



Product designation

Power contactor

Product type designation

BF26

**Contact characteristics**

|                                                                                |                                                    |        |
|--------------------------------------------------------------------------------|----------------------------------------------------|--------|
| Number of poles                                                                | Nr.                                                | 4      |
| Rated insulation voltage $U_i$ IEC/EN                                          | V                                                  | 690    |
| Rated impulse withstand voltage $U_{imp}$                                      | kV                                                 | 6      |
| Operational frequency                                                          | min Hz                                             | 25     |
|                                                                                | max Hz                                             | 400    |
| IEC Conventional free air thermal current $I_{th}$                             | A                                                  | 45     |
| Operational current $I_e$                                                      | AC-1 ( $\leq 40^\circ\text{C}$ )                   | A 45   |
|                                                                                | AC-1 ( $\leq 55^\circ\text{C}$ )                   | A 36   |
|                                                                                | AC-1 ( $\leq 70^\circ\text{C}$ )                   | A 32   |
|                                                                                | AC-3 ( $\leq 440\text{V } \leq 55^\circ\text{C}$ ) | A 26   |
|                                                                                | AC-4 (400V)                                        | A 11.5 |
| Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )                     | 230V kW                                            | 17     |
|                                                                                | 400V kW                                            | 30     |
|                                                                                | 500V kW                                            | 37     |
|                                                                                | 690V kW                                            | 51     |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series | $\leq 24\text{V}$ A                                | 25     |
|                                                                                | 48V A                                              | 21     |
|                                                                                | 75V A                                              | 18     |
|                                                                                | 110V A                                             | 6      |
|                                                                                | 220V A                                             | –      |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series | $\leq 24\text{V}$ A                                | 28     |
|                                                                                | 48V A                                              | 28     |
|                                                                                | 75V A                                              | 25     |
|                                                                                | 110V A                                             | 22     |
|                                                                                | 220V A                                             | 2      |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | $\leq 24\text{V}$ A                                | 28     |
|                                                                                | 48V A                                              | 28     |
|                                                                                | 75V A                                              | 25     |
|                                                                                | 110V A                                             | 24     |
|                                                                                | 220V A                                             | 20     |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series | $\leq 24\text{V}$ A                                | 28     |
|                                                                                | 48V A                                              | 28     |
|                                                                                | 75V A                                              | 25     |
|                                                                                | 110V A                                             | 24     |
|                                                                                | 220V A                                             | 26     |

IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 1 poles in series

|                   |   |    |
|-------------------|---|----|
| $\leq 24\text{V}$ | A | 18 |
| 48V               | A | 15 |
| 75V               | A | 13 |
| 110V              | A | 2  |
| 220V              | A | –  |

 IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 2 poles in series

|                   |   |    |
|-------------------|---|----|
| $\leq 24\text{V}$ | A | 20 |
| 48V               | A | 20 |
| 75V               | A | 18 |
| 110V              | A | 13 |
| 220V              | A | 3  |

 IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 3 poles in series

|                   |   |    |
|-------------------|---|----|
| $\leq 24\text{V}$ | A | 25 |
| 48V               | A | 25 |
| 75V               | A | 20 |
| 110V              | A | 18 |
| 220V              | A | 19 |

 IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 4 poles in series

|                   |   |    |
|-------------------|---|----|
| $\leq 24\text{V}$ | 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)

|          |   |     |
|----------|---|-----|
| $I_{th}$ | W | 4   |
| AC-3     | W | 1.4 |

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 | 0.8  |
| max | Ibin | 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                        | 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 properly wired |
| Mechanical features                                 |  |                            |                    |                          |
| Operating position                                  |  | normal allowable           | Vertical plan ±30° |                          |
| Fixing                                              |  | Screw / DIN rail 35mm      |                    |                          |
| Weight                                              |  | g                          |                    | 664                      |
| Operations                                          |  |                            |                    |                          |
| Mechanical life                                     |  | cycles                     |                    | 20000000                 |
| Electrical life                                     |  | cycles                     |                    | 1600000                  |
| Safety related data                                 |  |                            |                    |                          |
| Performance level B10d according to EN/ISO 13489-1  |  | rated load mechanical load | cycles             | 1600000                  |
|                                                     |  |                            | cycles             | 20000000                 |
| EMC compatibility                                   |  | yes                        |                    |                          |
| DC coil operating                                   |  |                            |                    |                          |
| DC rated control voltage                            |  | V                          |                    | 110                      |
| DC operating voltage                                |  |                            |                    |                          |
| pick-up                                             |  | min                        | %Us                | 80                       |
|                                                     |  | max                        | %Us                | 125                      |
| drop-out                                            |  | min                        | %Us                | 10                       |
|                                                     |  | max                        | %Us                | 40                       |
| Average coil consumption ≤20°C                      |  | in-rush holding            | W                  | 5.4                      |
|                                                     |  |                            | W                  | 5.4                      |
| Max cycles frequency                                |  |                            |                    |                          |
| Mechanical operation                                |  | cycles/h                   |                    | 3600                     |
| Operating times                                     |  |                            |                    |                          |
| Average time for Us control 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                       |
| in DC                                               |  |                            |                    |                          |

**Closing NO**

|     |    |    |
|-----|----|----|
| min | ms | 54 |
| max | ms | 66 |

**Opening NO**

|     |    |    |
|-----|----|----|
| min | ms | 14 |
| max | ms | 17 |

**UL technical data**

Rated operational voltage AC (UL) V 600

Full-load current (FLA) for three-phase AC motor

|         |   |    |
|---------|---|----|
| at 480V | A | 21 |
| at 600V | A | 22 |

Yielded mechanical performance

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

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 |

**Ambient conditions**

Temperature

Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -50 |
| max | °C | 70  |

Storage temperature

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

Max altitude

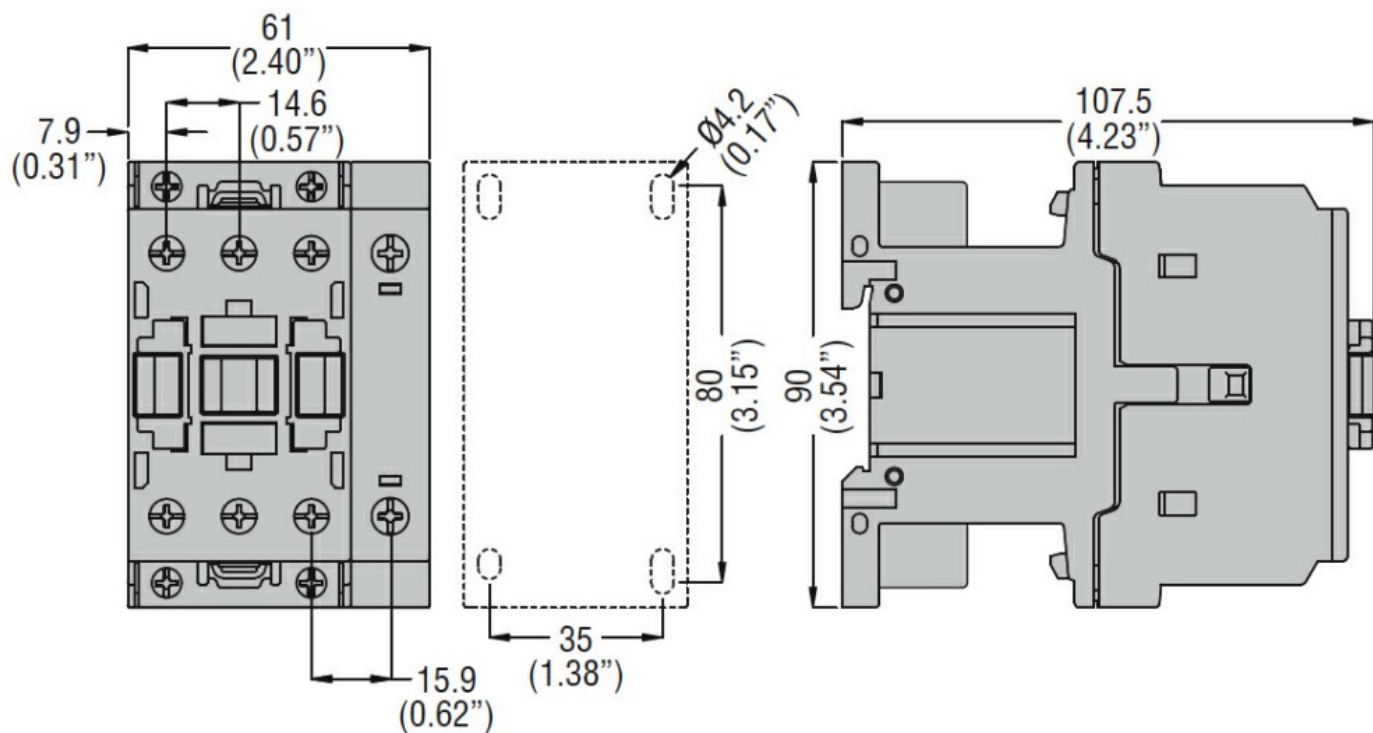
|   |      |
|---|------|
| m | 3000 |
|---|------|

**Resistance & Protection**

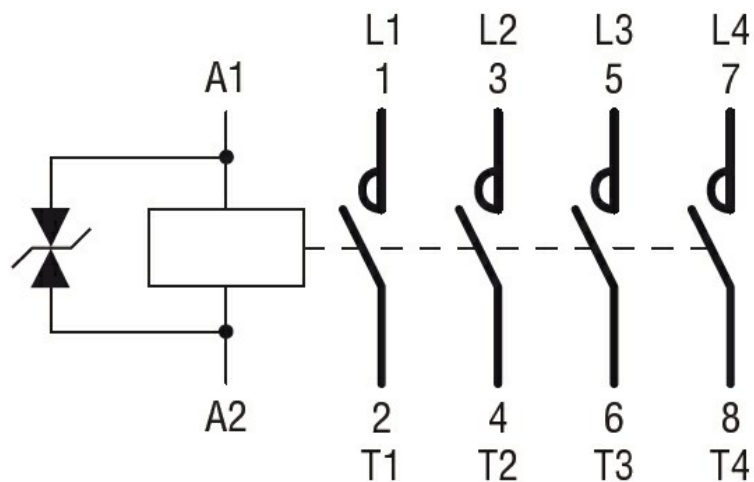
Pollution degree

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  
EAC

#### ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching