



Product designation
Product type designation

Power contactor
BF195

Contact characteristics

| | | |
|--|---|-------|
| Number of poles | Nr. | 3 |
| 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 | 275 |
| Operational current I_e | AC-1 ($\leq 40^\circ\text{C}$) | A 275 |
| | AC-1 ($\leq 55^\circ\text{C}$) | A 230 |
| | AC-1 ($\leq 70^\circ\text{C}$) | A 200 |
| | AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$) | A 195 |
| | AC-4 (400V) | A 95 |
| Rated operational power AC-3 ($T \leq 55^\circ\text{C}$) | 230V kW | 55 |
| | 400V kW | 90 |
| | 415V kW | 110 |
| | 440V kW | 110 |
| | 500V kW | 132 |
| | 690V kW | 160 |
| | 1000V kW | 90 |
| Rated operational current AC-3 ($T \leq 55^\circ\text{C}$) | 230V A | 195 |
| | 400V A | 195 |
| | 415V A | 195 |
| | 440V A | 195 |
| | 500V A | 184 |
| | 690V A | 165 |
| | 1000V A | 85 |
| Rated operational power AC-1 ($T \leq 40^\circ\text{C}$) | 230V kW | 104 |
| | 400V kW | 181 |
| | 500V kW | 199 |
| | 690V kW | 312 |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series | $\leq 24\text{V}$ A | 275 |
| | 48V A | 275 |
| | 75V A | 275 |
| | 110V A | 120 |
| | 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 | 275 |

| | | | |
|--|----------|----|------|
| | 48V | A | 275 |
| | 75V | A | 275 |
| | 110V | A | 170 |
| | 220V | A | 150 |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series | | | |
| | ≤24V | A | 275 |
| | 48V | A | 275 |
| | 75V | A | 275 |
| | 110V | A | 170 |
| | 220V | A | 150 |
| | 330V | A | 150 |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series | | | |
| | ≤24V | A | 275 |
| | 48V | A | 275 |
| | 75V | A | 275 |
| | 110V | A | 275 |
| | 220V | A | 275 |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series | | | |
| | ≤24V | A | 275 |
| | 48V | A | 275 |
| | 75V | A | 180 |
| | 110V | A | 90 |
| | 220V | A | — |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series | | | |
| | ≤24V | A | 275 |
| | 48V | A | 275 |
| | 75V | A | 180 |
| | 110V | A | 140 |
| | 220V | A | 100 |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series | | | |
| | ≤24V | A | 275 |
| | 48V | A | 275 |
| | 75V | A | 180 |
| | 110V | A | 160 |
| | 220V | A | 140 |
| | 330V | A | 100 |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series | | | |
| | ≤24V | A | 275 |
| | 48V | A | 275 |
| | 75V | A | 180 |
| | 110V | A | 160 |
| | 220V | A | 160 |
| | 330V | A | 160 |
| | 460V | A | 100 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 1560 |
| Protection fuse | | | |
| | gG (IEC) | A | 315 |
| | aM (IEC) | A | 250 |
| Making capacity (RMS value) | | A | 1658 |
| Breaking capacity at voltage | | | |
| | 440V | A | 1658 |
| | 500V | A | 1326 |
| | 690V | A | 1377 |
| Resistance per pole (average value) | | mΩ | 0.18 |

| | | | |
|---|------------|--------|---------------|
| Power dissipation per pole (average value) | | | |
| | Ith | W | 13 |
| | AC-3 | W | 6.7 |
| Tightening torque for terminals | | | |
| | min | Nm | 18 |
| | max | Nm | 18 |
| | min | Ibin | 159 |
| | max | Ibin | 159 |
| Tightening torque for coil terminal | | | |
| | min | Nm | 0.8 |
| | max | Nm | 1 |
| Power terminal protection according to IEC/EN 60529 | | | IP00 |
| Mechanical features | | | |
| Operating position | | | |
| | normal | | Vertical plan |
| | allowable | | ±30° |
| Fixing | | | Screw |
| Weight | | g | 3000 |
| Operations | | | |
| Mechanical life | | cycles | 10000000 |
| Electrical life | | cycles | 1000000 |
| Safety related data | | | |
| Performance level B10d according to EN/ISO 13489-1 | | | |
| | rated load | cycles | 1000000 |
| EMC compatibility | | | yes |
| AC coil operating | | | |
| Rated AC voltage at 50/60Hz, 60Hz | | | |
| | min | V | 100 |
| | max | V | 250 |
| AC operating voltage | | | |
| of 50/60Hz coil powered at 50Hz | | | |
| pick-up | | | |
| | min | %Us | 80 Us min |
| | max | %Us | 110 Us max |
| drop-out | | | |
| | max | %Us | ≤70 Us min |
| of 50/60Hz coil powered at 60Hz | | | |
| pick-up | | | |
| | min | %Us | 80 Us min |
| | max | %Us | 110 Us max |
| drop-out | | | |
| | max | %Us | ≤70 Us min |
| AC average coil consumption at 20°C | | | |
| of 50/60Hz coil powered at 50Hz | | | |
| | in-rush | VA | 160...230 |
| | holding | VA | 1.5...3.0 |
| of 50/60Hz coil powered at 60Hz | | | |
| | in-rush | VA | 160...230 |
| | holding | VA | 1.5...3.0 |
| of 60Hz coil powered at 60Hz | | | |
| | in-rush | VA | 160...230 |
| | holding | VA | 1.5...3.0 |
| Dissipation at holding ≤20°C 50Hz | | | W |
| | | | 1.5...3.0 |

DC coil operating

DC rated control voltage

| | | |
|-----|---|-----|
| min | V | 100 |
| max | V | 250 |

DC operating voltage

pick-up

| | | |
|-----|-----|------------|
| min | %Us | 85 Us min |
| max | %Us | 110 Us max |

drop-out

| | | |
|-----|-----|------------|
| max | %Us | ≤70 Us min |
|-----|-----|------------|

Average coil consumption ≤20°C

| | | |
|---------|---|-----------|
| in-rush | W | 160...230 |
| holding | W | 1.5...3.0 |

Max cycles frequency

Mechanical operation

cycles/h 1000

Operating times

Average time for Us control

in AC

Closing NO

| | | |
|-----|----|-----|
| min | ms | 50 |
| max | ms | 100 |

Opening NO

| | | |
|-----|----|----|
| min | ms | 35 |
| max | ms | 75 |

UL technical data

Yielded mechanical performance

for three-phase AC motor

| | | |
|----------|----|-----|
| 200/208V | HP | 60 |
| 220/230V | HP | 75 |
| 460/480V | HP | 150 |
| 575/600V | HP | 150 |

General USE

Contactor

| | | |
|------------|---|-----|
| AC current | A | 275 |
|------------|---|-----|

Short-circuit protection fuse, 600V

High fault

| | | |
|-----------------------|----|-----|
| Short circuit current | kA | 100 |
| Fuse rating | A | 400 |
| Fuse class | | J |

Standard fault

| | | |
|-----------------------|----|-----|
| Short circuit current | kA | 10 |
| Fuse rating | A | 400 |
| Fuse class | | RK5 |

Ambient conditions

Temperature

Operating temperature

| | | |
|-----|----|-----|
| min | °C | -40 |
| max | °C | 70 |

Storage temperature

| | | |
|-----|----|-----|
| min | °C | -50 |
| max | °C | 80 |

Max altitude

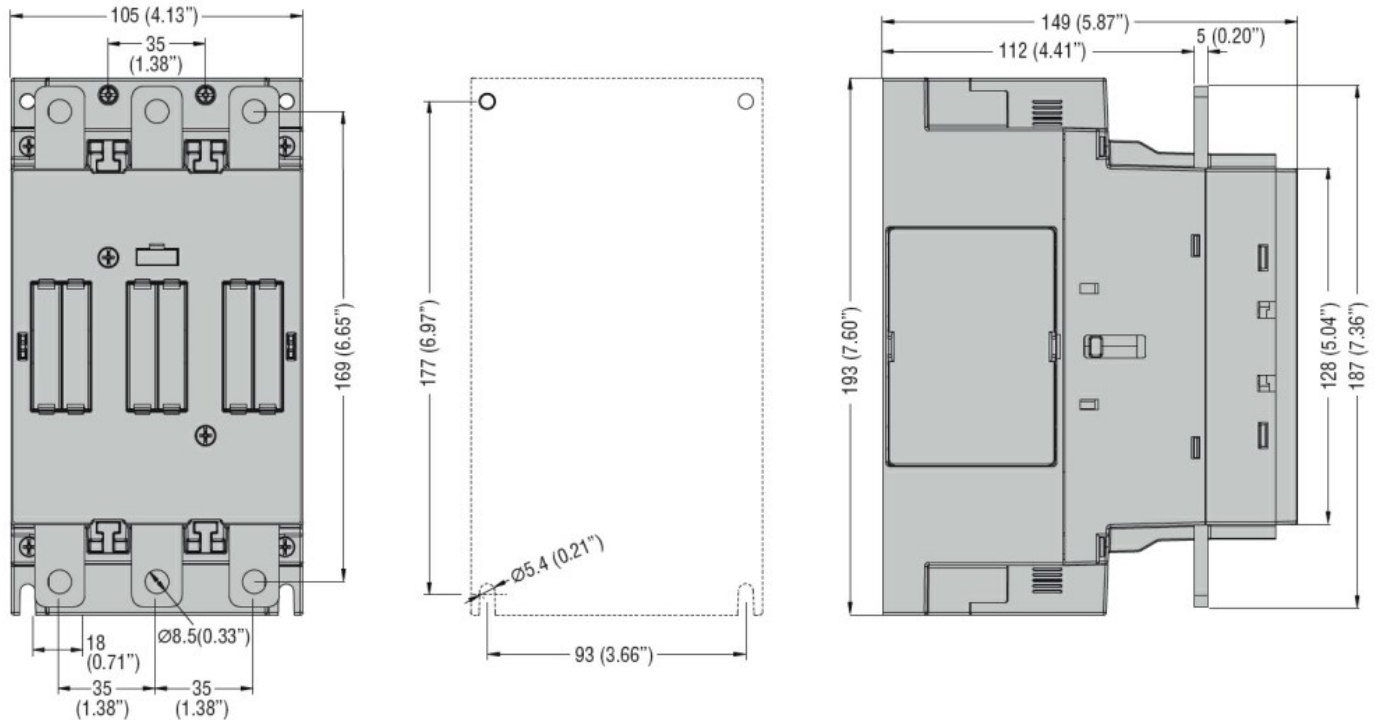
m 3000

Resistance & Protection

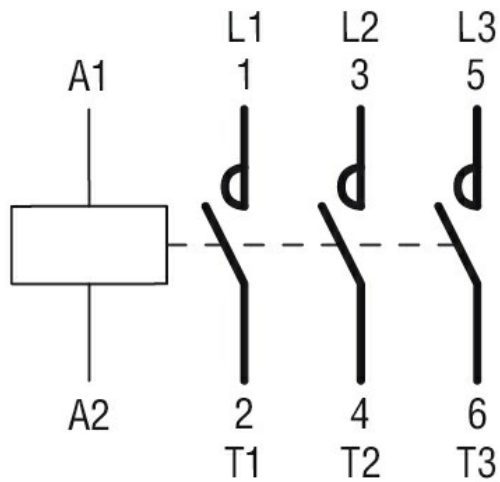
Pollution degree

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

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching