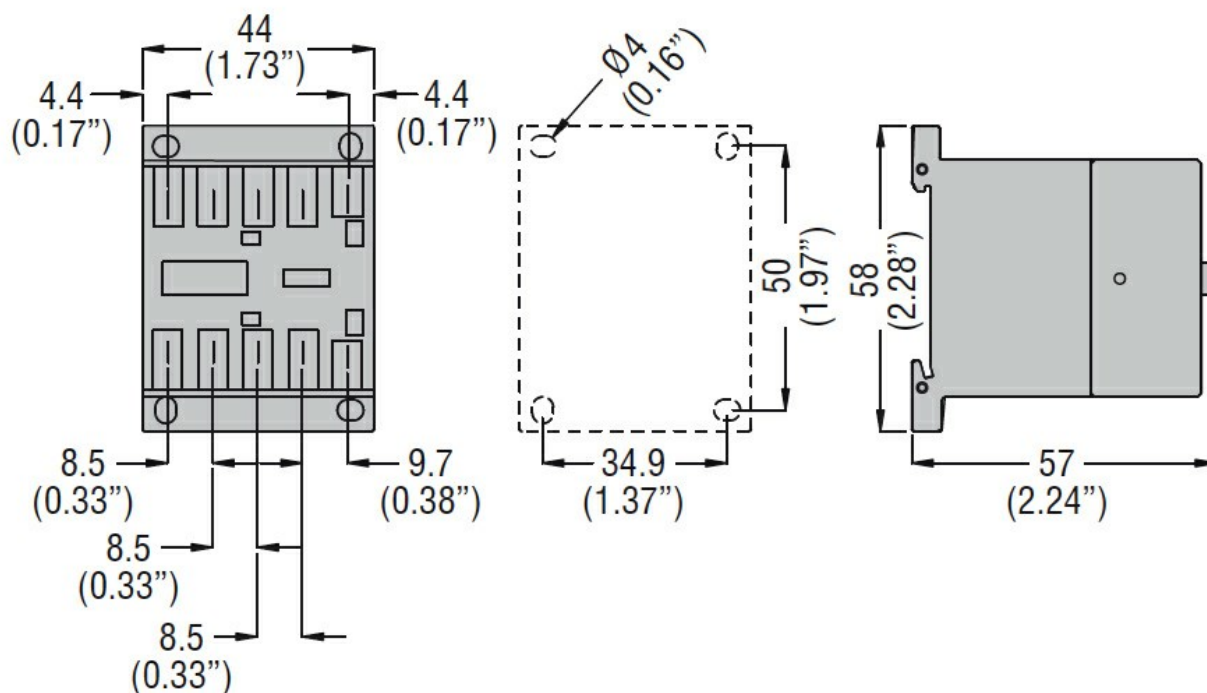
|     |    |     |
|-----|----|-----|
| min | °C | -60 |
| max | °C | +80 |

Max altitude m 3000

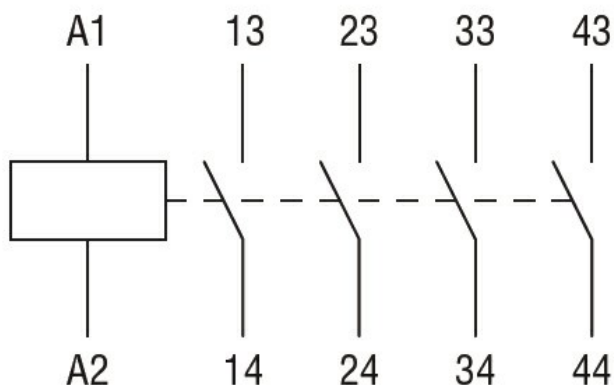
#### Resistance & Protection

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