



Product designation
Product type designation

Power contactor
BF150

Contact characteristics

| | | |
|---|--------------------|--------|
| Number of poles | Nr. | 4 |
| Rated insulation voltage U _i IEC/EN | V | 1000 |
| Rated impulse withstand voltage U _{imp} | kV | 8 |
| Operational frequency | min | Hz 25 |
| | max | Hz 400 |
| IEC Conventional free air thermal current I _{th} | A | 165 |
| Operational current I _e | AC-1 (≤40°C) | A 165 |
| | AC-1 (≤55°C) | A 135 |
| | AC-1 (≤70°C) | A 118 |
| | AC-3 (≤440V ≤55°C) | A 150 |
| | AC-4 (400V) | A 70 |
| Rated operational current AC-3 (T≤55°C) | 230V | A 150 |
| | 400V | A 150 |
| | 415V | A 150 |
| | 440V | A 150 |
| | 500V | A 128 |
| | 690V | A 113 |
| | 1000V | A 51 |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series | ≤24V | A 165 |
| | 48V | A 165 |
| | 75V | A 150 |
| | 110V | A 10 |
| | 220V | A – |
| | | |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series | ≤24V | A 165 |
| | 48V | A 165 |
| | 75V | A 165 |
| | 110V | A 150 |
| | 220V | A 14 |
| | | |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series | ≤24V | A 165 |
| | 48V | A 165 |
| | 75V | A 165 |
| | 110V | A 160 |
| | 220V | A 150 |
| | | |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series | ≤24V | A 165 |
| | 48V | A 165 |

| | | | |
|--|-----------------|------|------|
| | 75V | A | 165 |
| | 110V | A | 165 |
| | 220V | A | 165 |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series | ≤24V | A | 165 |
| | 48V | A | 60 |
| | 75V | A | 44 |
| | 110V | A | 6 |
| | 220V | A | – |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series | ≤24V | A | 165 |
| | 48V | A | 82 |
| | 75V | A | 70 |
| | 110V | A | 80 |
| | 220V | A | 7 |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series | ≤24V | A | 165 |
| | 48V | A | 195 |
| | 75V | A | 110 |
| | 110V | A | 120 |
| | 220V | A | 120 |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series | ≤24V | A | 165 |
| | 48V | A | 130 |
| | 75V | A | 130 |
| | 110V | A | 150 |
| | 220V | A | 150 |
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| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 1200 |
| <hr/> | | | |
| Protection fuse | gG (IEC) | A | 250 |
| | aM (IEC) | A | 160 |
| <hr/> | | | |
| Making capacity (RMS value) | | A | 1500 |
| <hr/> | | | |
| Breaking capacity at voltage | 440V | A | 1200 |
| | 500V | A | 1025 |
| | 690V | A | 905 |
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| Resistance per pole (average value) | | mΩ | 0.45 |
| <hr/> | | | |
| Power dissipation per pole (average value) | I _{th} | W | 12 |
| | AC-3 | W | 10.1 |
| <hr/> | | | |
| Tightening torque for terminals | min | Nm | 6 |
| | max | Nm | 7 |
| | min | lbin | 4.4 |
| | max | lbin | 5.2 |
| <hr/> | | | |
| Tightening torque for coil terminal | min | Nm | 0.8 |
| | max | Nm | 1 |
| | min | lbin | 0.59 |
| | max | lbin | 0.74 |
| <hr/> | | | |
| Conductor section | AWG/Kcmil | | |
| | max | | 2/0 |

| | | | | |
|---|------------------------------|------------------|-----------------|-----------------------|
| Flexible w/o lug conductor section | | min | mm ² | 1.5 |
| | | max | mm ² | 70 |
| Flexible c/w lug conductor section | | min | mm ² | 1.5 |
| | | max | mm ² | 70 |
| Power terminal protection according to IEC/EN 60529 | | | | IP20 front |
| Mechanical features | | | | |
| Operating position | | normal allowable | | Vertical plan ±30° |
| Fixing | | | | Screw / DIN rail 35mm |
| Weight | | | g | 2420 |
| Conductor section | AWG/kcmil conductor section | | | |
| | | max | | 2/0 |
| Operations | | | | |
| Mechanical life | | | cycles | 15000000 |
| Electrical life | | | cycles | 800000 |
| Safety related data | | | | |
| EMC compatibility | | | | yes |
| AC coil operating | | | | |
| Rated AC voltage at 60Hz | | | V | 460 |
| AC operating voltage | of 60Hz coil powered at 60Hz | | | |
| | pick-up | min | %Us | 80 |
| | | max | %Us | 110 |
| | drop-out | min | %Us | 20 |
| | | max | %Us | 55 |
| AC average coil consumption at 20°C | of 60Hz coil powered at 60Hz | | | |
| | | in-rush | VA | 300 |
| | | holding | VA | 20 |
| Dissipation at holding ≤20°C 50Hz | | | W | 6.5 |
| Max cycles frequency | | | | |
| Mechanical operation | | | cycles/h | 1500 |
| Operating times | | | | |
| Average time for Us control | in AC | | | |
| | Closing NO | min | ms | 45 |
| | | max | ms | 32 |
| | Opening NO | min | ms | 9 |
| | | max | ms | 24 |
| UL technical data | | | | |
| General USE | Contactor | | | |
| | | AC current | A | 165 |
| Short-circuit protection fuse, 600V | | | | |

High fault

| | | |
|-----------------------|----|-----|
| Short circuit current | kA | 100 |
| Fuse rating | A | 200 |
| Fuse class | | J |

Standard fault

| | | |
|-----------------------|----|-----|
| Short circuit current | kA | 10 |
| Fuse rating | A | 250 |
| Fuse class | | RK5 |

Ambient conditions

Temperature

Operating temperature

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

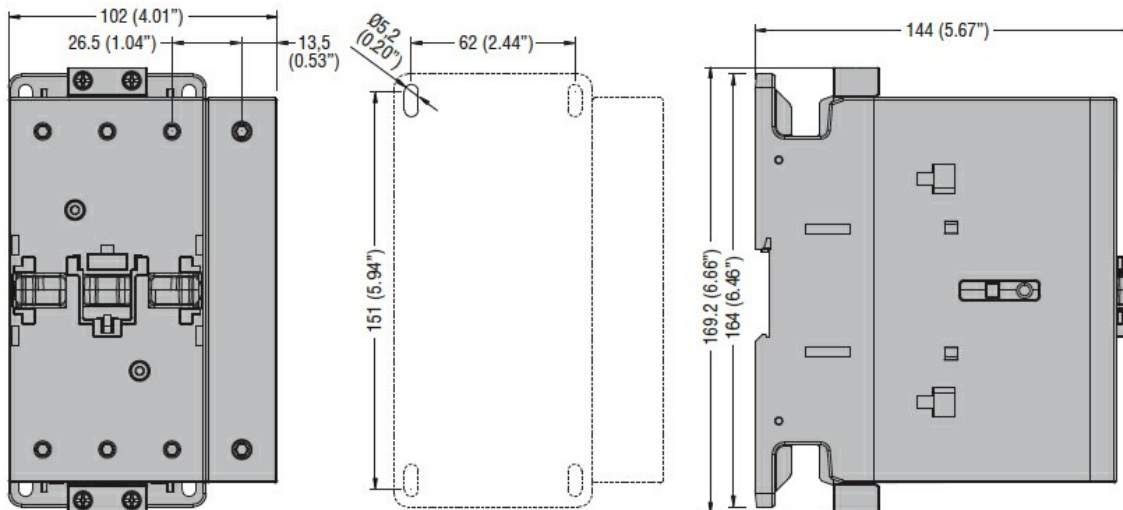
Storage temperature

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

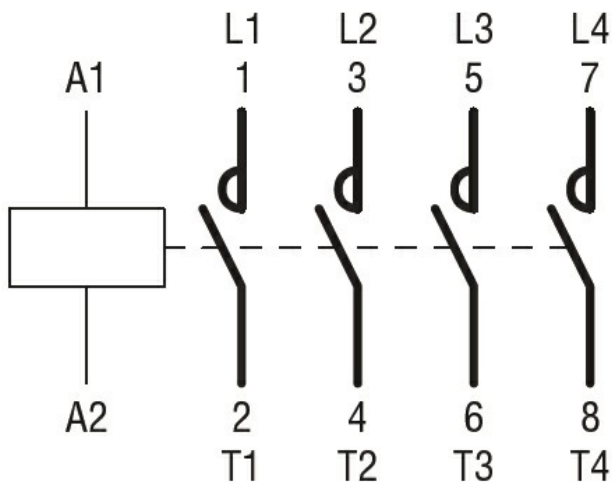
Max altitude

m 3000

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