



|   |                                    |                 |                 |                 |
|---|------------------------------------|-----------------|-----------------|-----------------|
| Product designation                                   |                                    |                 |                 | Power contactor |
| Product type designation                              |                                    |                 |                 | BFK94           |
| <b>Contact characteristics</b>                        |                                    |                 |                 |                 |
| Number of poles                                       | Nr.                                |                 |                 | 3               |
| Rated insulation voltage $U_i$ IEC/EN                 | V                                  |                 |                 | 690             |
| Rated impulse withstand voltage $U_{imp}$             | kV                                 |                 |                 | 8               |
| Operational frequency                                 | min                                | Hz              | 25              |                 |
|   | max                                | Hz              | 400             |                 |
| IEC Conventional free air thermal current $I_{th}$    | A                                  |                 |                 | 115             |
| Rated operational power AC-6b ( $T \leq 40^\circ C$ ) | 230V                               | kvar            | 34              |                 |
|   | 400V                               | kvar            | 60              |                 |
|   | 440...480V                         | kvar            | 75              |                 |
|   | 690V                               | kvar            | 80              |                 |
| Short-time allowable current for 10s (IEC/EN60947-1)  | A                                  |                 |                 | 640             |
| Protection fuse                                       | gG (IEC)                           | A               | 125             |                 |
|   |                                    | A               | 950             |                 |
| Making capacity (RMS value)                           |                                    |                 |                 | 950             |
| Breaking capacity at voltage                          | 440V                               | A               | 760             |                 |
|   | 500V                               | A               | 660             |                 |
|   | 690V                               | A               | 475             |                 |
| Resistance per pole (average value)                   |                                    | m $\Omega$      | 0.6             |                 |
| Power dissipation per pole (average value)            | lth                                | W               | 7.9             |                 |
|   |                                    |                 |                 |                 |
| Tightening torque for terminals                       | min                                | Nm              | 4               |                 |
|   | max                                | Nm              | 5               |                 |
|   | min                                | Ibin            | 2.95            |                 |
|   | max                                | Ibin            | 3.69            |                 |
| 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             | 2               |                 |
|   | Flexible w/o lug conductor section | min             | mm <sup>2</sup> | 1.5             |
|   |                                    | max             | mm <sup>2</sup> | 35              |
| Flexible c/w lug conductor section                    | min                                | mm <sup>2</sup> | 1.5             |                 |

|   |                                      |                            |                 |                       |
|---|--------------------------------------|----------------------------|-----------------|-----------------------|
|   |                                      | max                        | mm <sup>2</sup> | 35                    |
| Power terminal protection according to IEC/EN 60529 |                                      |                            |                 | IP20 front            |
| <b>Mechanical features</b>                          |                                      |                            |                 |                       |
| Operating position                                  |                                      | normal allowable           |                 | Vertical plan ±30°    |
| Fixing  |                                      |                            |                 | Screw / DIN rail 35mm |
| Weight  |                                      |                            | g               | 1090                  |
| Conductor section                                   | AWG/kcmil conductor section          | max                        |                 | 2                     |
| <b>Operations</b>                                   |                                      |                            |                 |                       |
| Mechanical life                                     |                                      |                            | cycles          | 15000000              |
| Electrical life                                     |                                      |                            | cycles          | 400000                |
| <b>Safety related data</b>                          |                                      |                            |                 |                       |
| Performance level B10d according to EN/ISO 13489-1  |                                      | rated load mechanical load | cycles cycles   | 400000 15000000       |
| EMC compatibility                                   |                                      |                            |                 | yes                   |
| <b>AC coil operating</b>                            |                                      |                            |                 |                       |
| Rated AC voltage at 60Hz                            |                                      |                            | V               | 24                    |
| AC operating voltage                                | of 60Hz coil powered at 60Hz pick-up | min                        | %Us             | 80                    |
|   |                                      | max                        | %Us             | 110                   |
|   | drop-out                             | min                        | %Us             | 20                    |
|   |                                      | max                        | %Us             | 55                    |
| AC average coil consumption at 20°C                 | of 60Hz coil powered at 60Hz         | in-rush holding            | VA VA           | 210 15                |
| Dissipation at holding ≤20°C 50Hz                   |                                      |                            | W               | 5                     |
| <b>Max cycles frequency</b>                         |                                      |                            |                 |                       |
| Mechanical operation                                |                                      |                            | cycles/h        | 3600                  |
| <b>Operating times</b>                              |                                      |                            |                 |                       |
| Average time for Us control                         | in AC                                |                            |                 |                       |
|   | Closing NO                           | min                        | ms              | 12                    |
|   |                                      | max                        | ms              | 28                    |
|   | Opening NO                           | min                        | ms              | 8                     |
|   |                                      | max                        | ms              | 22                    |
|   | in DC                                |                            |                 |                       |
|   | Closing NO                           | min                        | ms              | 40                    |
|   |                                      | max                        | ms              | 85                    |
|   | Opening NO                           | min                        | ms              | 20                    |
|   |                                      | max                        | ms              | 55                    |
| <b>UL technical data</b>                            |                                      |                            |                 |                       |

General USE

Contactor

AC current A 115

Ambient conditions

Temperature

Operating temperature

min °C -50  
max °C 70

Storage temperature

min °C -60  
max °C 80

Max altitude

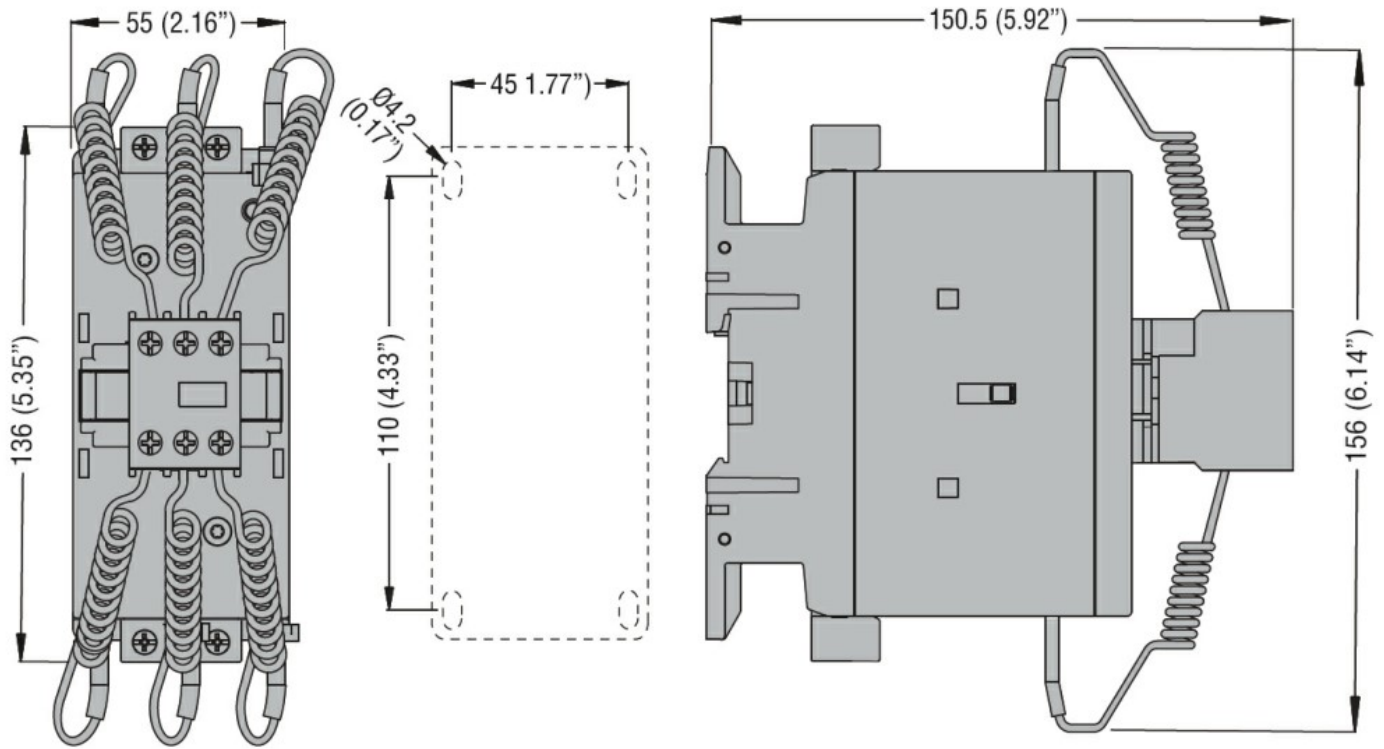
m 3000

Resistance & Protection

Pollution degree

3

Dimensions



Wiring diagrams



**Certifications and compliance**

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

**ETIM classification**

ETIM 8.0

EC001079 -  
 Capacitor  
 contactor