

Product designation

Product type designation

### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 95A, AC COIL 60HZ,



Power contactor

**BF95** 

Contact characteristics Nr. 3 Number of poles Rated insulation voltage Ui IEC/EN ٧ 1000 k۷ Rated impulse withstand voltage Uimp 8 Operational frequency Нъ 25 min Hz 400 max IEC Conventional free air thermal current Ith 140 Α Operational current le AC-1 (≤40°C) Α 140 AC-1 (≤55°C) Α 115 AC-1 (≤70°C) Α 100 AC-3 (≤440V ≤55°C) Α 95 AC-4 (400V) 45 Rated operational power AC-3 (T≤55°C) kW 30 230V 400V kW 55 415V kW 55 440V kW 55 500V kW 75 690V kW 90 1000V kW 45 Rated operational current AC-3 (T≤55°C) 230V Α 95 400V Α 95 415V Α 95 440V Α 95 500V 95 690V Α 93 1000V Α 33 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series

IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series

IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series

≤24V

48V

75V

110V

220V

≤24V

48V

75V

110V

220V

Α

Α

Α

Α

Α

Α

Α

140

140

100

10

140

140

140 110

12





|  | ≤24V     | Α         | 140  |
|--|----------|-----------|------|
|  | 48V      | Α         | 140  |
|  | 75V      | Α         | 155  |
|  | 110V     | Α         | 120  |
|  | 220V     | Α         | 125  |
| IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series      |          |           |      |
|  | ≤24V     | Α         | 140  |
|  | 48V      | Α         | 140  |
|  | 75V      | Α         | 155  |
|  | 110V     | Α         | 140  |
|  | 220V     | Α         | 140  |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series |          |           |      |
|  | ≤24V     | Α         | 140  |
|  | 48V      | Α         | 44   |
|  | 75V      | Α         | 36   |
|  | 110V     | Α         | 6    |
|  | 220V     | Α         | _    |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series |          |           |      |
|  | ≤24V     | Α         | 140  |
|  | 48V      | Α         | 63   |
|  | 75V      | Α         | 60   |
|  | 110V     | Α         | 55   |
|  | 220V     | Α         | 7    |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series |          |           |      |
|  | ≤24V     | Α         | 140  |
|  | 48V      | Α         | 115  |
|  | 75V      | Α         | 90   |
|  | 110V     | Α         | 85   |
|  | 220V     | Α         | 76   |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series |          |           |      |
|  | ≤24V     | Α         | 140  |
|  | 48V      | Α         | 110  |
|  | 75V      | Α         | 110  |
|  | 110V     | Α         | 105  |
|  | 220V     | Α         | 95   |
| Short-time allowable current for 10s (IEC/EN60947-1)                 |          | Α         | 760  |
| Protection fuse  |          |           |      |
|  | gG (IEC) | Α         | 160  |
|  | aM (IEC) | Α         | 100  |
| Making capacity (RMS value)  |          | Α         | 1200 |
| Breaking capacity at voltage   |          |           |      |
|  | 440V     | Α         | 1100 |
|  | 500V     | Α         | 775  |
|  | 690V     | Α         | 745  |
| Resistance per pole (average value)                                  |          | $m\Omega$ | 0.45 |
| Power dissipation per pole (average value)                           |          |           |      |
|  | Ith      | W         | 8.8  |
|  | AC-3     | W         | 4.1  |
| Tightening torque for terminals                                      |          |           |      |
|  | min      | Nm        | 6    |
|  | max      | Nm        | 7    |
|  | min      | lbin      | 4.4  |
|  | max      | lbin      | 5.2  |
|  |          |           |      |





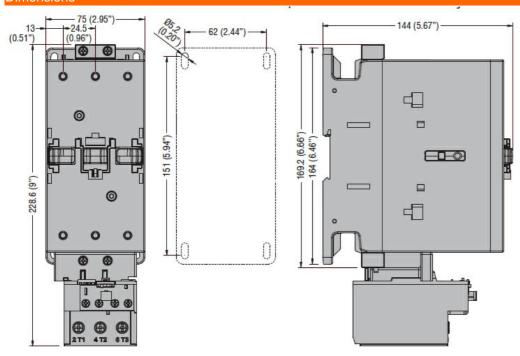
| Tightening torque for o | coil terminal                       |           |          |                  |
|-------------------------|-------------------------------------|-----------|----------|------------------|
|                         |                                     | min       | Nm       | 0.8              |
|                         |                                     | max       | Nm       | 1                |
|                         |                                     | min       | lbin     | 0.59             |
|                         |                                     | max       | lbin     | 0.74             |
| Conductor section       |                                     |           |          |                  |
|                         | AWG/Kcmil                           |           |          |                  |
|                         | 7.00 G/1.00mil                      | max       |          | 2/0              |
|                         | Flexible w/o lug conductor section  | Пих       |          | 2/0              |
|                         | Tickibic w/o lag conductor section  | min       | mm²      | 1.5              |
|                         |                                     | max       | mm²      | 70               |
|                         | Flexible c/w lug conductor section  | IIIax     | 111111   | 10               |
|                         | r lexible c/w lug conductor section | min       | mm²      | 1.5              |
|                         |                                     |           | mm²      | 70               |
| Dawar tarminal protos   | tion according to ICC/CN 60520      | max       | ППП      |                  |
|                         | tion according to IEC/EN 60529      |           |          | IP20 front       |
| Mechanical features     |                                     |           |          |                  |
| Operating position      |                                     |           |          | Mandle - L. I    |
|                         |                                     | normal    |          | Vertical plan    |
|                         |                                     | allowable |          | ±30°             |
| Fixing                  |                                     |           |          | Screw / DIN rail |
|                         |                                     |           |          | 35mm             |
| Weight                  |                                     |           | g        | 2020             |
| Conductor section       |                                     |           |          |                  |
|                         | AWG/kcmil conductor section         |           |          |                  |
|                         |                                     | max       |          | 2/0              |
| Auxiliary contact chara | acteristics                         |           |          |                  |
| Thermal current Ith     |                                     |           | Α        | 140              |
| Operations              |                                     |           |          |                  |
| Mechanical life         |                                     |           | cycles   | 15000000         |
| Electrical life         |                                     |           | cycles   | 1400000          |
| AC coil operating       |                                     |           |          |                  |
| Rated AC voltage at 6   | 0Hz                                 |           | V        | 120              |
| AC operating voltage    |                                     |           |          |                  |
|                         | of 60Hz coil powered at 60Hz        |           |          |                  |
|                         | pick-up                             |           |          |                  |
|                         |                                     | min       | %Us      | 80               |
|                         |                                     | max       | %Us      | 110              |
|                         | drop-out                            |           |          |                  |
|                         | a.op out                            | min       | %Us      | 20               |
|                         |                                     | max       | %Us      | 55               |
| AC average coil consu   | Imption at 20°C                     |           | ,,,,,    |                  |
| avolago odii odilot     | of 60Hz coil powered at 60Hz        |           |          |                  |
|                         | 3. 301 12 3011 powerou at 301 12    | in-rush   | VA       | 300              |
|                         |                                     | holding   | VA<br>VA | 20               |
| Dissipation at holding  | <20°C 50H7                          | Holding   | W        | 6.5              |
| Max cycles frequency    | ⇒20 O JUI IZ                        |           | V V      | 0.0              |
|                         |                                     |           | ovoloo/b | 1500             |
| Mechanical operation    |                                     |           | cycles/h | 1300             |
| Operating times         | - atual                             |           |          |                  |
| Average time for Us of  |                                     |           |          |                  |
|                         | in AC                               |           |          |                  |
|                         | Closing NO                          |           |          |                  |
|                         |                                     | min       | ms       | 16               |
|                         |                                     | max       | ms       | 32               |
|                         |                                     |           |          |                  |



#### Opening NO

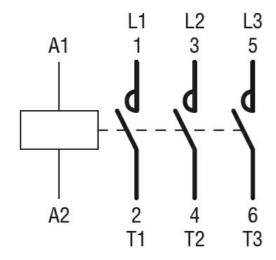
| min                                 | ms | 9    |
|-------------------------------------|----|------|
| max                                 | ms | 24   |
| UL technical data                   |    |      |
| Yielded mechanical performance      |    |      |
| for three-phase AC motor            |    |      |
| 200/208V                            | HP | 30   |
| 220/230V                            | HP | 30   |
| 460/480V                            | HP | 60   |
| 575/600V                            | HP | 75   |
| General USE                         |    |      |
| Contactor                           |    |      |
| AC current                          | Α  | 150  |
| Short-circuit protection fuse, 600V |    |      |
| High fault                          |    |      |
| Short circuit current               | kA | 100  |
| Fuse rating                         | Α  | 200  |
| Fuse class                          |    | J    |
| Standard fault                      |    |      |
| Short circuit current               | kA | 10   |
| Fuse rating                         | Α  | 250  |
| Fuse class                          |    | RK5  |
| Ambient conditions                  |    |      |
| Temperature                         |    |      |
| Operating temperature               |    |      |
| min                                 | °C | -50  |
| max                                 | °C | 70   |
| Storage temperature                 |    |      |
| min                                 | °C | -60  |
| max                                 | °C | +80  |
| Max altitude                        | m  | 3000 |

#### **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

EC000066 -Power contactor, AC switching