



|   |                    |       | SE SE           |
|---|--------------------|-------|-----------------|
| Product designation   |                    |       | Power contactor |
| Product type designation  |                    |       | BF195           |
| Contact characteristics   |                    |       |                 |
| Number of poles   |                    | Nr.   | 3               |
| Rated insulation voltage Ui IEC/EN                                |                    | V     | 1000            |
| Rated impulse withstand voltage Uimp                              |                    | kV    | 8               |
| Operational frequency   |                    |       |                 |
|   | min                | Hz    | 25              |
|   | max                | Hz    | 400             |
| IEC Conventional free air thermal current Ith                     |                    | Α     | 275             |
| Operational current le  |                    |       |                 |
|   | AC-1 (≤40°C)       | Α     | 275             |
|   | AC-1 (≤55°C)       | Α     | 230             |
|   | AC-1 (≤70°C)       | Α     | 200             |
|   | AC-3 (≤440V ≤55°C) | Α     | 195             |
|   | AC-4 (400V)        | Α     | 95              |
| Rated operational power AC-3 (T≤55°C)                             | 710 1 (1001)       | - , , |                 |
| ration operational perior rice of (1=00 o)                        | 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≤40°C)                             | 10001              |       |                 |
| raisa speralishal perior, ito i (1–10 o)                          | 230V               | kW    | 104             |
|   | 400V               | kW    | 181             |
|   | 500V               | kW    | 199             |
|   | 690V               | kW    | 312             |
| IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series   |                    |       |                 |
| 120 max canonic to in 201 mar 2/1 = mile mar 1 poloce in conce    | ≤24V               | Α     | 275             |
|   | 48V                | Α     | 275             |
|   | 75V                | Α     | 275             |
|   | 110V               | Α     | 120             |
|   | 220V               | Α     | _               |
| IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series   |                    |       |                 |
| sandik io iii 50 i iiiai Erit = iiiio iiiai E poloo iii oolioo    | ≤24V               | Α     | 275             |
|   | 48V                | A     | 275             |
|   | 75V                | A     | 275             |
|   | 110V               | A     | 170             |
|   | 220V               | A     | 150             |
| IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series   | 220 V              | 77    |                 |
| 120 max outlone to in 201 with 2/1/2 mile with a police in selles | ≤24V               | Α     | 275             |
|   | 48V                | A     | 275             |
|   | 75V                | A     | 275             |
|   | 750                | 77    | 210             |



|   | 110V     | Α    | 170          |
|---|----------|------|--------------|
|   | 220V     | Α    | 150          |
|   | 330V     | Α    | 150          |
| IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series         |          |      |              |
|   | ≤24V     | Α    | 275          |
|   | 48V      | Α    | 275          |
|   | 75V      | Α    | 275          |
|   | 110V     | Α    | 275          |
|   | 220V     | Α    | 275          |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series    |          |      |              |
| ·   | ≤24V     | Α    | 275          |
|   | 48V      | Α    | 275          |
|   | 75V      | Α    | 180          |
|   | 110V     | Α    | 90           |
|   | 220V     | Α    | <del>-</del> |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series    |          | ,,   | -            |
|   | ≤24V     | Α    | 275          |
|   | 48V      | A    | 275          |
|   | 75V      | A    | 180          |
|   | 110V     | A    | 140          |
|   | 220V     | A    | 100          |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series    | 220 V    |      | 100          |
| ILO max current le in DO3-DO3 with L/N = 13ms with 3 poles in series    | ≤24V     | Α    | 275          |
|   | 48V      | A    | 275          |
|   | 75V      | A    | 180          |
|   | 110V     | A    | 160          |
|   |          |      |              |
|   | 220V     | A    | 140          |
| IFC many asymptotic in DC2 DC5 with L/D < 45 may with 4 malas in parisa | 330V     | A    | 100          |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series    | 40 AV /  | ^    | 075          |
|   | ≤24V     | A    | 275          |
|   | 48V      | A    | 275          |
|   | 75V      | A    | 180          |
|   | 110V     | Α    | 160          |
|   | 220V     | Α    | 160          |
|   | 330V     | Α    | 160          |
|   | 460V     | Α    | 100          |
| Short-time allowable current for 10s (IEC/EN60947-1)                    |          | A    | 1560         |
| Protection fuse   |          |      |              |
|   | gG (IEC) | Α    | 315          |
| ·   | aM (IEC) | Α    | 250          |
| Making capacity (RMS value)   |          | Α    | 1658         |
| Breaking capacity at voltage  |          |      |              |
|   | 440V     | Α    | 1658         |
|   | 500V     | Α    | 1326         |
|   | 690V     | Α    | 1377         |
| Resistance per pole (average value)                                     |          | mΩ   | 0.18         |
| Power dissipation per pole (average value)                              |          |      |              |
|   | Ith      | W    | 13           |
|   | AC3      | W    | 6.7          |
| Tightening torque for terminals   |          |      | _            |
|   | min      | Nm   | 18           |
|   | max      | Nm   | 18           |
|   | min      | Ibin | 159          |
|   | max      | Ibin | 159          |
|   |          |      |              |



BF19500E024

| Tightening torque for c  | oil terminal                            |            |        |               |
|--------------------------|---|------------|--------|---------------|
| rigintering torque for c | on terminal                             | min        | Nm     | 0.8           |
|                          |   | max        | Nm     | 1             |
| Power terminal protect   | tion according to IEC/EN 60529          |            |        | IP00          |
| Mechanical features      |   |            |        |               |
| Operating position       |   |            |        |               |
| 1 01                     |   | normal     |        | Vertical plan |
|                          |   | allowable  |        | ±30°          |
| Fixing                   |   |            |        | Screw         |
| Weight                   |   |            | g      | 3000          |
| Operations               |   |            |        |               |
| Mechanical life          |   |            | cycles | 10000000      |
| Electrical life          |   |            | cycles | 1000000       |
| Safety related data      |   |            | .,     |               |
|                          | Od according to EN/ISO 13489-1          |            |        |               |
|                          |   | rated load | cycles | 1000000       |
| EMC compatibility        |   |            | -,     | yes           |
| AC coil operating        |   |            |        | ,<br>         |
| Rated AC voltage at 50   | 0/60Hz. 60Hz                            |            |        |               |
| zu                       |   | min        | V      | 24            |
|                          |   | max        | V      | 60            |
| AC operating voltage     |   | THOM:      | •      |               |
| to operating venage      | of 50/60Hz coil powered at 50Hz         |            |        |               |
|                          | pick-up                                 |            |        |               |
|                          | pion ap                                 | min        | %Us    | 80 Us min     |
|                          |   | max        | %Us    | 110 Us max    |
|                          | drop-out                                | max        | 7000   | 110 00 max    |
|                          | arop out                                | max        | %Us    | ≤70 Us min    |
|                          | of 50/60Hz coil powered at 60Hz         |            | ,,,,,  |               |
|                          | pick-up                                 |            |        |               |
|                          | Press SP                                | min        | %Us    | 80 Us min     |
|                          |   | max        | %Us    | 110 Us max    |
|                          | drop-out                                |            |        |               |
|                          | •                                       | max        | %Us    | ≤70 Us min    |
| AC average coil consu    | imption at 20°C                         |            |        |               |
| 3                        | of 50/60Hz coil powered at 50Hz         |            |        |               |
|                          | , | in-rush    | VA     | 160230        |
|                          |   | holding    | VA     | 1.53.0        |
|                          | of 50/60Hz coil powered at 60Hz         | <u></u>    |        |               |
|                          | ,                                       | in-rush    | VA     | 160230        |
|                          |   | holding    | VA     | 1.53.0        |
|                          | of 60Hz coil powered at 60Hz            |            |        |               |
|                          | •                                       | in-rush    | VA     | 160230        |
|                          |   | holding    | VA     | 1.53.0        |
| Dissipation at holding : | ≤20°C 50Hz                              | <u> </u>   | W      | 1.53.0        |
| OC coil operating        |   |            |        |               |
| DC rated control voltag  | ge                                      |            |        |               |
|                          | -                                       | min        | V      | 20            |
|                          |   | max        | V      | 60            |
| DC operating voltage     |   |            |        |               |
| , 5                      | pick-up                                 |            |        |               |
|                          | 1 - · · · · · · · · · · · · · · · · · · | min        | %Us    | 85 Us min     |
|                          |   | max        | %Us    | 110 Us max    |
|                          |   |            |        |               |

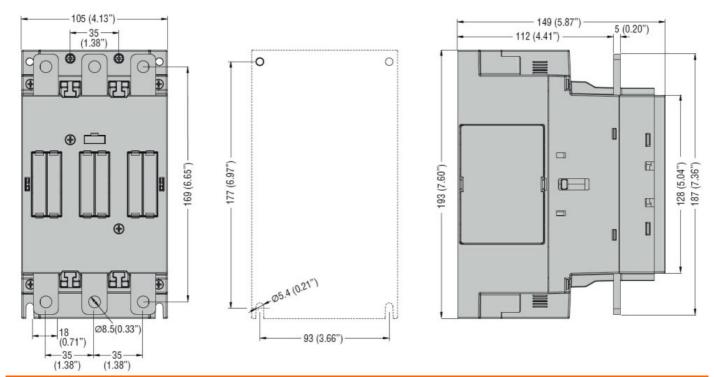




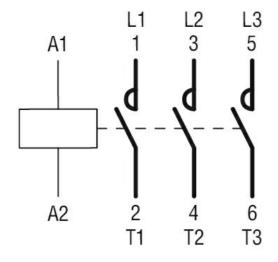
|                          | drop-out                 |                       |          |            |
|--------------------------|--------------------------|-----------------------|----------|------------|
|                          | arop out                 | max                   | %Us      | ≤70 Us min |
| Average coil consump     | otion ≤20°C              |                       |          |            |
|                          |                          | in-rush               | W        | 160230     |
|                          |                          | holding               | W        | 1.53.0     |
| Max cycles frequency     |                          |                       |          |            |
| Mechanical operation     |                          |                       | cycles/h | 1000       |
| Operating times          | o material.              |                       |          |            |
| Average time for Us c    | in AC                    |                       |          |            |
|                          | Closing NO               |                       |          |            |
|                          | Closing NO               | min                   | ms       | 50         |
|                          |                          | max                   | ms       | 100        |
|                          | Opening NO               | max                   | 1113     | 100        |
|                          | Opening IVO              | min                   | ms       | 35         |
|                          |                          | max                   | ms       | 75         |
| UL technical data        |                          |                       |          |            |
| Yielded mechanical pe    | erformance               |                       |          |            |
| ·                        | 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            | Α        | 275        |
| Short-circuit protection |                          |                       |          |            |
|                          | High fault               |                       |          |            |
|                          |                          | Short circuit current | kA       | 100        |
|                          |                          | Fuse rating           | Α        | 400        |
|                          |                          | Fuse class            |          | J          |
|                          | Standard fault           | 01 ( )                |          | 4.0        |
|                          |                          | Short circuit current | kA<br>^  | 10         |
|                          |                          | Fuse rating           | Α        | 400<br>RK5 |
| Ambient conditions       |                          | Fuse class            |          | CAN        |
| Temperature              |                          |                       |          |            |
| romperature              | Operating temperature    |                       |          |            |
|                          | Operating temperature    | min                   | °C       | -40        |
|                          |                          | max                   | °C       | 70         |
|                          | Storage temperature      | max                   |          | . •        |
|                          | gp                       | min                   | °C       | -50        |
|                          |                          | max                   | °C       | 80         |
| Max altitude             |                          |                       | m        | 3000       |
| Resistance & Protecti    | on                       |                       |          |            |
| Pollution degree         |                          |                       |          | 3          |
| Dimensions               |                          |                       |          |            |

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 195A, AC/DC COIL, 24...60VAC - 20...60VDC



## Wiring diagrams



## Certifications and compliance

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching