



Power contactor
BF195

Product designation

Product type designation

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 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 $L/R \leq 1\text{ms}$ with 3 poles in series | $\leq 24\text{V}$ | A 275 |
| | 48V | A 275 |
| | 75V | A 275 |

| | | | |
|----------------------------------------------------------------------------------|-----------------|------------------|------|
| | 110V | A | 170 |
| | 220V | A | 150 |
| | 330V | A | 150 |
| <hr/> | | | |
| 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 |
| <hr/> | | | |
| 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 | – |
| <hr/> | | | |
| 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 |
| <hr/> | | | |
| 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 |
| <hr/> | | | |
| 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 |
| <hr/> | | | |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 1560 |
| <hr/> | | | |
| Protection fuse | | | |
| | gG (IEC) | A | 315 |
| | aM (IEC) | A | 250 |
| <hr/> | | | |
| Making capacity (RMS value) | | A | 1658 |
| <hr/> | | | |
| Breaking capacity at voltage | | | |
| | 440V | A | 1658 |
| | 500V | A | 1326 |
| | 690V | A | 1377 |
| <hr/> | | | |
| Resistance per pole (average value) | | mΩ | 0.18 |
| <hr/> | | | |
| Power dissipation per pole (average value) | | | |
| | I _{th} | W | 13 |
| | AC3 | W | 6.7 |
| <hr/> | | | |
| Tightening torque for terminals | | | |
| | min | Nm | 18 |
| | max | Nm | 18 |
| | min | I _{bin} | 159 |
| | max | I _{bin} | 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 | 60 |
| max | V | 130 |

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

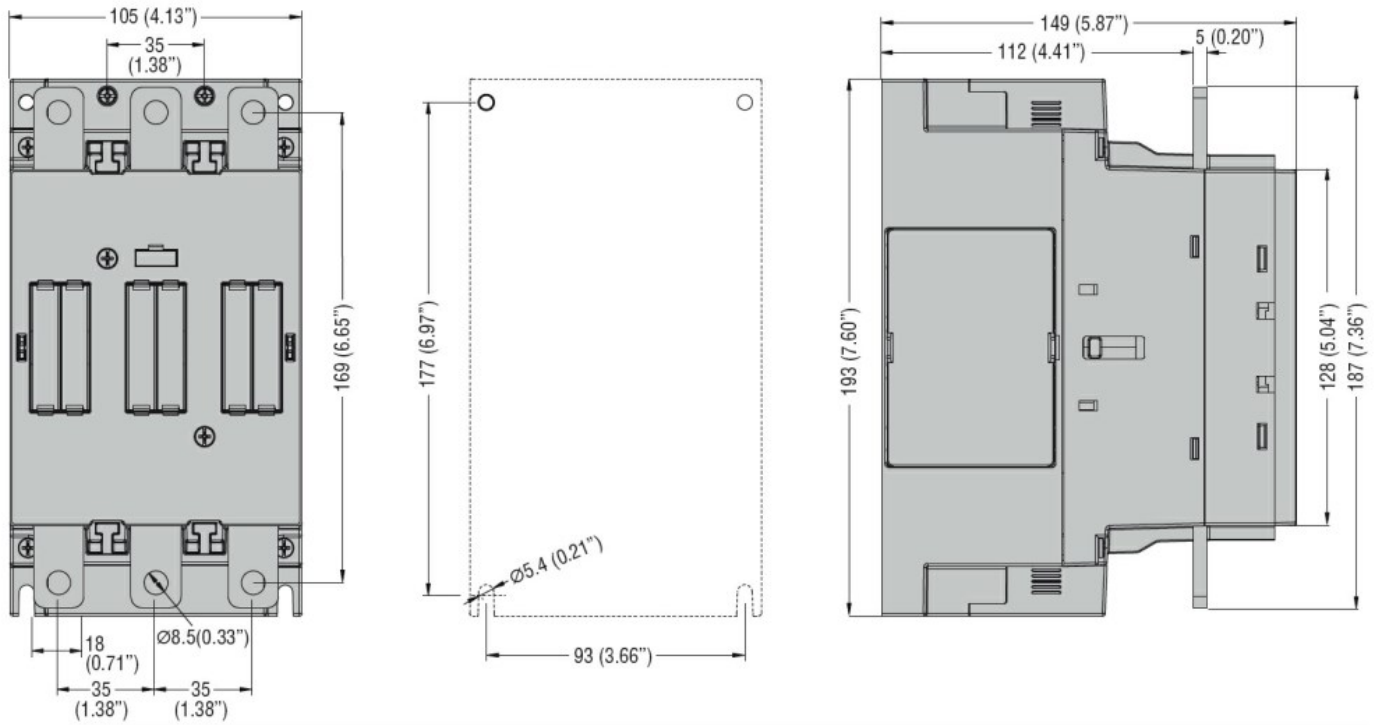
| | | |
|-----|---|-----|
| min | V | 60 |
| max | V | 130 |

DC operating voltage

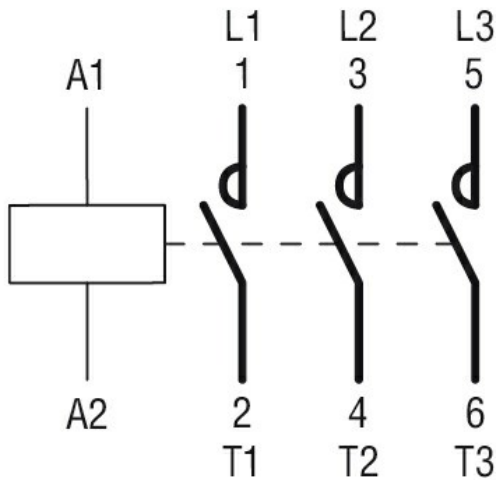
pick-up

| | | |
|-----|-----|------------|
| 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

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching