

|                                                      |            |               |                 |
|------------------------------------------------------|------------|---------------|-----------------|
| 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)                          |            | 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          | Prodotti finiti |
|                                                      | max        | Ibin          | Prodotti finiti |
| Max number of wires simultaneously connectable       | Nr.        | 2             |                 |
| Conductor section                                    |            |               |                 |
| 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 wired |
| Mechanical features                                  |            |               |                 |
| Operating position                                   | normal     | Vertical plan |                 |
|                                                      | allowable  | ±30°          |                 |

|                                                    |                                         |                    |                          |           |
|----------------------------------------------------|-----------------------------------------|--------------------|--------------------------|-----------|
| Fixing                                             |                                         |                    | Screw / DIN rail<br>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<br>mechanical load           | cycles<br>cycles   | 400000<br>20000000       |           |
| EMC compatibility                                  |                                         |                    | Yes                      |           |
| Rated AC voltage at 60Hz                           | V                                       |                    | 230                      |           |
| AC coil operating                                  |                                         |                    |                          |           |
| 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                |                                         |                    |                          |           |
|                                                    | of 50/60Hz coil powered at 50Hz         | in-rush<br>holding | VA<br>VA                 | 75<br>9   |
|                                                    | of 50/60Hz coil powered at 60Hz         | in-rush<br>holding | VA<br>VA                 | 70<br>7   |
|                                                    | of 60Hz coil powered at 60Hz            | in-rush<br>holding | VA<br>VA                 | 75<br>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<br>in AC               |                                         |                    |                          |           |
|                                                    | Closing NO                              | min<br>max         | ms<br>ms                 | 8<br>24   |
|                                                    | Opening NO                              | min<br>max         | ms<br>ms                 | 5<br>15   |
|                                                    | Closing NC                              | min<br>max         | ms<br>ms                 | 9<br>20   |
| UL technical data                                  |                                         |                    |                          |           |
| General USE                                        |                                         |                    |                          |           |
|                                                    | Contactor                               | AC current         | A                        | 56        |
| Ambient conditions                                 |                                         |                    |                          |           |
| Temperature                                        |                                         |                    |                          |           |
|                                                    | Operating temperature                   | min                | °C                       | -50       |

|                               |                                |    |      |
|-------------------------------|--------------------------------|----|------|
| Storage temperature           | max                            | °C | 70   |
|                               | 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 60947-1                 |    |      |
|                               | IEC/EN 60947-4-1               |    |      |
|                               | UL 60947-1                     |    |      |
|                               | UL 60947-4-1                   |    |      |
| Certificates                  | CCC                            |    |      |
|                               | cULus                          |    |      |
|                               | EAC                            |    |      |
| ETIM classification           |                                |    |      |
| ETIM 8.0                      | EC001079 - Capacitor contactor |    |      |