



Product designation

Power contactor

Product type designation

BF26

**Contact characteristics**

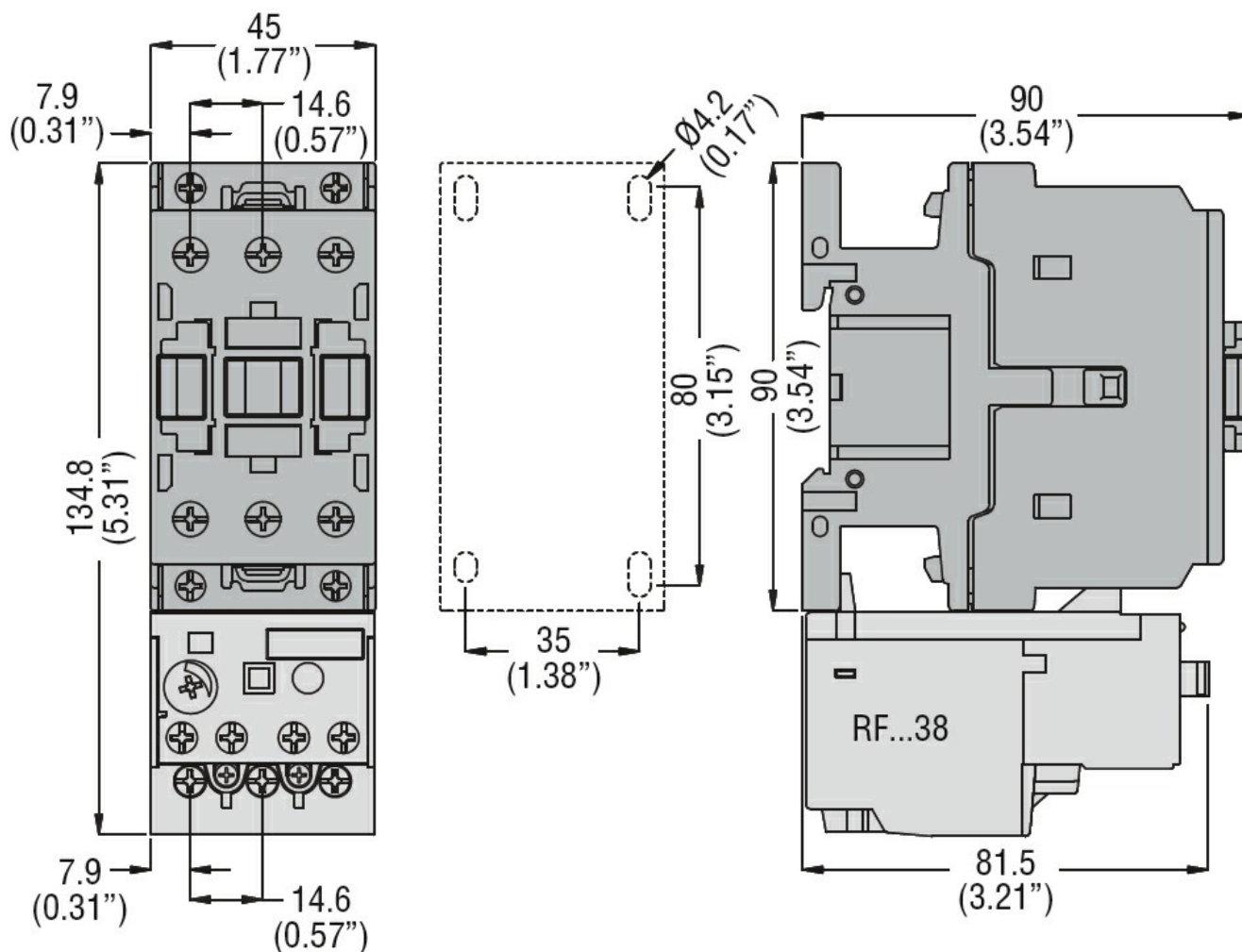
|                                                                                |                                                    |         |
|--------------------------------------------------------------------------------|----------------------------------------------------|---------|
| Number of poles                                                                | Nr.                                                | 3       |
| 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-3 ( $T \leq 55^\circ\text{C}$ )                     | 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 ( $T \leq 40^\circ\text{C}$ )                     | 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 Ie 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 Ie 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 Ie 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 Ie 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 Ie 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)                           |          |      |     |
|                                                                      | Ith      | 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 |

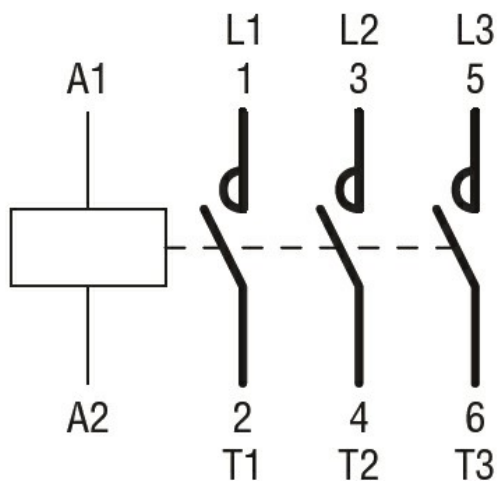
|                                                     |                  |                  |                          |
|-----------------------------------------------------|------------------|------------------|--------------------------|
|                                                     | max              | I <sub>bin</sub> | 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                | 426                      |
| <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                 |
| EMC compatibility                                   |                  |                  | yes                      |
| <b>AC coil operating</b>                            |                  |                  |                          |
| Rated AC voltage at 50/60Hz                         |                  | V                | 110                      |
| AC operating voltage                                |                  |                  |                          |
| of 50/60Hz coil powered at 50Hz                     |                  |                  |                          |
| pick-up                                             | min              | %U <sub>s</sub>  | 80                       |
|                                                     | max              | %U <sub>s</sub>  | 110                      |
| drop-out                                            | min              | %U <sub>s</sub>  | 20                       |
|                                                     | max              | %U <sub>s</sub>  | 55                       |
| of 50/60Hz coil powered at 60Hz                     |                  |                  |                          |
| pick-up                                             | min              | %U <sub>s</sub>  | 85                       |
|                                                     | max              | %U <sub>s</sub>  | 110                      |
| drop-out                                            | min              | %U <sub>s</sub>  | 20                       |
|                                                     | max              | %U <sub>s</sub>  | 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  |
| 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   |
| 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 |
| <b>Resistance &amp; Protection</b> |     |    |      |
| Pollution degree                   |     |    | 3    |
| <b>Dimensions</b>                  |     |    |      |



### 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