



|                                                      |            |      |                 |
|------------------------------------------------------|------------|------|-----------------|
| Product designation                                  |            |      | Power contactor |
| Product type designation                             |            |      | BFK150          |
| 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    | 165             |
| Rated operational power AC-6b (T≤40°C)               |            |      |                 |
|                                                      | 230V       | kvar | 50              |
|                                                      | 400V       | kvar | 100             |
|                                                      | 440...480V | kvar | 115             |
|                                                      | 690V       | kvar | 150             |
| Short-time allowable current for 10s (IEC/EN60947-1) |            | A    | 1200            |
| Protection fuse                                      |            |      |                 |
|                                                      | gG (IEC)   | A    | 160             |
| Making capacity (RMS value)                          |            | A    | 1500            |
| Breaking capacity at voltage                         |            |      |                 |
|                                                      | 440V       | A    | 1200            |
|                                                      | 500V       | A    | 1025            |
|                                                      | 690V       | A    | 905             |
| Resistance per pole (average value)                  |            | mΩ   | 0.45            |
| Power dissipation per pole (average value)           |            |      |                 |
|                                                      | Ith        | W    | 12              |
| Tightening torque for terminals                      |            |      |                 |
|                                                      | min        | Nm   | 6               |
|                                                      | max        | Nm   | 7               |
|                                                      | min        | Ibin | 4.4             |
|                                                      | max        | Ibin | 5.2             |
| 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        |      | 2/0             |
| Flexible w/o lug conductor section                   |            |      |                 |
|                                                      | min        | mm²  | 1.5             |
|                                                      | max        | mm²  | 70              |
| Flexible c/w lug conductor section                   |            |      |                 |
|                                                      | min        | mm²  | 1.5             |

|                                                                     |  |                               |                  |                          |
|---------------------------------------------------------------------|--|-------------------------------|------------------|--------------------------|
|                                                                     |  | max                           | mm²              | 70                       |
| Power terminal protection according to IEC/EN 60529                 |  |                               |                  | IP20 front               |
| Mechanical features                                                 |  |                               |                  |                          |
| Operating position                                                  |  | normal<br>allowable           |                  | Vertical plan<br>±30°    |
| Fixing                                                              |  |                               |                  | Screw / DIN rail<br>35mm |
| Weight                                                              |  |                               | g                | 2095                     |
| Operations                                                          |  |                               |                  |                          |
| Mechanical life                                                     |  |                               | cycles           | 15000000                 |
| Electrical life                                                     |  |                               | cycles           | 800000                   |
| Safety related data                                                 |  |                               |                  |                          |
| Performance level B10d according to EN/ISO 13489-1                  |  |                               |                  |                          |
|                                                                     |  | rated load<br>mechanical load | cycles<br>cycles | 800000<br>15000000       |
| EMC compatibility                                                   |  |                               |                  | yes                      |
| AC coil operating                                                   |  |                               |                  |                          |
| Rated AC voltage at 60Hz                                            |  |                               | V                | 575                      |
| AC operating voltage                                                |  |                               |                  |                          |
| of 60Hz coil powered at 60Hz<br>pick-up                             |  | min<br>max                    | %Us<br>%Us       | 80<br>110                |
| drop-out                                                            |  | min<br>max                    | %Us<br>%Us       | 20<br>55                 |
| AC average coil consumption at 20°C<br>of 60Hz coil powered at 60Hz |  |                               |                  |                          |
|                                                                     |  | in-rush<br>holding            | VA<br>VA         | 300<br>20                |
| Dissipation at holding ≤20°C 50Hz                                   |  |                               | W                | 6.5                      |
| Max cycles frequency                                                |  |                               |                  |                          |
| Mechanical operation                                                |  |                               | cycles/h         | 1500                     |
| Operating times                                                     |  |                               |                  |                          |
| Average time for Us control<br>in AC                                |  |                               |                  |                          |
| Closing NO                                                          |  | min<br>max                    | ms<br>ms         | 16<br>32                 |
| Opening NO                                                          |  | min<br>max                    | ms<br>ms         | 9<br>24                  |
| UL technical data                                                   |  |                               |                  |                          |
| Rated operational voltage AC (UL)                                   |  |                               | V                | 600                      |
| General USE                                                         |  |                               |                  |                          |
| Contactor                                                           |  |                               |                  |                          |
|                                                                     |  | AC current                    | A                | 165                      |
| Ambient conditions                                                  |  |                               |                  |                          |
| Temperature                                                         |  |                               |                  |                          |
| Operating temperature                                               |  | min<br>max                    | °C<br>°C         | -50<br>70                |

Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -60 |
| max | °C | 80  |

Max altitude

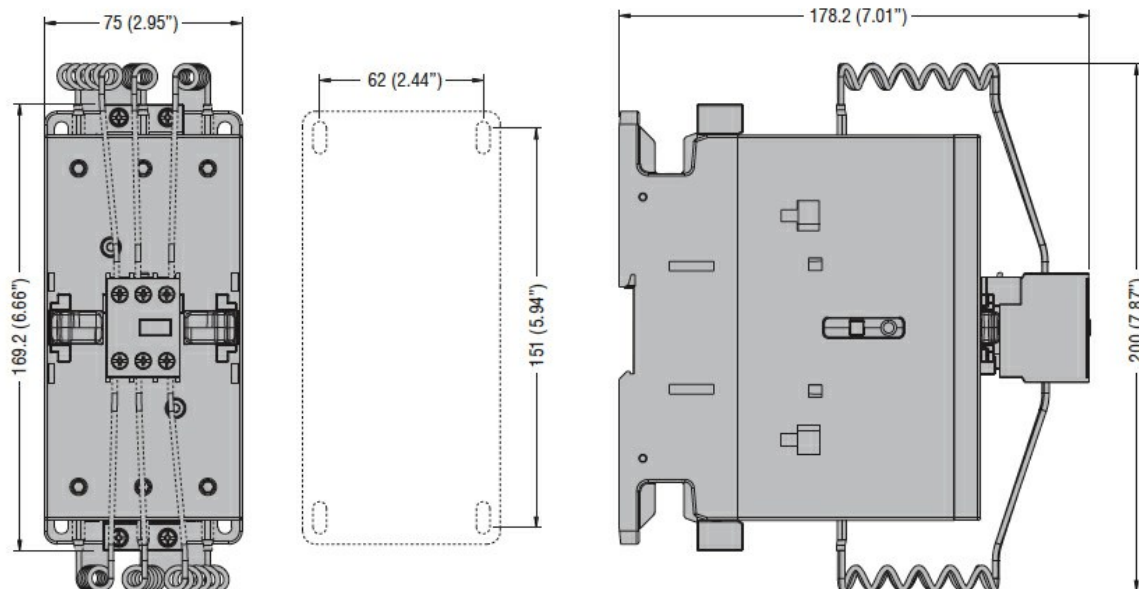
|   |      |
|---|------|
| m | 3000 |
|---|------|

Resistance & Protection

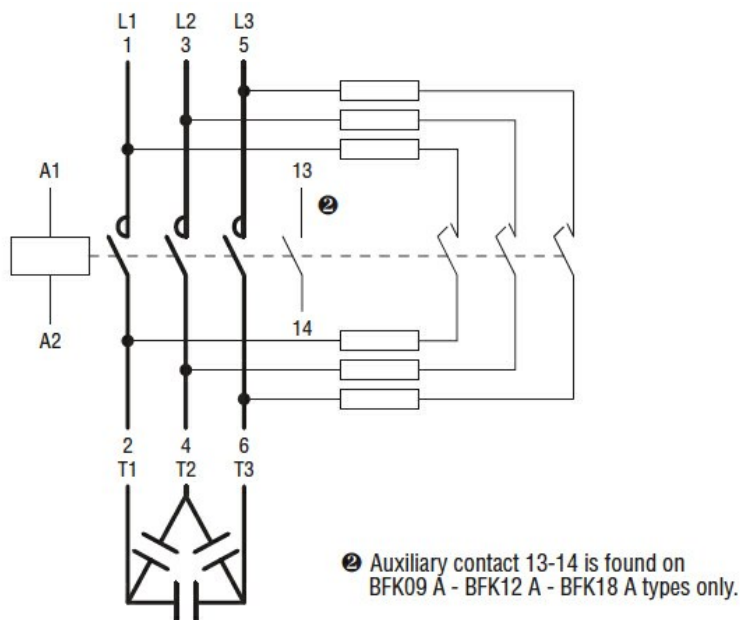
Pollution degree

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

ETIM classification

ETIM 8.0

EC001079 -  
Capacitor  
contactor