



Product designation  
Product type designation

Power contactor  
BFK94

### Contact characteristics

|                                                       |                                    |                                                      |
|-------------------------------------------------------|------------------------------------|------------------------------------------------------|
| 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<br>max                         | Hz<br>Hz<br>25<br>400                                |
| IEC Conventional free air thermal current $I_{th}$    | A                                  | 115                                                  |
| Rated operational power AC-6b ( $T \leq 40^\circ C$ ) | 230V<br>400V<br>440...480V<br>690V | kvar<br>kvar<br>kvar<br>kvar<br>34<br>60<br>75<br>80 |
| Short-time allowable current for 10s (IEC/EN60947-1)  | A                                  | 640                                                  |
| Protection fuse                                       | gG (IEC)                           | A<br>125                                             |
| Making capacity (RMS value)                           | A                                  | 950                                                  |
| Breaking capacity at voltage                          | 440V<br>500V<br>690V               | A<br>A<br>A<br>760<br>660<br>475                     |
| Resistance per pole (average value)                   | m $\Omega$                         | 0.6                                                  |
| Power dissipation per pole (average value)            | $I_{th}$<br>W                      | 7.9                                                  |
| Tightening torque for terminals                       | min<br>max<br>min<br>max           | Nm<br>Nm<br>lbin<br>lbin<br>4<br>5<br>2.95<br>3.69   |
| Tightening torque for coil terminal                   | min<br>max<br>min<br>max           | Nm<br>Nm<br>lbin<br>lbin<br>0.8<br>1<br>0.8<br>0.74  |
| Max number of wires simultaneously connectable        | Nr.                                | 2                                                    |
| Conductor section                                     | AWG/Kcmil                          |                                                      |
|                                                       | max                                | 2                                                    |
| Flexible w/o lug conductor section                    | min<br>max                         | mm <sup>2</sup><br>mm <sup>2</sup><br>1.5<br>35      |
| Flexible c/w lug conductor section                    | min                                | mm <sup>2</sup><br>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<br>±30°    |
| Fixing                                              |                  |                 | Screw / DIN rail<br>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       | cycles          | 400000                   |
|                                                     | mechanical load  | cycles          | 15000000                 |
| EMC compatibility                                   |                  |                 | yes                      |
| <b>AC coil operating</b>                            |                  |                 |                          |
| Rated AC voltage at 60Hz                            |                  | V               | 120                      |
| 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              | 210                      |
|                                                     | holding          | VA              | 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

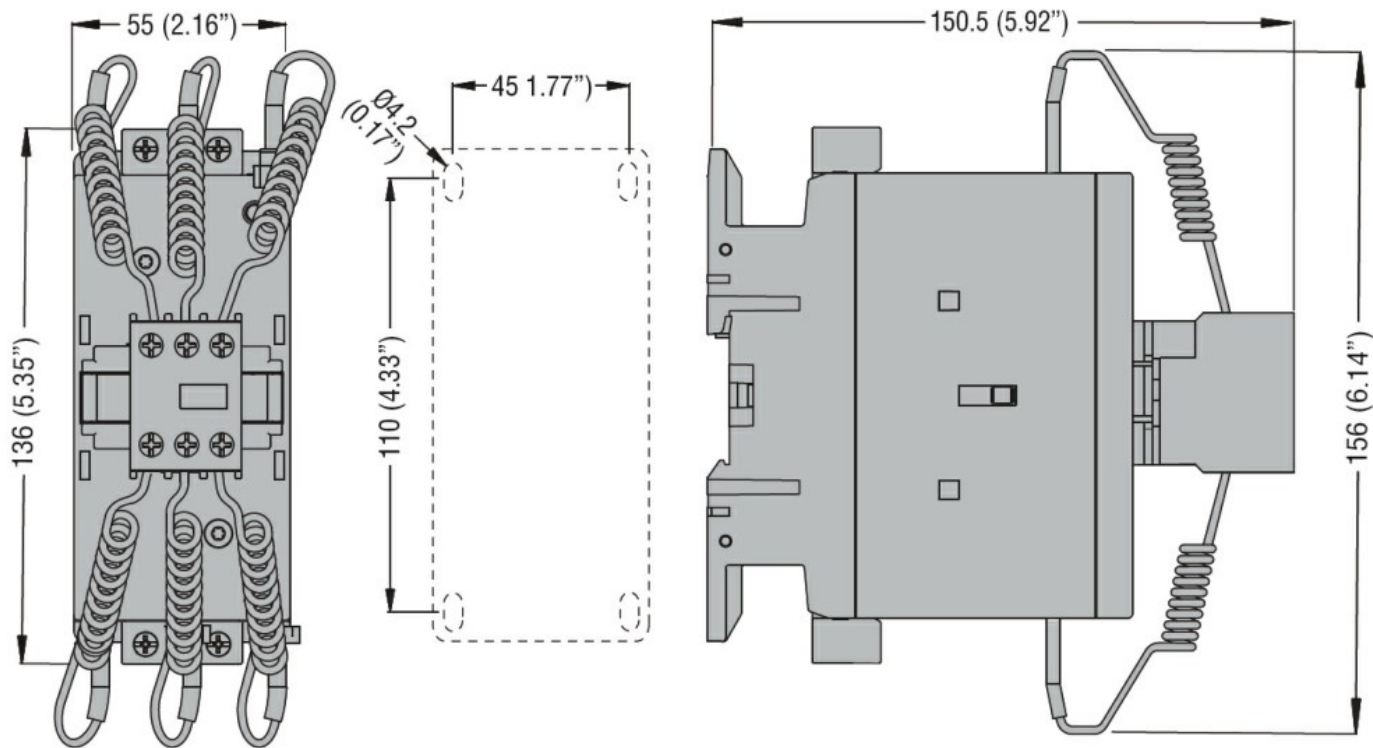
m      3000

Resistance & Protection

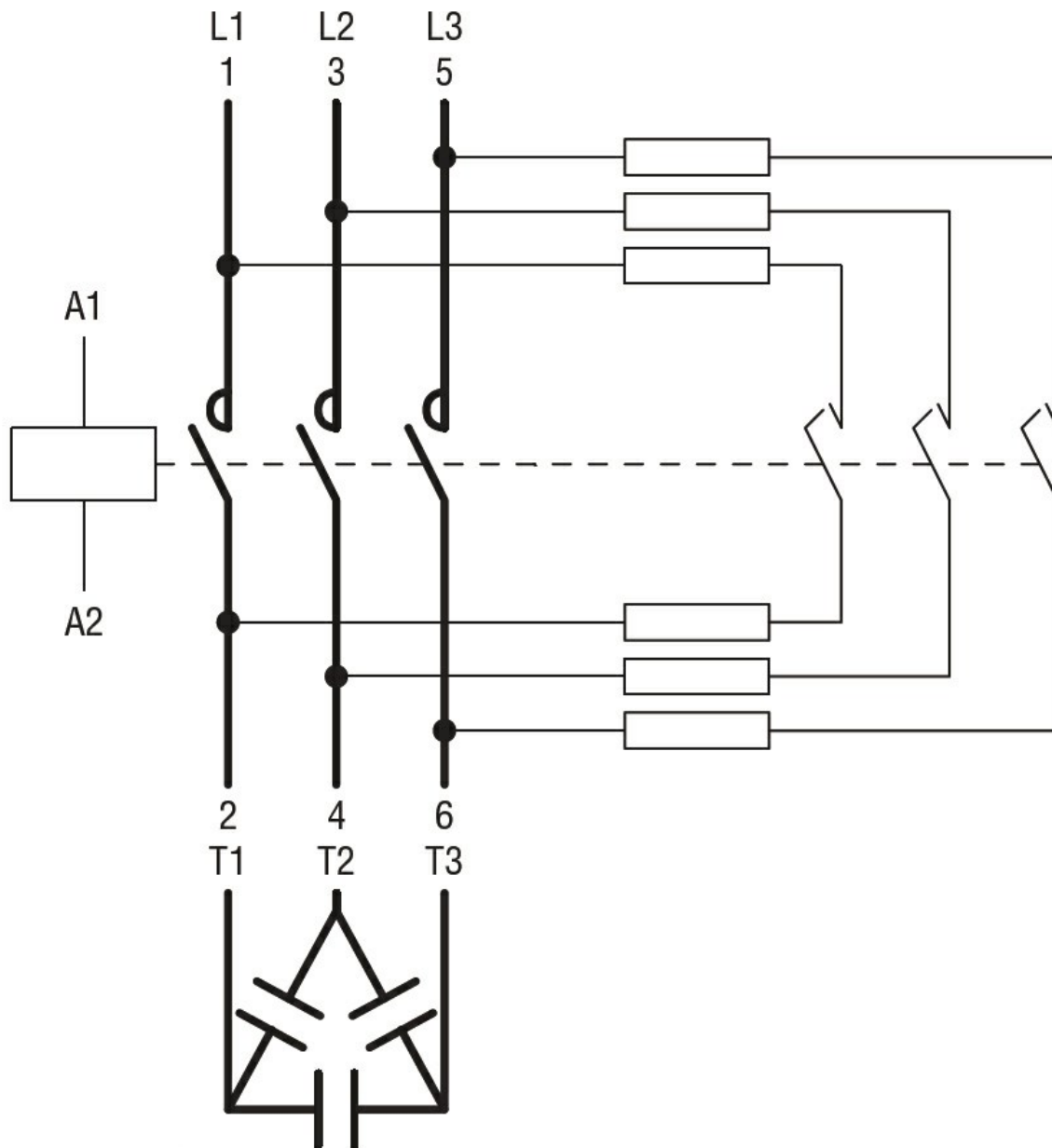
Pollution degree

3

Dimensions



Wiring diagrams



## Certifications and compliance

### Compliance

IEC/EN 60947-1  
IEC/EN 60947-4-1

## ETIM classification

ETIM 8.0

EC001079 -  
Capacitor  
contactor