



|   |                                    |                 |                     |
|---|------------------------------------|-----------------|---------------------|
| Product designation                                   | Power contactor                    |                 |                     |
| Product type designation                              | BFK115                             |                 |                     |
| <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                                 | 8               |                     |
| Operational frequency                                 | min                                | Hz              | 25                  |
|   | max                                | Hz              | 400                 |
| IEC Conventional free air thermal current $I_{th}$    | A                                  | 160             |                     |
| Rated operational power AC-6b ( $T \leq 40^\circ C$ ) | 230V                               | kvar            | 45                  |
|   | 400V                               | kvar            | 75                  |
|   | 440...480V                         | kvar            | 85                  |
|   | 690V                               | kvar            | 135                 |
| Short-time allowable current for 10s (IEC/EN60947-1)  | A                                  | 920             |                     |
| Protection fuse                                       | gG (IEC)                           | A               | 160                 |
|   |                                    | A               | 1500                |
| Making capacity (RMS value)                           | A                                  | 1500            |                     |
| Breaking capacity at voltage                          | 440V                               | A               | 1200                |
|   | 500V                               | A               | 850                 |
|   | 690V                               | A               | 905                 |
| Resistance per pole (average value)                   | m $\Omega$                         | 0.45            |                     |
| Power dissipation per pole (average value)            | $I_{th}$                           | W               | 11.5                |
|   |                                    |                 |                     |
| Tightening torque for terminals                       | min                                | Nm              | 6                   |
|   | max                                | Nm              | 7                   |
|   | min                                | lbin            | 4.4                 |
|   | max                                | lbin            | 5.2                 |
| Tightening torque for coil terminal                   | min                                | Nm              | 0.8                 |
|   | max                                | Nm              | 1                   |
|   | min                                | lbin            | 0.59                |
|   | max                                | lbin            | 0.74                |
| Max number of wires simultaneously connectable        | Nr.                                | 2               |                     |
| Conductor section                                     | AWG/Kcmil                          | max             | 2/0                 |
|   | Flexible w/o lug conductor section | min             | mm <sup>2</sup> 1.5 |
|   |                                    | max             | mm <sup>2</sup> 70  |
| Flexible c/w lug conductor section                    | min                                | mm <sup>2</sup> | 1.5                 |

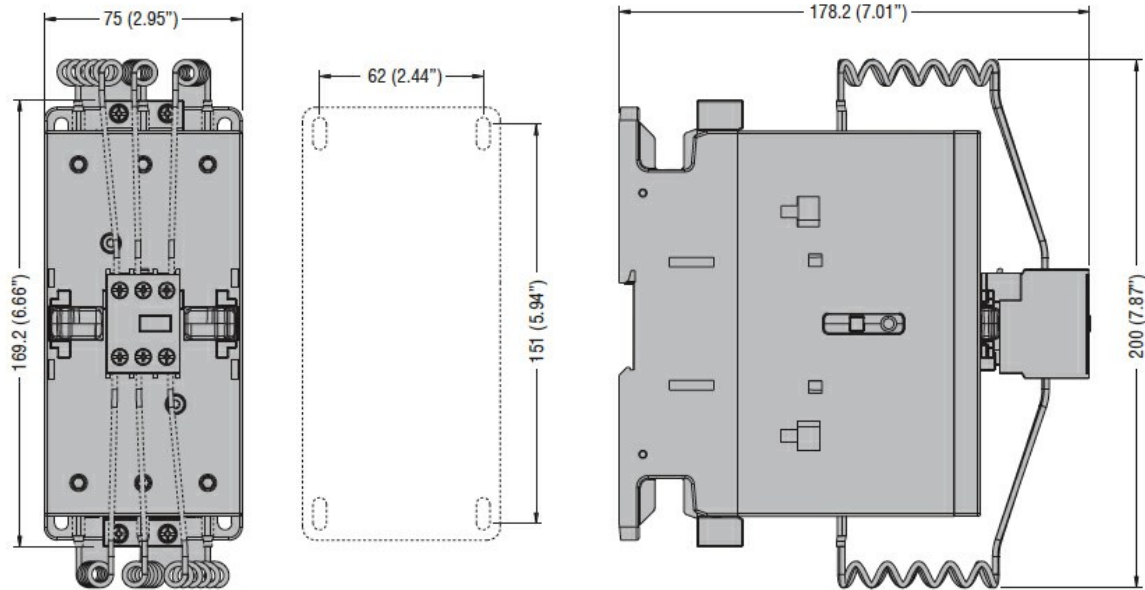
|   |                              |                            |                 |                       |
|---|------------------------------|----------------------------|-----------------|-----------------------|
|   |                              | max                        | mm <sup>2</sup> | 70                    |
| Power terminal protection according to IEC/EN 60529 |                              |                            |                 | IP20 front            |
| <b>Mechanical features</b>                          |                              |                            |                 |                       |
| Operating position                                  |                              | normal allowable           |                 | Vertical plan ±30°    |
| Fixing  |                              |                            |                 | Screw / DIN rail 35mm |
| Weight  |                              |                            | g               | 2095                  |
| Conductor section                                   | AWG/kcmil conductor section  | max                        |                 | 2/0                   |
| <b>Operations</b>                                   |                              |                            |                 |                       |
| Mechanical life                                     |                              |                            | cycles          | 15000000              |
| Electrical life                                     |                              |                            | cycles          | 1200000               |
| <b>Safety related data</b>                          |                              |                            |                 |                       |
| Performance level B10d according to EN/ISO 13489-1  |                              | rated load mechanical load | cycles cycles   | 400000 15000000       |
| EMC compatibility                                   |                              |                            |                 | yes                   |
| <b>AC coil operating</b>                            |                              |                            |                 |                       |
| Rated AC voltage at 60Hz                            |                              |                            | V               | 24                    |
| 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                    |
| <b>Max cycles frequency</b>                         |                              |                            |                 |                       |
| Mechanical operation                                |                              |                            | cycles/h        | 1500                  |
| <b>Operating times</b>                              |                              |                            |                 |                       |
| Average time for Us control in AC                   | Closing NO                   | min                        | ms              | 16                    |
|   |                              | max                        | ms              | 32                    |
|   | Opening NO                   | min                        | ms              | 9                     |
|   |                              | max                        | ms              | 24                    |
| <b>UL technical data</b>                            |                              |                            |                 |                       |
| General USE   | Contactor                    | AC current                 | A               | 160                   |
| <b>Ambient conditions</b>                           |                              |                            |                 |                       |
| Temperature   | Operating temperature        | min                        | °C              | -50                   |
|   |                              | max                        | °C              | 70                    |
|   | Storage temperature          | min                        | °C              | -60                   |
|   |                              | max                        | °C              | 80                    |
| Max altitude  |                              |                            | m               | 3000                  |

Resistance & Protection

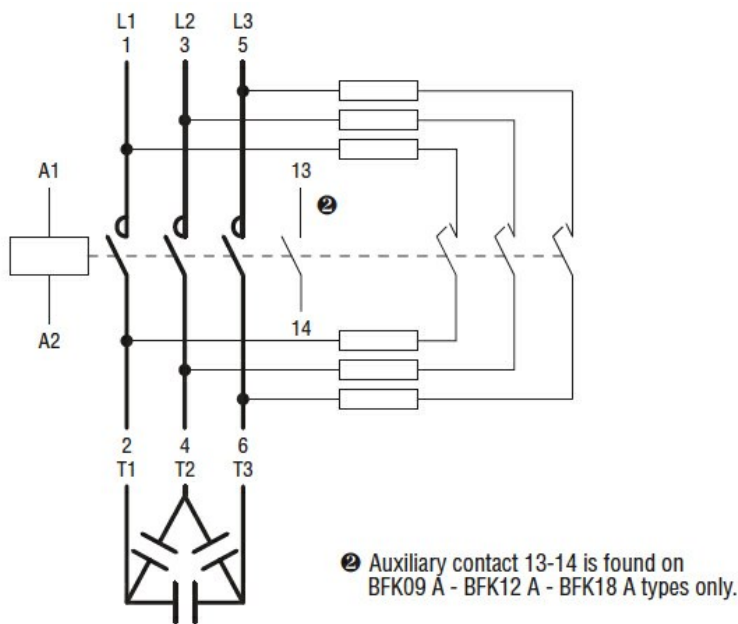
Pollution degree

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

ETIM classification

ETIM 8.0

EC001079 -  
Capacitor  
contactor