



Product designation

Power contactor

Product type designation

BFK94

**Contact characteristics**

|                                                      |            |      |      |
|------------------------------------------------------|------------|------|------|
| Number of poles                                      | Nr.        | 3    |      |
| Rated insulation voltage Ui IEC/EN                   | V          | 690  |      |
| Rated impulse withstand voltage Uimp                 | kV         | 8    |      |
| Operational frequency                                | min        | Hz   | 25   |
|                                                      | max        | Hz   | 400  |
| IEC Conventional free air thermal current Ith        | A          | 115  |      |
| Rated operational power AC-6b (T≤40°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  |
| Making capacity (RMS value)                          | A          | 950  |      |
| Breaking capacity at voltage                         | 440V       | A    | 760  |
|                                                      | 500V       | A    | 660  |
|                                                      | 690V       | A    | 475  |
| Resistance per pole (average value)                  | mΩ         | 0.6  |      |
| Power dissipation per pole (average value)           | Ith        | 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        | mm²  | 1.5  |
|                                                      | max        | mm²  | 35   |
| Flexible c/w lug conductor section                   | min        | mm²  | 1.5  |

|                                                     |  |                                 |                       |            |
|-----------------------------------------------------|--|---------------------------------|-----------------------|------------|
|                                                     |  | max                             | mm²                   | 35         |
| Power terminal protection according to IEC/EN 60529 |  |                                 |                       | IP20 front |
| Mechanical features                                 |  |                                 |                       |            |
| Operating position                                  |  | normal allowable                | Vertical plan ±30°    |            |
| Fixing                                              |  |                                 | Screw / DIN rail 35mm |            |
| Weight                                              |  |                                 | g                     | 1090       |
| Conductor section                                   |  | AWG/kcmil conductor section     |                       |            |
|                                                     |  | max                             | 2                     |            |
| Operations                                          |  |                                 |                       |            |
| Mechanical life                                     |  |                                 | cycles                | 15000000   |
| Electrical life                                     |  |                                 | cycles                | 400000     |
| Safety related data                                 |  |                                 |                       |            |
| Performance level B10d according to EN/ISO 13489-1  |  | rated load mechanical load      | cycles                | 400000     |
|                                                     |  |                                 | cycles                | 15000000   |
| EMC compatibility                                   |  |                                 | yes                   |            |
| AC coil operating                                   |  |                                 |                       |            |
| Rated AC voltage at 50/60Hz                         |  |                                 | V                     | 230        |
| AC operating voltage                                |  | of 50/60Hz coil powered at 50Hz |                       |            |
|                                                     |  | pick-up                         |                       |            |
|                                                     |  | min                             | %Us                   | 80         |
|                                                     |  | max                             | %Us                   | 110        |
|                                                     |  | drop-out                        |                       |            |
|                                                     |  | min                             | %Us                   | 20         |
|                                                     |  | max                             | %Us                   | 55         |
|                                                     |  | of 50/60Hz coil powered at 60Hz |                       |            |
|                                                     |  | pick-up                         |                       |            |
|                                                     |  | min                             | %Us                   | 85         |
|                                                     |  | max                             | %Us                   | 110        |
|                                                     |  | drop-out                        |                       |            |
|                                                     |  | min                             | %Us                   | 20         |
|                                                     |  | max                             | %Us                   | 55         |
| AC average coil consumption at 20°C                 |  | of 50/60Hz coil powered at 50Hz |                       |            |
|                                                     |  | in-rush holding                 | VA                    | 210        |
|                                                     |  |                                 | VA                    | 15         |
|                                                     |  | of 50/60Hz coil powered at 60Hz |                       |            |
|                                                     |  | in-rush holding                 | VA                    | 195        |
|                                                     |  |                                 | VA                    | 13         |
|                                                     |  | of 60Hz coil powered at 60Hz    |                       |            |
|                                                     |  | in-rush holding                 | VA                    | 210        |
|                                                     |  |                                 | VA                    | 15         |
| Dissipation at holding ≤20°C 50Hz                   |  |                                 | W                     | 5          |
| Max cycles frequency                                |  |                                 |                       |            |
| Mechanical operation                                |  |                                 | cycles/h              | 3600       |
| Operating times                                     |  |                                 |                       |            |
| Average time for Us control in AC                   |  | Closing NO                      |                       |            |

CONTACTOR PARA CORRECCIÓN DEL FACTOR DE POTENCIA CON CIRCUITO DE CONTROL EN AC, TIPO BFK (CON RESISTENCIAS LIMITADORAS), POTENCIA NOMINAL MÁXIMA (IEC) 400V = 60KVAR, BOBINA 230VAC 50/60HZ

|       |            |     |    |    |
|-------|------------|-----|----|----|
|       | Opening NO | min | ms | 12 |
|       |            | max | ms | 28 |
|       |            | min | ms | 8  |
|       |            | max | ms | 22 |
| in DC |            |     |    |    |
|       | Closing NO | min | ms | 40 |
|       |            | max | ms | 85 |
|       | Opening NO | min | ms | 20 |
|       |            | max | ms | 55 |

#### UL technical data

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

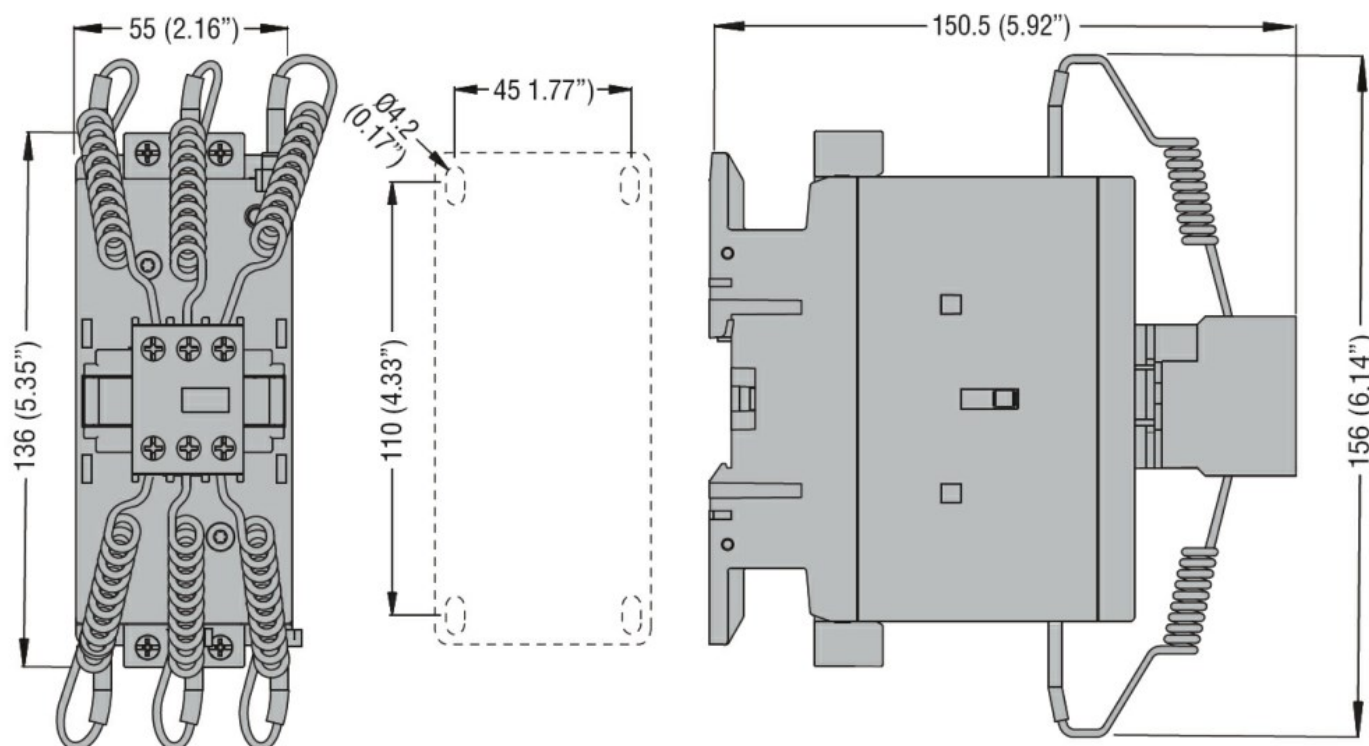
m 3000

#### Resistance & Protection

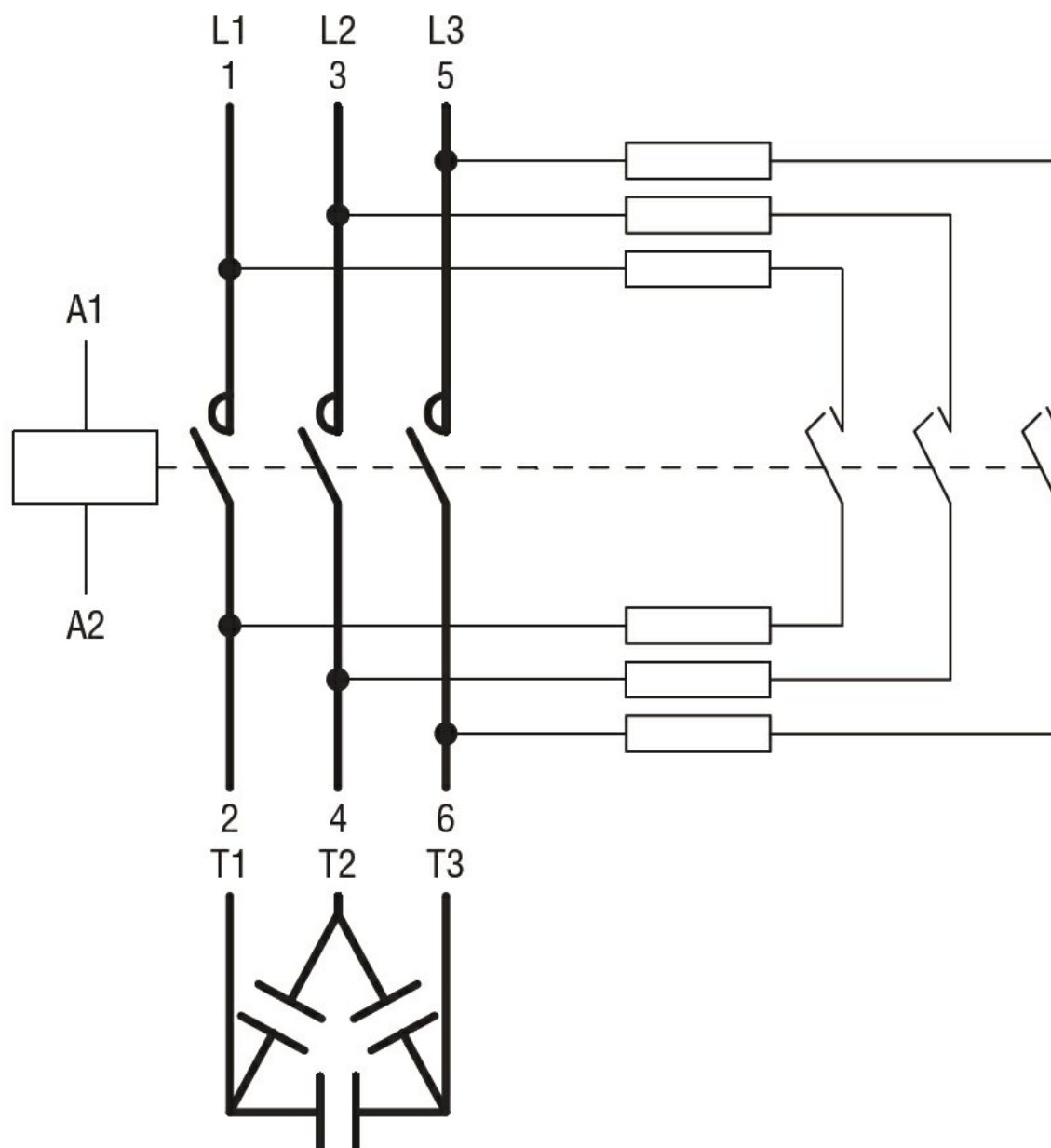
Pollution degree

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