



Product designation

Power contactor

Product type designation

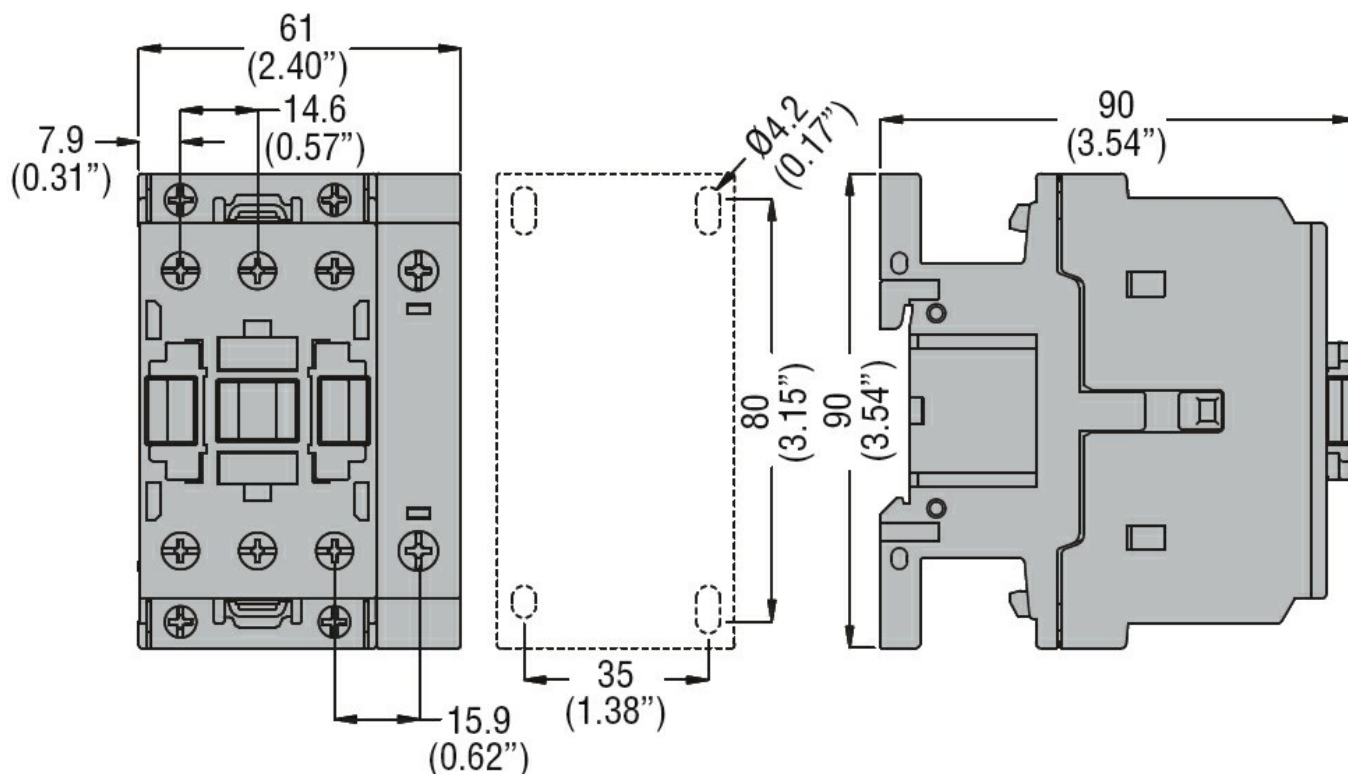
BF26

**Contact characteristics**

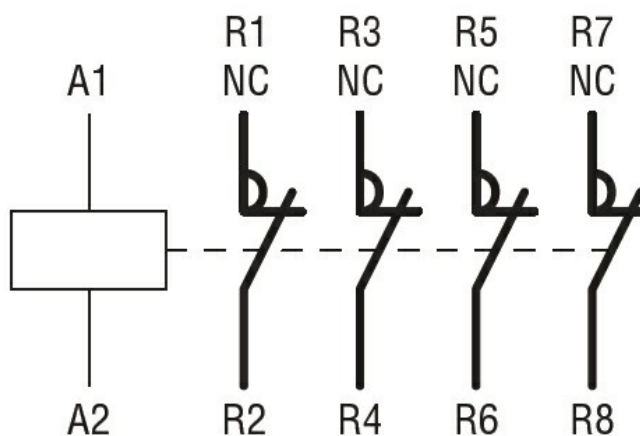
|                                                            |                                                    |           |
|------------------------------------------------------------|----------------------------------------------------|-----------|
| Number of poles                                            | 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     |
| 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)                        | m $\Omega$                                         | 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                                                | lbin 1.8  |
|                                                            | max                                                | lbin 2.2  |
| Tightening torque for coil terminal                        | min                                                | Nm 0.8    |
|                                                            | max                                                | Nm 1      |
|                                                            | min                                                | lbin 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 |
| Mechanical features                                 |                 |                  |                          |
| Operating position                                  |                 | normal allowable | Vertical plan ±30°       |
| Fixing                                              |                 |                  | Screw / DIN rail 35mm    |
| Weight                                              |                 | g                | 510                      |
| Operations                                          |                 |                  |                          |
| Mechanical life                                     |                 | cycles           | 20000000                 |
| Electrical life                                     |                 | cycles           | 1600000                  |
| Safety related data                                 |                 |                  |                          |
| Performance level B10d according to EN/ISO 13489-1  |                 |                  |                          |
|                                                     | rated load      | cycles           | 1600000                  |
|                                                     | mechanical load | cycles           | 20000000                 |
| EMC compatibility                                   |                 |                  | yes                      |
| AC coil operating                                   |                 |                  |                          |
| 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<br>holding                           | VA<br>VA                                 | 75<br>9                |
| Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz |                           |                                              | W                                        | 2.5                    |
| Max cycles frequency                                  |                           |                                              |                                          |                        |
| Mechanical operation                                  |                           |                                              | cycles/h                                 | 3600                   |
| Operating times                                       |                           |                                              |                                          |                        |
| Average time for $U_s$ 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                                 | 11<br>29               |
|                                                       | Opening NC                | min<br>max                                   | ms<br>ms                                 | 6<br>14                |
| UL technical data                                     |                           |                                              |                                          |                        |
| Rated operational voltage AC (UL)                     |                           |                                              | V                                        | 600                    |
| Full-load current (FLA) for three-phase AC motor      |                           | at 480V<br>at 600V                           | A<br>A                                   | 21<br>22               |
| Yielded mechanical performance                        |                           |                                              |                                          |                        |
|                                                       | for single-phase AC motor | 110/120V<br>230V                             | HP<br>HP                                 | 2<br>5                 |
|                                                       | for three-phase AC motor  | 200/208V<br>220/230V<br>460/480V<br>575/600V | HP<br>HP<br>HP<br>HP                     | 7.5<br>7.5<br>15<br>20 |
| General USE                                           |                           |                                              |                                          |                        |
|                                                       | Contactor                 | AC current                                   | A                                        | 45                     |
| Ambient conditions                                    |                           |                                              |                                          |                        |
| Temperature                                           |                           |                                              |                                          |                        |
|                                                       | Operating temperature     | min<br>max                                   | $^{\circ}\text{C}$<br>$^{\circ}\text{C}$ | -50<br>70              |
|                                                       | Storage temperature       | min<br>max                                   | $^{\circ}\text{C}$<br>$^{\circ}\text{C}$ | -60<br>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