



|   |                                  |                 |                              |                          |
|---|----------------------------------|-----------------|------------------------------|--------------------------|
| Product designation                                 |                                  |                 |                              | Auxiliary contactor      |
| Product type designation                            |                                  |                 |                              | BF00                     |
| <b>Contact characteristics</b>                      |                                  |                 |                              |                          |
| 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                              | Hz              | 25                           |                          |
|   | max                              | Hz              | 400                          |                          |
| IEC Conventional free air thermal current $I_{th}$  | A                                |                 |                              | 10                       |
| Operational current $I_e$                           | AC-1 ( $\leq 55^\circ\text{C}$ ) |                 | A                            | 0                        |
|   | gG (IEC)                         |                 | A                            | 25                       |
| Tightening torque for terminals                     | min                              | Nm              | 1.5                          |                          |
|   | max                              | Nm              | 1.8                          |                          |
|   | min                              | lbin            | 1.1                          |                          |
|   | max                              | lbin            | 1.5                          |                          |
| Tightening torque for coil terminal                 | min                              | Nm              | 0.8                          |                          |
|   | max                              | Nm              | 1                            |                          |
|   | min                              | lbin            | 0.8                          |                          |
|   | max                              | lbin            | 0.74                         |                          |
| Max number of wires simultaneously connectable      | Nr.                              |                 |                              | 2                        |
| Conductor section                                   | AWG/Kcmil                        |                 |                              |                          |
|   | max                              |                 | 10                           |                          |
| Flexible w/o lug conductor section                  | min                              | mm <sup>2</sup> | 1                            |                          |
|   | max                              | mm <sup>2</sup> | 6                            |                          |
| Flexible c/w lug conductor section                  | min                              | mm <sup>2</sup> | 1                            |                          |
|   | max                              | mm <sup>2</sup> | 4                            |                          |
| Flexible with insulated spade lug conductor section | min                              | mm <sup>2</sup> | 1                            |                          |
|   | max                              | mm <sup>2</sup> | 4                            |                          |
| Power terminal protection according to IEC/EN 60529 |                                  |                 |                              | IP20 when properly wired |
| <b>Mechanical features</b>                          |                                  |                 |                              |                          |
| Operating position                                  | normal allowable                 |                 | Vertical plan $\pm 30^\circ$ |                          |

|  |                             |     |        |                          |
|--|-----------------------------|-----|--------|--------------------------|
| Fixing   |                             |     |        | Screw / DIN rail<br>35mm |
| Weight   | g                           |     |        | 495                      |
| Conductor section                                  | AWG/kcmil conductor section |     |        |                          |
|  | max                         |     |        | 10                       |
| <b>Auxiliary contact characteristics</b>           |                             |     |        |                          |
| Thermal current I <sub>th</sub>                    | A                           |     |        | 10                       |
| IEC/EN 60947-5-1 designation                       |                             |     |        | A600 - P600              |
| Operating current AC15                             |                             |     |        |                          |
|  | 230V                        | A   |        | 3                        |
|  | 400V                        | A   |        | 1.9                      |
|  | 500V                        | A   |        | 1.4                      |
| Operating current DC12                             |                             |     |        |                          |
|  | 110V                        | A   |        | 5.7                      |
| Operating current DC13                             |                             |     |        |                          |
|  | 24V                         | A   |        | 5.7                      |
|  | 48V                         | A   |        | 2.9                      |
|  | 60V                         | A   |        | 2.3                      |
|  | 110V                        | A   |        | 1.25                     |
|  | 125V                        | A   |        | 1.1                      |
|  | 220V                        | A   |        | 0.55                     |
|  | 600V                        | A   |        | 0.2                      |
| <b>Operations</b>                                  |                             |     |        |                          |
| Mechanical life                                    | cycles                      |     |        | 20000000                 |
| <b>Safety related data</b>                         |                             |     |        |                          |
| 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                      |
| <b>DC coil operating</b>                           |                             |     |        |                          |
| DC rated control voltage                           | V                           |     |        | 110                      |
| DC operating voltage                               |                             |     |        |                          |
|  | pick-up                     |     |        |                          |
|  | min                         | %Us |        | 70                       |
|  | max                         | %Us |        | 125                      |
|  | drop-out                    |     |        |                          |
|  | min                         | %Us |        | 10                       |
|  | max                         | %Us |        | 40                       |
| Average coil consumption ≤20°C                     | in-rush                     |     | W      | 5.4                      |
|  | holding                     |     | W      | 5.4                      |
| <b>Max cycles frequency</b>                        |                             |     |        |                          |
| Mechanical operation                               | cycles/h                    |     |        | 3600                     |
| <b>Operating times</b>                             |                             |     |        |                          |
| Average time for U <sub>s</sub> control            |                             |     |        |                          |
|  | in DC                       |     |        |                          |
|  | Closing NO                  |     |        |                          |
|  | min                         | ms  |        | 54                       |
|  | max                         | ms  |        | 66                       |
|  | Opening NO                  |     |        |                          |
|  | min                         | ms  |        | 14                       |
|  | max                         | ms  |        | 17                       |

|            |     |    |    |
|------------|-----|----|----|
| 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 A 10

Contact rating of auxiliary 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

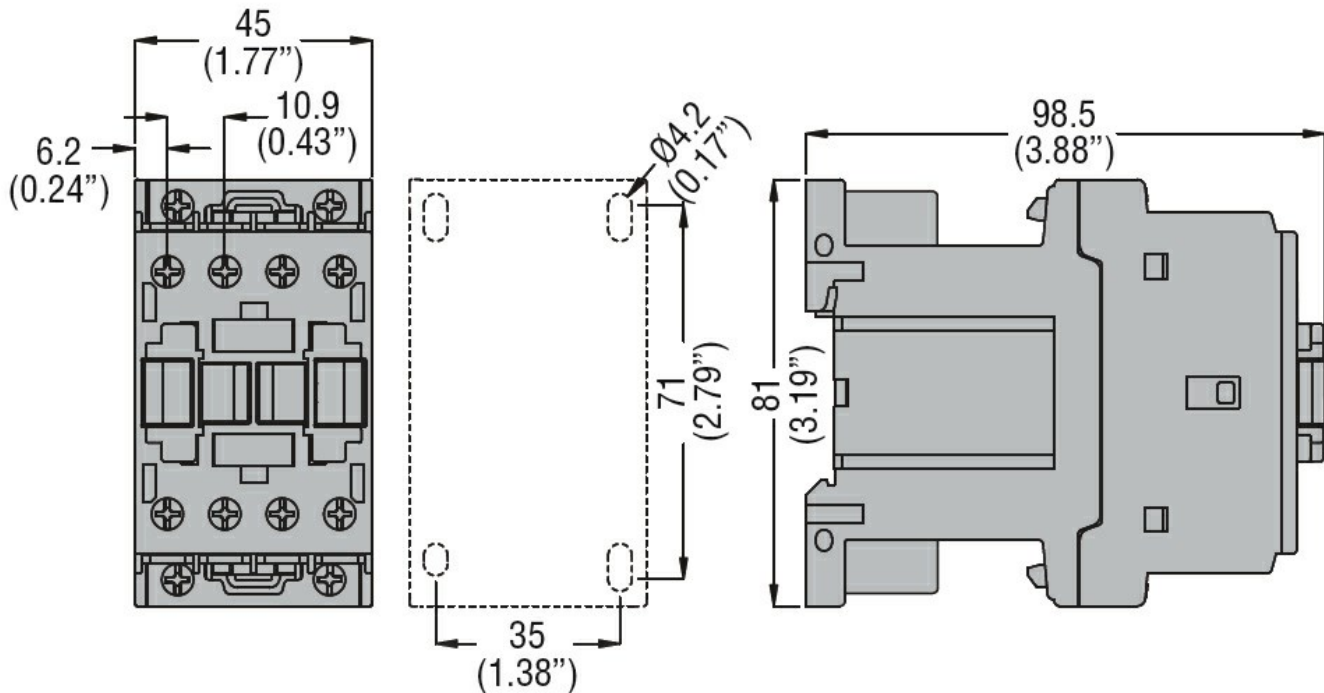
m 3000

**Resistance & Protection**

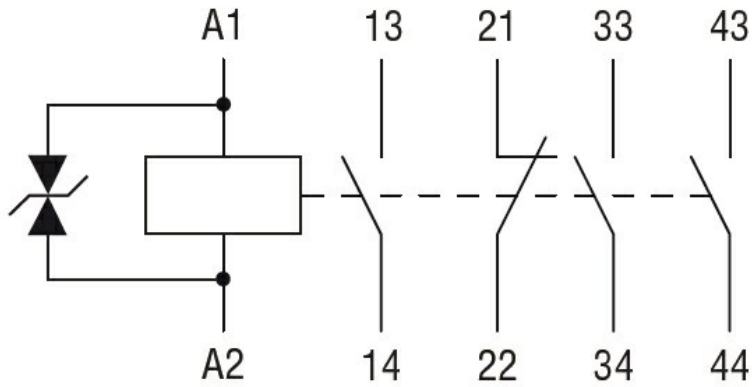
Pollution degree

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