



|   |                                    |                 |                 |                 |
|---|------------------------------------|-----------------|-----------------|-----------------|
| Product designation                                   |                                    |                 |                 | Power contactor |
| Product type designation                              |                                    |                 |                 | BFK32           |
| <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                                 |                 |                 | 6               |
| Operational frequency                                 | min                                | Hz              | 25              |                 |
|   | max                                | Hz              | 400             |                 |
| IEC Conventional free air thermal current $I_{th}$    | A                                  |                 |                 | 56              |
| Rated operational power AC-6b ( $T \leq 40^\circ C$ ) | 230V                               | kvar            | 14              |                 |
|   | 400V                               | kvar            | 25              |                 |
|   | 440...480V                         | kvar            | 27.5            |                 |
|   | 690V                               | kvar            | 30              |                 |
| Short-time allowable current for 10s (IEC/EN60947-1)  | A                                  |                 |                 | 320             |
| Protection fuse                                       | gG (IEC)                           | A               | 63              |                 |
|   |                                    | A               | 320             |                 |
| Making capacity (RMS value)                           |                                    | A               | 320             |                 |
| Breaking capacity at voltage                          | 440V                               | A               | 256             |                 |
|   | 500V                               | A               | 240             |                 |
|   | 690V                               | A               | 192             |                 |
| Resistance per pole (average value)                   |                                    | m $\Omega$      | 2               |                 |
| Power dissipation per pole (average value)            |                                    | lth             | W               | 6               |
|   |                                    | min             | Nm              | 2.5             |
| Tightening torque for terminals                       |                                    | max             | Nm              | 3               |
|   |                                    | min             | Ibin            | 1.8             |
|   |                                    | max             | Ibin            | 2.2             |
|   |                                    | min             | Nm              | 0.8             |
| Tightening torque for coil terminal                   |                                    | max             | Nm              | 1               |
|   |                                    | min             | Ibin            | 0.59            |
|   |                                    | max             | Ibin            | 0.74            |
|   |                                    | min             | Nm              | 1               |
| Max number of wires simultaneously connectable        |                                    | Nr.             | 2               |                 |
| Conductor section                                     | AWG/Kcmil                          | max             | 6               |                 |
|   | Flexible w/o lug conductor section | min             | mm <sup>2</sup> | 2.5             |
|   |                                    | max             | mm <sup>2</sup> | 16              |
| Flexible c/w lug conductor section                    | min                                | mm <sup>2</sup> | 1               |                 |

|   |  |                  |                 |                          |
|---|--|------------------|-----------------|--------------------------|
|   |  | max              | mm <sup>2</sup> | 10                       |
| Flexible with insulated spade lug conductor section |  |                  |                 |                          |
|   |  | min              | mm <sup>2</sup> | 1                        |
|   |  | max              | mm <sup>2</sup> | 10                       |
| Power terminal protection according to IEC/EN 60529 |  |                  |                 | IP20 when properly wired |
| <b>Mechanical features</b>                          |  |                  |                 |                          |
| Operating position                                  |  |                  |                 |                          |
|   |  | normal allowable |                 | Vertical plan ±30°       |
| Fixing  |  |                  |                 | Screw / DIN rail 35mm    |
| Weight  |  |                  | g               | 400                      |
| Conductor section                                   |  |                  |                 |                          |
| AWG/kcmil conductor section                         |  |                  |                 |                          |
|   |  | max              |                 | 6                        |
| <b>Operations</b>                                   |  |                  |                 |                          |
| Mechanical life                                     |  |                  | cycles          | 20000000                 |
| Electrical life                                     |  |                  | cycles          | 1600000                  |
| <b>Safety related data</b>                          |  |                  |                 |                          |
| Performance level B10d according to EN/ISO 13489-1  |  |                  |                 |                          |
|   |  | rated load       | cycles          | 400000                   |
|   |  | mechanical load  | cycles          | 20000000                 |
| EMC compatibility                                   |  |                  |                 | yes                      |
| <b>AC coil operating</b>                            |  |                  |                 |                          |
| Rated AC voltage at 60Hz                            |  |                  | V               | 575                      |
| 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          | VA              | 75                       |
|   |  | holding          | VA              | 9                        |
| Dissipation at holding ≤20°C 50Hz                   |  |                  | W               | 2.5                      |
| <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              | 8                        |
|   |  | max              | ms              | 24                       |
| Opening NO  |  |                  |                 |                          |
|   |  | min              | ms              | 5                        |
|   |  | max              | ms              | 15                       |
| Closing NC  |  |                  |                 |                          |
|   |  | min              | ms              | 9                        |
|   |  | max              | ms              | 20                       |
| <b>UL technical data</b>                            |  |                  |                 |                          |

General USE

Contactor

AC current A 56

**Ambient conditions**

Temperature

Operating temperature

min °C -50  
max °C 70

Storage temperature

min °C -60  
max °C 80

Max altitude

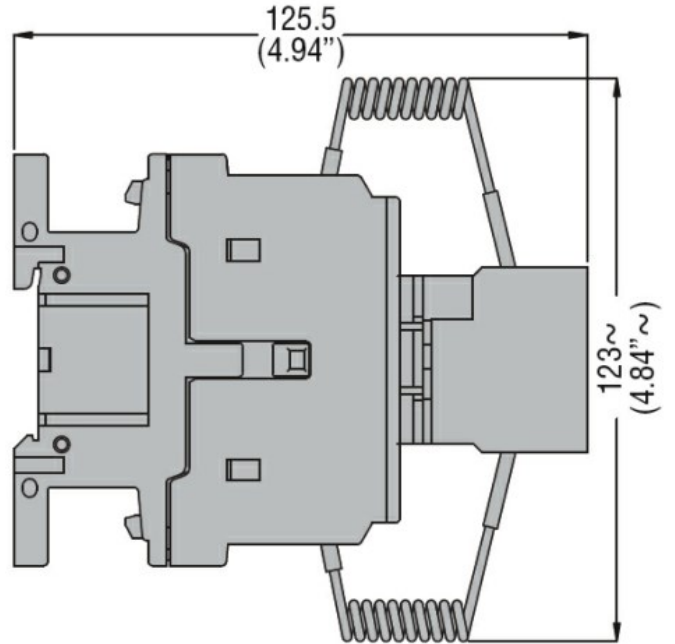
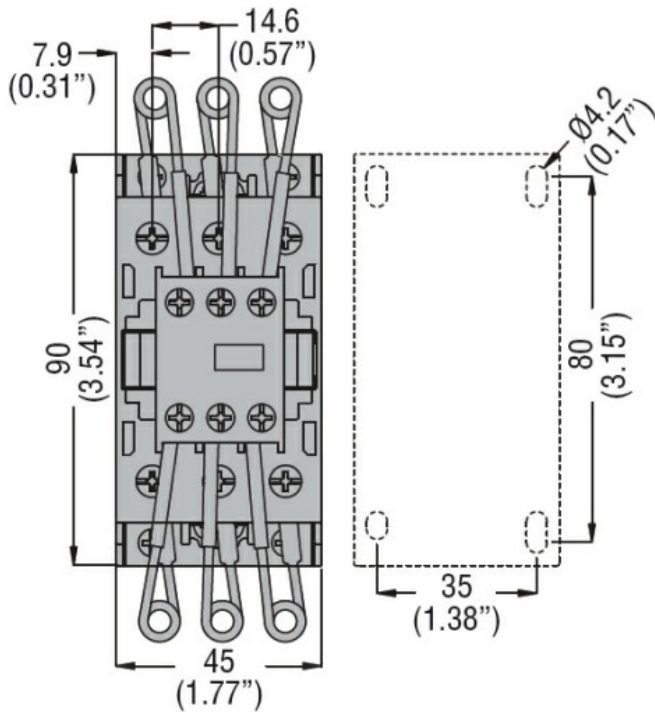
m 3000

**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

Certificates

- CCC
- cULus
- EAC

**ETIM classification**

ETIM 8.0

EC001079 -  
Capacitor  
contactor