



| Product designation Product type designation                    |                    |     | Power contactor<br>BF195 |
|---|--------------------|-----|--------------------------|
| Contact characteristics   |                    |     |                          |
| Number of poles   |                    | Nr. | 4                        |
| 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-1 (T≤40°C)                           | ,                  |     |                          |
|   | 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 |                    |     |                          |
| · ·   | ≤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 |                    |     |                          |
| ·   | ≤24V               | Α   | 275                      |
|   | 48V                | Α   | 275                      |
|   | 75V                | Α   | 275                      |
|   | 110V               | Α   | 170                      |
|   | 220V               | Α   | 150                      |
| IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series |                    |     |                          |
| ·   | ≤24V               | Α   | 275                      |
|   | 48V                | Α   | 275                      |
|   | 75V                | Α   | 275                      |
|   | 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                      |
|   |                    |     |                          |



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|  |               |        | 075           |
|--|---------------|--------|---------------|
| IEO  | 220V          | A      | 275           |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series | <b>-04)</b> / | ^      | 075           |
|  | ≤24V          | A      | 275           |
|  | 48V           | A      | 275           |
|  | 75V           | A      | 180           |
|  | 110V          | A      | 90            |
|  | 220V          | Α      | _             |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series |               |        |               |
|  | ≤24V          | Α      | 275           |
|  | 48V           | Α      | 275           |
|  | 75V           | Α      | 180           |
|  | 110V          | Α      | 140           |
|  | 220V          | Α      | 100           |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series |               |        |               |
|  | ≤24V          | Α      | 275           |
|  | 48V           | Α      | 275           |
|  | 75V           | Α      | 180           |
|  | 110V          | Α      | 160           |
|  | 220V          | Α      | 140           |
|  | 330V          | Α      | 100           |
| IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series |               |        |               |
|  | ≤24V          | Α      | 275           |
|  | 48V           | Α      | 275           |
|  | 75V           | Α      | 180           |
|  | 110V          | A      | 160           |
|  | 220V          | A      | 160           |
|  | 330V          | A      | 160           |
|  | 460V          | A      | 100           |
| Short-time allowable current for 10s (IEC/EN60947-1)                 | 400 V         | A      | 1560          |
| Protection fuse  |               |        | 1300          |
| Flotection fuse  | ۵۵ (۱۲۵)      | ۸      | 245           |
|  | gG (IEC)      | A      | 315           |
| Making consists (DMC value)  | aM (IEC)      | A      | 250           |
| Making capacity (RMS value)  |               | Α      | 1658          |
| Breaking capacity at voltage   |               | _      |               |
|  | 440V          | Α      | 1658          |
|  | 500V          | Α      | 1326          |
|  | 690V          | A      | 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           | lbin   | 159           |
|  | max           | lbin   | 159           |
| Tightening torque for coil terminal                                  |               |        |               |
|  | min           | Nm     | 0.8           |
|  | max           | Nm     | 1             |
| Power terminal protection according to IEC/EN 60529                  | HUA           | . 4111 | IP00          |
| Mechanical features  |               |        | 11 00         |
| Operating position   |               |        |               |
| Operating position   | narmal        |        | Vertical plan |
|  | normal        |        | Vertical plan |



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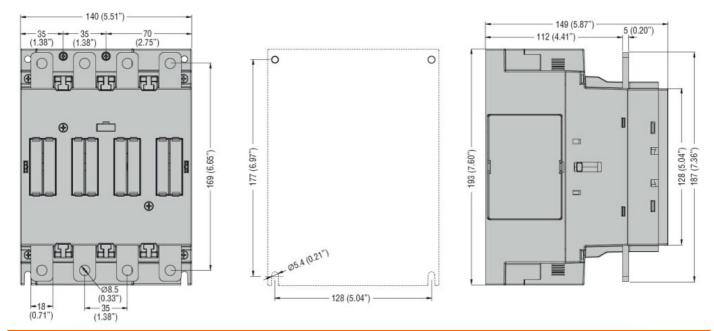
|                          |  | allowable          |            | ±30°             |
|--------------------------|--|--------------------|------------|------------------|
| Fixing                   |  |                    |            | Screw            |
| Weight                   |  |                    | g          | 4000             |
| Operations               |  |                    |            |                  |
| Mechanical life          |  |                    | cycles     | 10000000         |
| Electrical life          |  |                    | cycles     | 1000000          |
| Safety related data      |  |                    |            |                  |
| Performance level B10    | Od according to EN/ISO 13489-1             |                    |            |                  |
|                          |  | rated load         | cycles     | 1000000          |
| EMC compatibility        |  |                    |            | yes              |
| AC coil operating        |  |                    |            |                  |
| Rated AC voltage at 50   | 0/60Hz, 60Hz                               |                    |            |                  |
|                          |  | min                | V          | 100              |
|                          |  | max                | V          | 250              |
| AC operating voltage     |  |                    |            |                  |
|                          | of 50/60Hz coil powered at 50Hz            |                    |            |                  |
|                          | pick-up                                    | _                  | 0///       | 0011             |
|                          |  | min                | %Us        | 80 Us min        |
|                          | L  | max                | %Us        | 110 Us max       |
|                          | drop-out                                   | <b></b>            | 0/110      | ≤70 Us min       |
|                          | of FO/COLLE poil novement of COLLE         | max                | %Us        | ≤/U US Min       |
|                          | of 50/60Hz coil powered at 60Hz<br>pick-up |                    |            |                  |
|                          | ріск-ир                                    | min                | %Us        | 80 Us min        |
|                          |  | max                | %Us        | 110 Us max       |
|                          | drop-out                                   | max                | 7003       | 110 00 max       |
|                          | arop cut                                   | max                | %Us        | ≤70 Us min       |
| AC average coil consu    | Imption at 20°C                            |                    | ,,,,,      |                  |
|                          | of 50/60Hz coil powered at 50Hz            |                    |            |                  |
|                          | , , , , , , , , , , , , , , , , , , ,      | in-rush            | VA         | 160230           |
|                          |  | holding            | VA         | 1.53.0           |
|                          | of 50/60Hz coil powered at 60Hz            |                    |            |                  |
|                          |  | 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                                 |                    | W          | 1.53.0           |
| DC coil operating        |  |                    |            |                  |
| DC rated control voltage | ge   |                    |            |                  |
|                          |  | min                | V          | 100              |
| DO 6 5                   |  | max                | V          | 250              |
| DC operating voltage     |  |                    |            |                  |
|                          | pick-up                                    |                    | 0/11-      | 05 He mi:        |
|                          |  | min                | %Us        | 85 Us min        |
|                          | drop out                                   | max                | %Us        | 110 Us max       |
|                          | drop-out                                   | <b>200.0</b> 11    | 0/110      | <70 Ha min       |
| Average soil consumer    | tion <20°C                                 | max                | %Us        | ≤70 Us min       |
| Average coil consump     | UUII ≥ZU C                                 | ام سامه            | ۱۸/        | 160 220          |
|                          |  | in-rush<br>holding | W          | 160230<br>1.53.0 |
| Max cycles frequency     |  | noiding            | V V        | 1.JJ.U           |
| Mechanical operation     |  |                    | cycles/h   | 1000             |
| Woodaniou operation      |  |                    | Jy 0103/11 | 1000             |



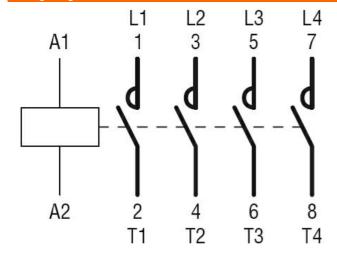
| Operating times         |  |                           |     |           |
|-------------------------|--|---------------------------|-----|-----------|
| Average time for Us of  | control  |                           |     |           |
| _                       | in AC  |                           |     |           |
|                         | Closing NO   |                           |     |           |
|                         | ŭ  | min                       | ms  | 50        |
|                         |  | max                       | ms  | 100       |
|                         | Opening NO   |                           |     |           |
|                         | , ,  | min                       | ms  | 35        |
|                         |  | max                       | ms  | 75        |
| UL technical data       |  |                           |     | -         |
| Yielded mechanical p    | erformance   |                           |     |           |
| ,                       | for three-phase AC motor   |                           |     |           |
|                         | p  | 200/208V                  | HP  | 60        |
|                         |  | 220/230V                  | HP  | 75        |
|                         |  | 460/480V                  | HP  | 150       |
|                         |  | 575/600V                  | HP  | 150       |
| General USE             |  | 07070001                  |     |           |
| Ochciai OOL             | Contactor  |                           |     |           |
|                         | Contactor  | AC current                | Α   | 275       |
| Short-circuit protectio | in fuse 600V   | AC current                |     | 213       |
| Short-circuit protectio | High fault   |                           |     |           |
|                         | i ligit tadit  | Short circuit current     | kA  | 100       |
|                         |  | Fuse rating               | A   | 400       |
|                         |  | Fuse class                | ^   | 400<br>J  |
|                         | Standard fault   | Fuse class                |     | J         |
|                         | Standard fault   | Short circuit current     | kA  | 10        |
|                         |  |                           | A   | 400       |
|                         |  | Fuse rating<br>Fuse class | А   | RK5       |
| Ambient conditions      |  | Fuse class                |     | IXIXO     |
|                         |  |                           |     |           |
| Temperature             | Operating temperature  |                           |     |           |
|                         | Operating temperature  |                           | ۰.  | 40        |
|                         |  | min                       | °C  | -40<br>70 |
|                         | Character and the second state of the second s | max                       | - C | 70        |
|                         | Storage temperature  |                           | ۰.  | F0        |
|                         |  | min                       | °C  | -50       |
| Manadalanak             |  | max                       |     | 80        |
| Max altitude            | ion  |                           | m   | 3000      |
| Resistance & Protect    | ion —  |                           |     | 2         |
| Pollution degree        |  |                           |     | 3         |
| Dimensions              |  |                           |     |           |

**ENERGY AND AUTOMATION** 

#### FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 100...250VAC/DC



#### Wiring diagrams



#### Certifications and compliance

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching