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 PRODUCT-DETAILS

## BC7-30-01-05

### BC7-30-01-05 Mini Contactor 220 ... 240 V DC - 3 NO - 0 NC - Screw Terminals




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#### General Information

|                       |  |
|-----------------------|--|
| Extended Product Type | BC7-30-01-05   |
| Product ID            | GJL1313001R0015  |
| EAN                   | 4013614152382  |
| Catalog Description   | BC7-30-01-05 Mini Contactor 220 ... 240 V DC - 3 NO - 0 NC - Screw Terminals |

|                  |   |
|------------------|---|
| Long Description | The BC7-30-01 mini contactor is a compact 3 pole contactor with 1 auxiliary contact and screw terminals. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors are used in residential buildings, commercial buildings and industrial applications for the control of single or three-phase loads up to 5.5 kW (AC-3) and 20 A (AC-1) or switching of control signals. Further features are the noiseless and hum-free coil, a switch position indication and the integrated possibility for rail or wall mounting. |
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#### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85365080 |

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#### Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals          | 2CDC102047M6801 |
| CAD Dimensional Drawing           | 2CDC001079B0201 |
| Dimension Diagram                 | GJL1200436F0001 |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 52.5 mm  |
| Product Net Height         | 57.5 mm  |
| Product Net Depth / Length | 46.7 mm  |
| Product Net Weight         | 0.175 kg |

## Technical

|   |  |
|---|--|
| Number of Poles   | 3  |
| Mini Contactor Type   | Mini Contactor   |
| Rated Operational Voltage   | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 250 V DC<br>Main Circuit 690 V AC<br>Main Circuit 220 V DC   |
| Rated Frequency (f)   | Control Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC  |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )               | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV  |
| Rated Insulation Voltage (U <sub>i</sub> )                        | 690 V<br>acc. to UL/CSA 600 V  |
| Number of Main Contacts NC  | 0  |
| Number of Main Contacts NO  | 3  |
| Rated Operational Current AC-1 (I <sub>e</sub> )                  | (220 / 240 V) 40 °C 20 A<br>(220 / 240 V) 55 °C 16 A<br>(380 / 440 V) 40 °C 20 A<br>(380 / 440 V) 55 °C 16 A<br>(690 V) 40 °C 6 A<br>(690 V) 55 °C 6 A |
| Rated Operational Power AC-3 (P <sub>e</sub> )                    | (230 V) Three Phase 3 kW<br>(400 V) Three Phase 5.5 kW<br>(500 V) Three Phase 5.5 kW<br>(690 V) Three Phase, NO 3 kW                                   |
| Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A  |
| Number of Auxiliary Contacts NC                                   | 1  |
| Number of Auxiliary Contacts NO                                   | 0  |
| Rated Operational Current AC-15 (I <sub>e</sub> )                 | (24 V) 4 A<br>(120 V) 4 A<br>(500 V) 2 A<br>(220 / 240 V) 4 A<br>(380 / 400 V) 3 A   |
| Rated Operational Current DC-13 (I <sub>e</sub> )                 | (24 V) 2.5 A<br>(110 V) 0.7 A  |

|  |   |
|--|---|
|  | (220 / 240 V) 0.4 A   |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Main Circuit 20 A   |
| Rated Control Circuit Voltage ( $U_c$ )            | 220 ... 240 V DC  |
| Coil Operating Limits                              | (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55^\circ\text{C}$ )   |
| Degree of Protection                               | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20   |
| Mechanical Durability                              | 10000000 cycle  |
| Minimum Switching Capacity                         | Auxiliary Circuit 17 V<br>Auxiliary Circuit 5 mA  |
| Maximum Electrical Switching Frequency             | (AC-1) 300 cycles per hour<br>(AC-15) 600 cycles per hour<br>(AC-3) 600 cycles per hour<br>(DC-1) 600 cycles per hour<br>(DC-13) 600 cycles per hour<br>(DC-3) 600 cycles per hour                      |
| Connecting Capacity Main Circuit                   | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup> |
| Connecting Capacity Auxiliary Circuit              | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup> |
| Connecting Capacity Control Circuit                | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup> |
| Wire Stripping Length                              | Auxiliary Circuit 9 mm<br>Main Circuit 9 mm   |
| Tightening Torque                                  | Auxiliary Circuit 0.8 ... 1.1 N·m<br>Control Circuit 0.8 ... 1.1 N·m<br>Main Circuit 0.8 ... 1.1 N·m  |
| Recommended Screw Driver                           | M3<br>Pozidriv 1  |
| Mounting on DIN Rail                               | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715  |
| Power Loss   | at Rated Operating Conditions AC-1 per Pole 1.4 W   |
| Standards  | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>UL 60947-1<br>UL 60947-4-1  |

## Technical UL/CSA

|                                  |  |
|----------------------------------|--|
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V AC  |
| Full Load Amps Motor Use         | (115 V AC) Single Phase 13.8 A<br>(200 V AC) Three Phase 7.8 A<br>(220 ... 240 V AC) Three Phase 9.6 A<br>(230 V AC) Single Phase 10 A<br>(440 ... 480 V AC) Three Phase 7.6 A<br>(550 ... 600 V AC) Three Phase 6.1 A |
| Horsepower Rating UL/CSA         | (115 V AC) Single Phase 0.75 Hp<br>(200 V AC) Three Phase 2 Hp<br>(220 ... 240 V AC) Three Phase 3 Hp<br>(230 V AC) Single Phase 1.5 Hp<br>(440 ... 480 V AC) Three Phase 5 Hp<br>(550 ... 600 V AC) Three Phase 5 Hp  |
| General Use Rating               | (600 V AC) 16 A  |

## UL/CSA

|   |  |
|---|--|
| Contact Rating UL/CSA                           | A600   |
| Connecting Capacity<br>Main Circuit UL/CSA      | Stranded 1/2x 22-10 AWG  |
| Connecting Capacity<br>Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG  |
| Tightening Torque<br>UL/CSA                     | Auxiliary Circuit 7 in-lb<br>Control Circuit 7 in-lb<br>Main Circuit 7 in-lb |

## Environmental

|   |  |
|---|--|
| Ambient Air<br>Temperature                    | Operation -25 ... +55 °C<br>Storage -40 ... +80 °C |
| Maximum Operating<br>Altitude Permissible     | 2000 m   |
| Resistance to Shock acc.<br>to IEC 60068-2-27 | 11 ms Pulse 15g                                    |
| Resistance to Vibrations                      | 5g 5 ... 150 Hz                                    |

## Material Compliance

|   |  |
|---|--|
| Conflict Minerals<br>Reporting Template<br>(CMRT) | 9AKK108467A5658  |
| REACH Declaration                                 | 2CMT2021-006202  |
| RoHS Information                                  | 2CMT2021-006277  |
| RoHS Status                                       | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances<br>Control Act - TSCA            | 2CMT2023-006525  |
| WEEE B2C / B2B                                    | Business To Business   |
| WEEE Category                                     | 5. Small Equipment (No External Dimension More Than 50 cm)             |

## Certificates and Declarations

|                                     |                     |
|-------------------------------------|---------------------|
| BV Certificate                      | 1SAA920000-0204     |
| CB Certificate                      | 1SAA938000-2002     |
| CQC Certificate                     | CQC2003010304064033 |
| Declaration of<br>Conformity - CCC  | 2020980304001854    |
| Declaration of<br>Conformity - CE   | 1SAD101100-3101     |
| Declaration of<br>Conformity - UKCA | 1SAD201100-3101     |
| DNV GL Certificate                  | 1SAA938000-0306     |
| EAC Certificate                     | 1SAA920000-2702     |
| KC Certificate                      | 1SAA938000-1501     |
| LR Certificate                      | 1SAA938000-0504     |
| RMRS Certificate                    | 1SAA938000-0704     |
| UL Certificate                      | E191658-19881208    |

## Container Information

|                       |          |
|-----------------------|----------|
| Package Level 1 Units | 10 piece |
| Package Level 1 Width | 115 mm   |

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Height         | 54 mm         |
| Package Level 1 Depth / Length | 280 mm        |
| Package Level 1 Gross Weight   | 1.82 kg       |
| Package Level 1 EAN            | 4013614418228 |

## Classifications

|                                    |   |
|------------------------------------|---|
| Object Classification Code         | Q   |
| ETIM 4                             | EC000066 - Magnet contactor, AC-switching |
| ETIM 5                             | EC000066 - Magnet contactor, AC-switching |
| ETIM 6                             | EC000066 - Power contactor, AC switching  |
| ETIM 7                             | EC000066 - Power contactor, AC switching  |
| ETIM 8                             | EC000066 - Power contactor, AC switching  |
| eClass                             | V11.0 : 27371003                          |
| UNSPSC                             | 39121529                                  |
| IDEA Granular Category Code (IGCC) | 4763 >> Power contactor, DC switching     |

## Accessories

| Identifier      | Description  | Type     | Quantity | Unit Of Measure |
|-----------------|--|----------|----------|-----------------|
| GJL1201317R0002 | CA6-11E Auxiliary Contact - 0 NO - 0 NC - Screw Terminals  | CA6-11E  | 1        | piece           |
| GJL1201317R0003 | CA6-11M Auxiliary Contact - 0 NO - 0 NC - Screw Terminals  | CA6-11M  | 1        | piece           |
| GJL1201317R0004 | CA6-11N Auxiliary Contact - 0 NO - 0 NC - Screw Terminals  | CA6-11N  | 1        | piece           |
| GJL1201330R0003 | CAF6-11M Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-11M | 1        | piece           |
| GJL1201330R0006 | CAF6-20E Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-20E | 1        | piece           |
| GJL1201330R0011 | CAF6-02M Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-02M | 1        | piece           |
| GJL1201330R0007 | CAF6-20M Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-20M | 1        | piece           |
| GJL1201330R0012 | CAF6-02N Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-02N | 1        | piece           |
| GJL1201330R0008 | CAF6-20N Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-20N | 1        | piece           |
| GJL1201330R0002 | CAF6-11E Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-11E | 1        | piece           |
| GJL1201330R0004 | CAF6-11N Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-11N | 1        | piece           |
| GJL1201330R0010 | CAF6-02E Auxiliary Contact - 0 NO - 0 NC - Screw Terminals | CAF6-02E | 1        | piece           |
| GJL1201906R0001 | LT6-B Cover cap - No Terminals                             | LT6-B    | 1        | piece           |
| GJL1201904R0001 | BN6 Plunger - No Terminals                                 | BN6      | 1        | piece           |

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Mini Contactors

