



|   |                    |    |      |                 |
|---|--------------------|----|------|-----------------|
| Product designation   |                    |    |      | Power contactor |
| Product type designation  |                    |    |      | BF26            |
| <b>Contact characteristics</b>  |                    |    |      |                 |
| Number of poles   | Nr.                |    |      | 3               |
| Rated insulation voltage U <sub>i</sub> IEC/EN                              | V                  |    |      | 690             |
| Rated impulse withstand voltage U <sub>imp</sub>                            | kV                 |    |      | 6               |
| Operational frequency   | min                | Hz | 25   |                 |
|   | max                | Hz | 400  |                 |
| IEC Conventional free air thermal current I <sub>th</sub>                   | A                  |    |      | 45              |
| Operational current I <sub>e</sub>  | AC-1 (≤40°C)       | A  | 45   |                 |
|   | AC-1 (≤55°C)       | A  | 36   |                 |
|   | AC-1 (≤70°C)       | A  | 32   |                 |
|   | AC-3 (≤440V ≤55°C) | A  | 26   |                 |
|   | AC-4 (400V)        | A  | 11.5 |                 |
| Rated operational power AC-3 (T≤55°C)                                       | 230V               | kW | 7.3  |                 |
|   | 400V               | kW | 13   |                 |
|   | 415V               | kW | 14   |                 |
|   | 440V               | kW | 14   |                 |
|   | 500V               | kW | 15.6 |                 |
|   | 690V               | kW | 18.5 |                 |
| Rated operational power AC-1 (T≤40°C)                                       | 230V               | kW | 17   |                 |
|   | 400V               | kW | 30   |                 |
|   | 500V               | kW | 37   |                 |
|   | 690V               | kW | 51   |                 |
| IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series | ≤24V               | A  | 25   |                 |
|   | 48V                | A  | 21   |                 |
|   | 75V                | A  | 18   |                 |
|   | 110V               | A  | 6    |                 |
|   | 220V               | A  | –    |                 |
| IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series | ≤24V               | A  | 28   |                 |
|   | 48V                | A  | 28   |                 |
|   | 75V                | A  | 25   |                 |
|   | 110V               | A  | 22   |                 |
|   | 220V               | A  | 2    |                 |
| IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series | ≤24V               | A  | 28   |                 |
|   | 48V                | A  | 28   |                 |
|   | 75V                | A  | 25   |                 |
|   | 110V               | A  | 24   |                 |

|  |                 |                  |     |
|--|-----------------|------------------|-----|
|  | 220V            | A                | 20  |
| IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series      | ≤24V            | A                | 28  |
|  | 48V             | A                | 28  |
|  | 75V             | A                | 25  |
|  | 110V            | A                | 24  |
|  | 220V            | A                | 26  |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series | ≤24V            | A                | 18  |
|  | 48V             | A                | 15  |
|  | 75V             | A                | 13  |
|  | 110V            | A                | 2   |
|  | 220V            | A                | –   |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series | ≤24V            | A                | 20  |
|  | 48V             | A                | 20  |
|  | 75V             | A                | 18  |
|  | 110V            | A                | 13  |
|  | 220V            | A                | 3   |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series | ≤24V            | A                | 25  |
|  | 48V             | A                | 25  |
|  | 75V             | A                | 20  |
|  | 110V            | A                | 18  |
|  | 220V            | A                | 19  |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series | ≤24V            | A                | 30  |
|  | 48V             | A                | 30  |
|  | 75V             | A                | 25  |
|  | 110V            | A                | 20  |
|  | 220V            | A                | 15  |
| Short-time allowable current for 10s (IEC/EN60947-1)                             |                 | A                | 210 |
| Protection fuse  | gG (IEC)        | A                | 50  |
|  | aM (IEC)        | A                | 32  |
| Making capacity (RMS value)  |                 | A                | 260 |
| Breaking capacity at voltage   | 440V            | A                | 208 |
|  | 500V            | A                | 184 |
|  | 690V            | A                | 168 |
| Resistance per pole (average value)  |                 | mΩ               | 2   |
| Power dissipation per pole (average value)                                       | I <sub>th</sub> | W                | 4   |
|  | AC-3            | W                | 1.4 |
| Tightening torque for terminals  | min             | Nm               | 2.5 |
|  | max             | Nm               | 3   |
|  | min             | I <sub>bin</sub> | 1.8 |
|  | max             | I <sub>bin</sub> | 2.2 |
| Tightening torque for coil terminal  | min             | Nm               | 0.8 |
|  | max             | Nm               | 1   |
|  | min             | I <sub>bin</sub> | 0.8 |

|   |                  |                 |                          |
|---|------------------|-----------------|--------------------------|
|   | max              | lbin            | 0.74                     |
| Max number of wires simultaneously connectable      |                  | Nr.             | 2                        |
| Conductor section                                   |                  |                 |                          |
| AWG/Kcmil   | max              |                 | 6                        |
| Flexible w/o lug conductor section                  | min              | mm <sup>2</sup> | 2.5                      |
|   | max              | mm <sup>2</sup> | 16                       |
| Flexible c/w lug conductor section                  | min              | mm <sup>2</sup> | 1                        |
|   | max              | mm <sup>2</sup> | 10                       |
| Flexible with insulated spade lug conductor section | min              | mm <sup>2</sup> | 1                        |
|   | max              | mm <sup>2</sup> | 10                       |
| Power terminal protection according to IEC/EN 60529 |                  |                 | IP20 when properly wired |
| <b>Mechanical features</b>                          |                  |                 |                          |
| Operating position                                  | normal allowable |                 | Vertical plan ±30°       |
| Fixing  |                  |                 | Screw / DIN rail 35mm    |
| Weight  |                  | g               | 430                      |
| Conductor section                                   |                  |                 |                          |
| AWG/kcmil conductor section                         | max              |                 | 6                        |
| <b>Operations</b>                                   |                  |                 |                          |
| Mechanical life                                     |                  | cycles          | 20000000                 |
| Electrical life                                     |                  | cycles          | 1600000                  |
| <b>Safety related data</b>                          |                  |                 |                          |
| Performance level B10d according to EN/ISO 13489-1  | rated load       | cycles          | 1600000                  |
|   | mechanical load  | cycles          | 20000000                 |
| Mirror contacts according to IEC/EN 60947-4-1       |                  |                 | yes                      |
| EMC compatibility                                   |                  |                 | yes                      |
| <b>AC coil operating</b>                            |                  |                 |                          |
| Rated AC voltage at 50/60Hz                         |                  | V               | 48                       |
| AC operating voltage                                |                  |                 |                          |
| of 50/60Hz coil powered at 50Hz                     |                  |                 |                          |
| pick-up   | min              | %Us             | 80                       |
|   | max              | %Us             | 110                      |
| drop-out  | min              | %Us             | 20                       |
|   | max              | %Us             | 55                       |
| of 50/60Hz coil powered at 60Hz                     |                  |                 |                          |
| pick-up   | min              | %Us             | 85                       |
|   | max              | %Us             | 110                      |
| drop-out  | min              | %Us             | 20                       |
|   | max              | %Us             | 55                       |
| AC average coil consumption at 20°C                 |                  |                 |                          |
| of 50/60Hz coil powered at 50Hz                     |                  |                 |                          |

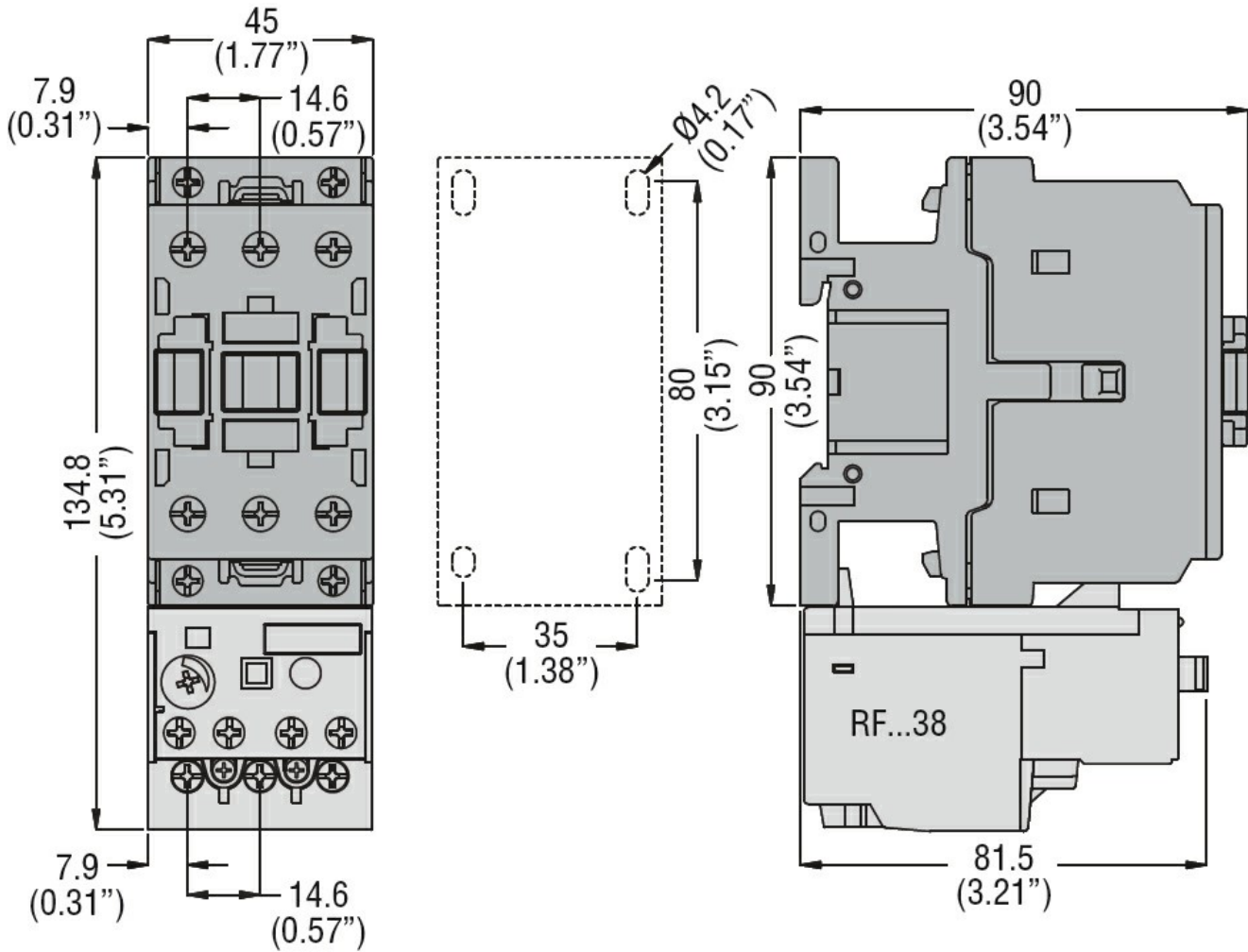
|   |                       |            |        |
|---|-----------------------|------------|--------|
|   | in-rush               | VA         | 75     |
|   | holding               | VA         | 9      |
| of 50/60Hz coil powered at 60Hz                             |                       |            |        |
|   | in-rush               | VA         | 70     |
|   | holding               | VA         | 6.5    |
| of 60Hz coil powered at 60Hz                                |                       |            |        |
|   | in-rush               | VA         | 75     |
|   | holding               | VA         | 9      |
| Dissipation at holding ≤20°C 50Hz                           |                       | W          | 2.5    |
| <b>Max cycles frequency</b>                                 |                       |            |        |
| Mechanical operation  |                       | cycles/h   | 3600   |
| <b>Operating times</b>                                      |                       |            |        |
| Average time for Us control<br>in AC                        |                       |            |        |
|   | Closing NO            |            |        |
|   |                       | min        | ms 8   |
|   |                       | max        | ms 24  |
|   | Opening NO            |            |        |
|   |                       | min        | ms 5   |
|   |                       | max        | ms 15  |
|   | Closing NC            |            |        |
|   |                       | min        | ms 9   |
|   |                       | max        | ms 20  |
|   | Opening NC            |            |        |
|   |                       | min        | ms 9   |
|   |                       | max        | ms 17  |
| <b>UL technical data</b>                                    |                       |            |        |
| Full-load current (FLA) for three-phase AC motor            |                       |            |        |
|   | at 480V               | A          | 21     |
|   | at 600V               | A          | 22     |
| Yielded mechanical performance<br>for single-phase AC motor |                       |            |        |
|   | 110/120V              | HP         | 2      |
|   | 230V                  | HP         | 5      |
| for three-phase AC motor                                    |                       |            |        |
|   | 200/208V              | HP         | 7.5    |
|   | 220/230V              | HP         | 7.5    |
|   | 460/480V              | HP         | 15     |
|   | 575/600V              | HP         | 20     |
| General USE   |                       |            |        |
|   | Contactor             |            |        |
|   |                       | AC current | A 45   |
| Short-circuit protection fuse, 600V<br>High fault           |                       |            |        |
|   | Short circuit current | kA         | 100    |
|   | Fuse rating           | A          | 100    |
|   | Fuse class            |            | J      |
| Standard fault  |                       |            |        |
|   | Short circuit current | kA         | 5      |
|   | Fuse rating           | A          | 100    |
| <b>Ambient conditions</b>                                   |                       |            |        |
| Temperature   |                       |            |        |
|   | Operating temperature |            |        |
|   |                       | min        | °C -50 |

|                     |     |    |      |
|---------------------|-----|----|------|
| Storage temperature | max | °C | 70   |
|                     | min | °C | -60  |
| Max altitude        | max | °C | 80   |
|                     |     | m  | 3000 |

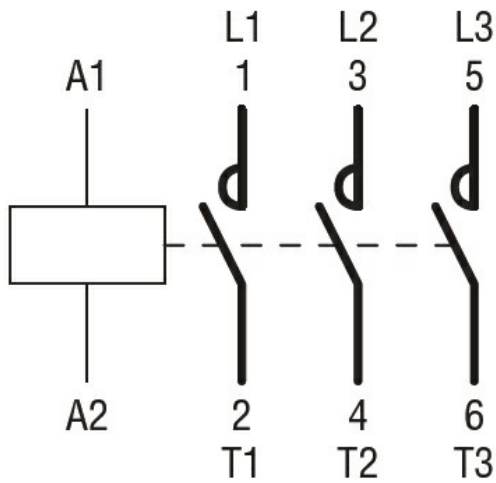
**Resistance & Protection**

|                  |   |
|------------------|---|
| 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

EAC

### ETIM classification

ETIM 8.0

EC000066 -  
 Power contactor,  
 AC switching