



| | | | |
|--|--|------|-----------------|
| Product designation | | | Power contactor |
| Product type designation | | | BF18 |
| Contact characteristics | | | |
| Number of poles | nr. | 3 | |
| Rated insulation voltage Ui | V | 690 | |
| Rated impulse withstand voltage Uimp | kV | 6 | |
| Operating frequency | | | |
| | Operational frequency min | Hz | 25 |
| | Operational frequency max | Hz | 400 |
| Conventional free air thermal current Ith | A | 32 | |
| Operating current | | | |
| | Operational current AC1 (≤40°C) | A | 32 |
| | Operational current AC3 (≤440V ≤55°C) | A | 18 |
| | Operational current AC4 (400V) | A | 8.5 |
| Rated operational power AC1 (T≤40°C) | | | |
| | 230V | kW | 12 |
| | 400V | kW | 21 |
| | 500V | kW | 26 |
| | 690V | kW | 36 |
| Rated operational power AC3A (T≤55°C) | | | |
| | Rated operational power AC3 (T≤55°C) 230V | kW | 4 |
| | Rated operational power AC3 (T≤55°C) 400V | kW | 7.5 |
| | Rated operational power AC3 (T≤55°C) 415V | kW | 9 |
| | Rated operational power AC3 (T≤55°C) 440V | kW | 9 |
| | Rated operational power AC3 (T≤55°C) 500V | kW | 10 |
| | Rated operational power AC3 (T≤55°C) 690V | kW | 10 |
| Short-time allowable current for 10s (IEC/EN60947-1) | A | 200 | |
| Protection fuse | | | |
| | gG (IEC) | A | 32 |
| | aM (IEC) | A | 20 |
| Making capacity (RMS value) | A | 180 | |
| Breaking capacity at voltage | | | |
| | Breaking capacity 440V | A | 144 |
| | Breaking capacity 500V | A | 120 |
| | Breaking capacity 690V | A | 94 |
| Resistance per pole (average value) | mΩ | 2.5 | |
| Power dissipation per pole (average value) | | | |
| | Power dissipation pole (average value) Ith | W | 2.6 |
| | AC3 | W | 0.8 |
| Tightening torque for terminals | | | |
| | min | Nm | 1.5 |
| | max | Nm | 1.8 |
| | min | lbft | 1.1 |
| | max | lbft | 1.5 |
| Tightening torque for coil terminal | | | |

| | | | |
|---|---------------------|-----------------|--------------------------|
| | min | Nm | 0.8 |
| | max | Nm | 1 |
| | min | lbft | 0.8 |
| | max | lbft | 0.74 |
| max number of wires simultaneously connectable | nr. | | 2 |
| Conductor section | | | |
| AWG | | | |
| | min | | 16 |
| | max | | 10 |
| Flexible w/o lug conductor section | | | |
| | min | mm ² | 1 |
| | max | mm ² | 6 |
| Flexible c/w lug conductor section | | | |
| | min | mm ² | 1 |
| | max | mm ² | 4 |
| Flexible with insulated spade lug conductor section | | | |
| | min | mm ² | 1 |
| | max | mm ² | 4 |
| Power terminal protection according to IEC/EN 60529 | | | IP20 when wired |
| Auxiliary contact characteristics | | | |
| Type of contact | | | 1 NO |
| Thermal current I _{th} | | A | 10 |
| IEC/EN 60947-5-1 designation | | | A600 - P600 |
| Operational current AC1 (≤40°C) | | A | 32 |
| Operating current AC15 | | | |
| | 230V | A | 3 |
| | 400V | A | 1.9 |
| | 500V | A | 1.4 |
| Operating current DC12 | | | |
| | 110V | A | 5.7 |
| Operating current DC13 | | | |
| | 24V | A | 5.7 |
| | 48V | A | 2.9 |
| | 60V | A | 2.3 |
| | 110V | A | Screw / DIN rail 35mm |
| | 125V | A | 0.6 |
| | 220V | A | 0.2 |
| | 600V | A | 1.2 |
| Ambient conditions | | | |
| Temperature | | | |
| Operating temperature | | | |
| | min | °C | -50 |
| | max | °C | 70 |
| Storage temperature | | | |
| | min | °C | -60 |
| | max | °C | 80 |
| Max altitude | | m | 3000 |
| Operating position | | | |
| | normal allowable | | Vertical plan ±30° |
| Mounting | | | Screw / DIN rail 35mm |
| Weight | | g | 0.5 |

Operations

| | | |
|-----------------|--------|----------|
| Mechanical life | Cycles | 20000000 |
| Electrical life | Cycles | 1600000 |

Safety related data

Performance level B10d according to EN/ISO 13489-1

| | | | |
|---|-----------------|-------|----------|
| | rated load | Cicli | 1600000 |
| | mechanical load | Cicli | 20000000 |
| Mirror contats according to IEC/EN 609474-4-1 | | | yes |
| EMC compatibility | | | yes |

DC coil operating

| | | | |
|--------------------------|-----|---|---|
| DC rated control voltage | min | V | 6 |
|--------------------------|-----|---|---|

| | | | |
|----------------------|-----|-----|------|
| DC operating voltage | | | |
| pick-up | min | %Us | 0.7 |
| | max | %Us | 1.25 |
| drop-out | min | %Us | 0.1 |
| | max | %Us | 0.40 |

Average coil consupcion $\leq 20^{\circ}\text{C}$

| | | |
|---------|---|-----|
| in-rush | W | 5.4 |
| holding | W | 5.4 |

Max cycles frequency

| | | |
|-----------------------|----------|------|
| Mechanical operations | Cycles/h | 3600 |
|-----------------------|----------|------|

Operating times

Average time for Us control

in AC

Closing NC

| | | |
|-----|----|----|
| min | ms | 14 |
| max | ms | 28 |

Opening NC

| | | |
|-----|----|----|
| min | ms | 7 |
| max | ms | 18 |

in DC

Closing NO

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

Opening NO

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

UL technical data

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

| | | |
|---------|---|----|
| at 480V | A | 14 |
| at 600V | A | 17 |

Yielded mechanical performance

for single-phase AC motor

| | | |
|-------------|----|---|
| at 110/120V | hp | 1 |
| at 230V | hp | 3 |

for three-phase AC motor

| | | |
|-------------|----|----|
| at 200/208V | hp | 5 |
| at 220/230V | hp | 5 |
| at 460/480V | hp | 10 |
| at 575/600V | hp | 15 |

Contact rating of auxiliary contacts according to UL

A600 - P600

General USE

Contactor

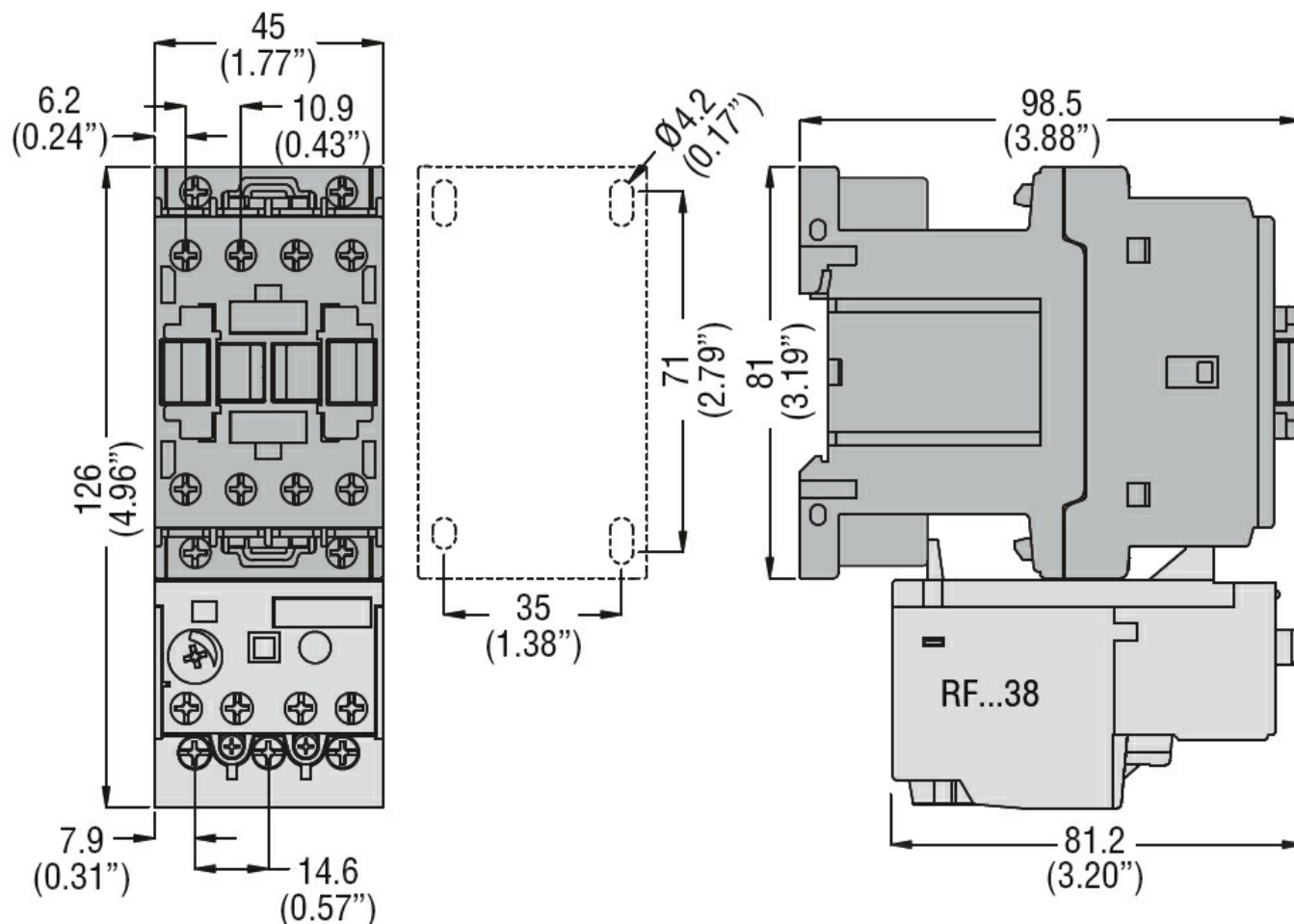
AC current A 32

Other features

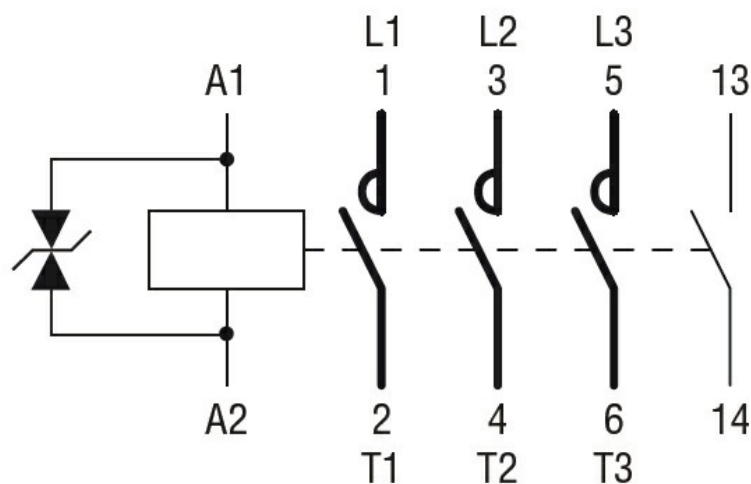
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Compliance

CCC

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching