



|                                                      |            |      |                 |
|------------------------------------------------------|------------|------|-----------------|
| Product designation                                  |            |      | Power contactor |
| Product type designation                             |            |      | BFK32           |
| Contact characteristics                              |            |      |                 |
| Number of poles                                      | Nr.        | 3    |                 |
| Rated insulation voltage Ui IEC/EN                   | V          | 690  |                 |
| Rated impulse withstand voltage Uimp                 | kV         | 6    |                 |
| Operational frequency                                | min        | Hz   | 25              |
|                                                      | max        | Hz   | 400             |
| IEC Conventional free air thermal current Ith        | A          | 56   |                 |
| Rated operational power AC-6b (T≤40°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)                  | mΩ         | 2    |                 |
| Power dissipation per pole (average value)           | Ith        | W    | 6               |
|                                                      |            |      |                 |
| Tightening torque for terminals                      | min        | Nm   | 2.5             |
|                                                      | max        | Nm   | 3               |
|                                                      | min        | Ibin | 1.8             |
|                                                      | max        | Ibin | 2.2             |
| Tightening torque for coil terminal                  | min        | Nm   | 0.8             |
|                                                      | max        | Nm   | 1               |
|                                                      | min        | Ibin | 0.59            |
|                                                      | max        | Ibin | 0.74            |
| Max number of wires simultaneously connectable       | Nr.        | 2    |                 |
| Conductor section                                    | AWG/Kcmil  |      |                 |
|                                                      | max        |      | 6               |
| Flexible w/o lug conductor section                   | min        | mm²  | 2.5             |
|                                                      | max        | mm²  | 16              |
| Flexible c/w lug conductor section                   | min        | mm²  | 1               |
|                                                      |            |      |                 |

|                                                     |                                                     |                  |          |                          |
|-----------------------------------------------------|-----------------------------------------------------|------------------|----------|--------------------------|
|                                                     |                                                     | max              | mm²      | 10                       |
|                                                     | Flexible with insulated spade lug conductor section |                  |          |                          |
|                                                     |                                                     | min              | mm²      | 1                        |
|                                                     |                                                     | max              | mm²      | 10                       |
| Power terminal protection according to IEC/EN 60529 |                                                     |                  |          | IP20 when properly wired |
| Mechanical features                                 |                                                     |                  |          |                          |
| Operating position                                  |                                                     | normal allowable |          | Vertical plan ±30°       |
| Fixing                                              |                                                     |                  |          | Screw / DIN rail 35mm    |
| Weight                                              |                                                     |                  | g        | 400                      |
| Operations                                          |                                                     |                  |          |                          |
| Mechanical life                                     |                                                     |                  | cycles   | 20000000                 |
| Electrical life                                     |                                                     |                  | cycles   | 1600000                  |
| Safety related data                                 |                                                     |                  |          |                          |
| Performance level B10d according to EN/ISO 13489-1  |                                                     |                  |          |                          |
|                                                     |                                                     | rated load       | cycles   | 1600000                  |
|                                                     |                                                     | mechanical load  | cycles   | 20000000                 |
| 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              | %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                      |
| Max cycles frequency                                |                                                     |                  |          |                          |
| Mechanical operation                                |                                                     |                  | cycles/h | 3600                     |
| Operating times                                     |                                                     |                  |          |                          |
| 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                       |
| UL technical data                                   |                                                     |                  |          |                          |
| Rated operational voltage AC (UL)                   |                                                     |                  | V        | 600                      |
| 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  |

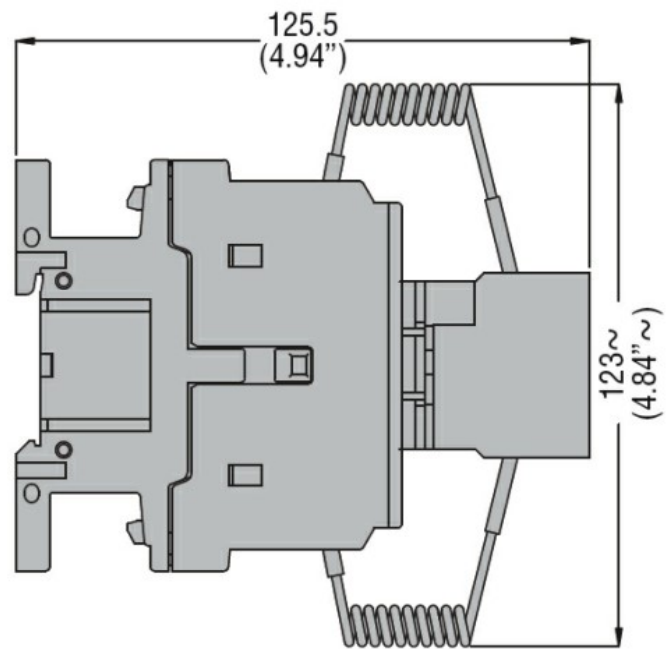
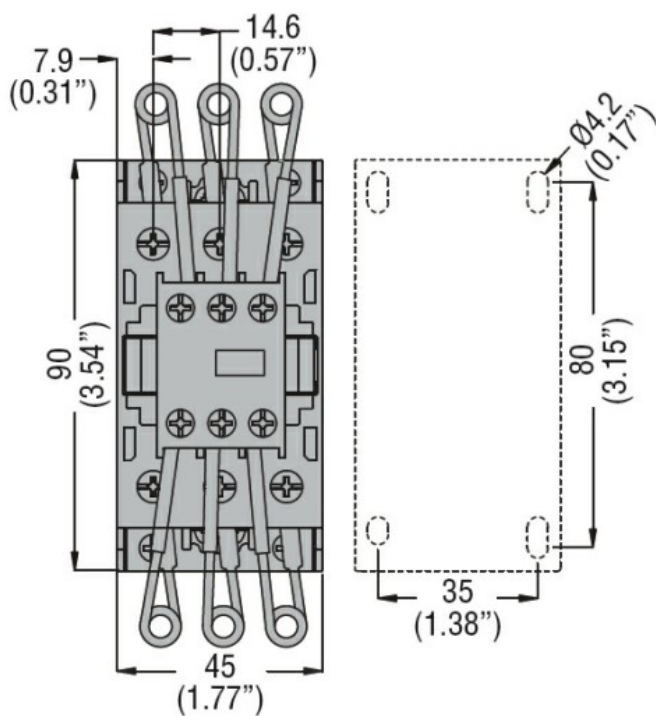
|              |   |      |
|--------------|---|------|
| Max altitude | m | 3000 |
|--------------|---|------|

**Resistance & Protection**

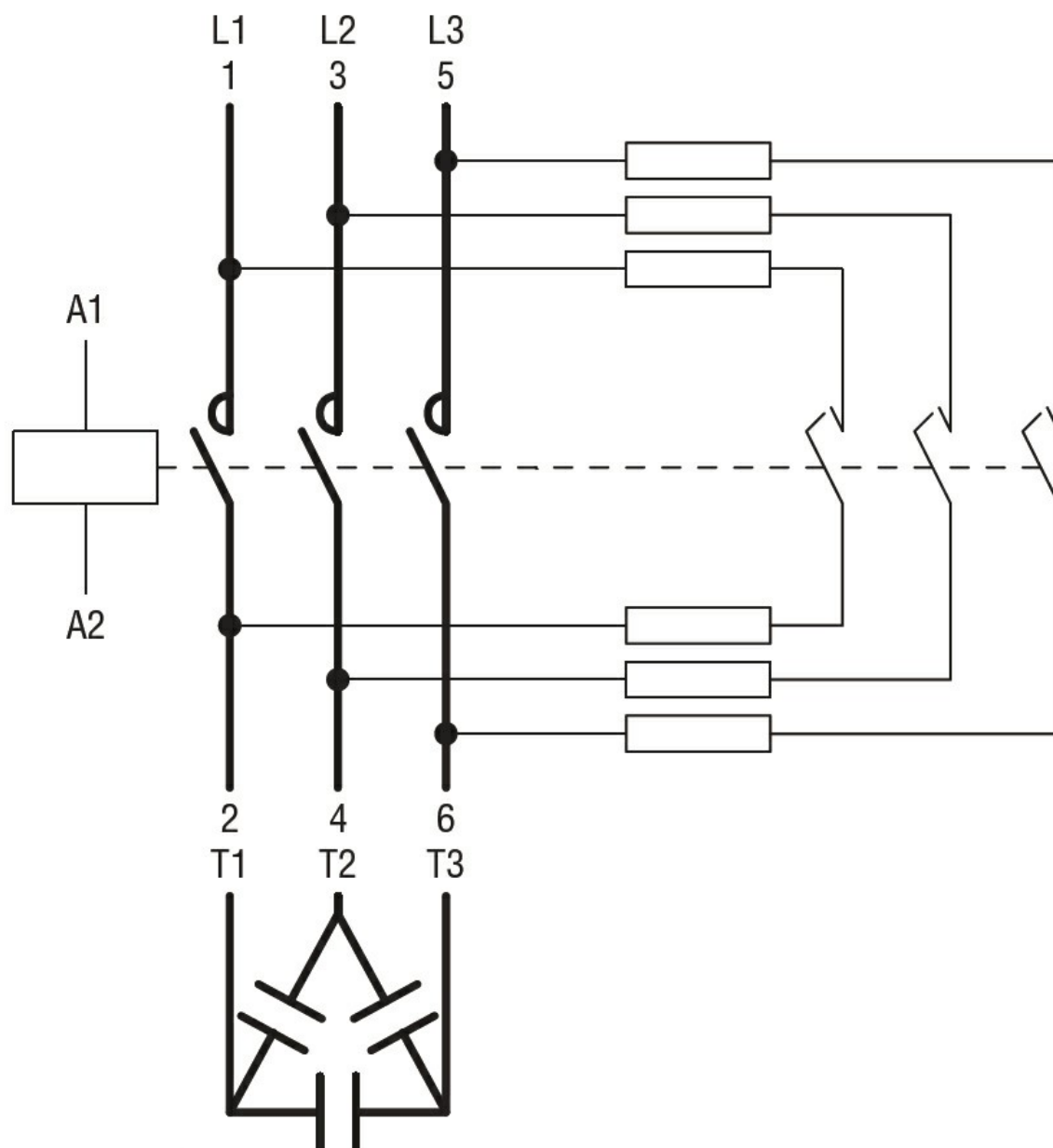
Pollution degree

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

$$\frac{\text{CCC}}{\text{cULus}} = \text{EAC}$$

## ETIM classification

ETIM 8.0

EC001079 -  
Capacitor  
contactor