

## PRODUCT-DETAILS

# BC6-30-01-01

## BC6-30-01-01 Mini Contactor 24VDC



### General Information

|                       |                                   |
|-----------------------|-----------------------------------|
| Extended Product Type | BC6-30-01-01                      |
| Product ID            | GJL1213001R0011                   |
| EAN                   | 4013614052828                     |
| Catalog Description   | BC6-30-01-01 Mini Contactor 24VDC |

### Long Description

The BC6-30-01 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 4 kW (AC-3) and 20 A / 690 V (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.

### Ordering

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

### Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0201 |
| Instructions and Manuals          | 2CDC102047M6801 |

Dimension Diagram

GJL1200436F0001

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 52.5 mm  |
| Product Net Height         | 57.5 mm  |
| Product Net Depth / Length | 46.5 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 ( $U_{imp}$ )      | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV                                                                                                            |
| Rated Insulation Voltage ( $U_i$ )                 | 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 ( $I_e$ )           | (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 ( $P_e$ )             | (230 V) Three Phase 2.2 kW<br>(400 V) Three Phase 4 kW<br>(500 V) Three Phase 4 kW<br>(690 V) Three Phase, NO 3 kW                                     |
| Rated Short-time Withstand Current ( $I_{cw}$ )    | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 64 A                                                                                        |
| Number of Auxiliary Contacts NC                    | 1                                                                                                                                                      |
| Number of Auxiliary Contacts NO                    | 0                                                                                                                                                      |
| Rated Operational Current AC-15 ( $I_e$ )          | (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 ( $I_e$ )          | (24 V) 2.5 A<br>(110 V) 0.7 A<br>(220 / 240 V) 0.4 A                                                                                                   |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Main Circuit 20 A                                                                                                                                      |

|                                         |                                                                                                                                                                                                         |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Control Circuit Voltage ( $U_c$ ) | 24 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                                                                                                    |
| Mounting on DIN Rail                    | TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715<br>TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715                                                                                          |
| Power Loss                              | at Rated Operating Conditions per Pole 2 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 | Auxiliary Circuit 600 V AC/DC<br>Main Circuit 600 V AC                                                                                                                                                                 |
| Full Load Amps Motor Use         | (115 V AC) Single Phase 5.8 A<br>(200 V AC) Three Phase 4.8 A<br>(220 ... 240 V AC) Three Phase 6.8 A<br>(230 V AC) Single Phase 4.9 A<br>(440 ... 480 V AC) Three Phase 4.8 A<br>(550 ... 600 V AC) Three Phase 1.7 A |
| Horsepower Rating UL/CSA         | (115 V AC) Single Phase 0.25 Hp<br>(200 V AC) Three Phase 1 Hp<br>(220 ... 240 V AC) Three Phase 2 Hp<br>(230 V AC) Single Phase 0.5 Hp<br>(440 ... 480 V AC) Three Phase 3 Hp<br>(550 ... 600 V AC) Three Phase 1 Hp  |
| General Use Rating UL/CSA        | (300 V AC) 12 A                                                                                                                                                                                                        |
| Connecting Capacity Main         | Stranded 1/2x 22-10 AWG                                                                                                                                                                                                |

## Circuit UL/CSA

Connecting Capacity  
Auxiliary Circuit UL/CSA

Stranded 1/2x 22-10 AWG

Tightening Torque  
UL/CSA

Auxiliary Circuit 7 in-lb  
Control Circuit 7 in-lb  
Main Circuit 7 in-lb

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**Environmental**


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Ambient Air Temperature

Operation -25 ... +55 °C  
Storage -40 ... +80 °C

Maximum Operating  
Altitude Permissible

2000 m

Resistance to Shock acc.  
to IEC 60068-2-27

11 ms Pulse 15g

Resistance to Vibrations  
acc. to IEC 60068-2-6

5g / 5 ... 150 Hz

RoHS Status

Following EU Directive 2011/65/EU

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**Certificates and Declarations (Document Number)**


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|                                    |                     |
|------------------------------------|---------------------|
| BV Certificate                     | 1SAA920000-0204     |
| CB Certificate                     | 1SAA938000-2002     |
| CQC Certificate                    | CQC2003010304064033 |
| cULus Certificate                  | cUL_E191658         |
| Declaration of Conformity<br>- CCC | 2020980304001854    |
| Declaration of Conformity<br>- CE  | 1SAD938516-0001     |
| DNV GL Certificate                 | 1SAA938000-0306     |
| EAC Certificate                    | 1SAA920000-2702     |
| Environmental Information          | 1SAC200067H0009     |
| Instructions and Manuals           | 2CDC102047M6801     |
| KC Certificate                     | 1SAA938000-1501     |
| LR Certificate                     | 1SAA938000-0504     |
| RMRS Certificate                   | 1SAA938000-0704     |
| RoHS Information                   | 1SAD938516-0001     |

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**Container Information**


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|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | 10 piece      |
| Package Level 1 Width             | 115 mm        |
| Package Level 1 Height            | 54 mm         |
| Package Level 1 Depth /<br>Length | 280 mm        |
| Package Level 1 Gross<br>Weight   | 1.82 kg       |
| Package Level 1 EAN               | 4013614414473 |

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**Classifications**


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|                            |                                           |
|----------------------------|-------------------------------------------|
| 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  |
| eClass                     | V11.0 : 27371003                          |
| UNSPSC                     | 39121529                                  |
| E-Number (Finland)         | 3709115                                   |
| E-Number (Sweden)          | 3210061                                   |

## Accessories

| Identifier      | Description                | Type     | Quantity | Unit Of Measure |
|-----------------|----------------------------|----------|----------|-----------------|
| GJL1201317R0002 | CA6-11E Auxiliary Contact  | CA6-11E  | 1        | piece           |
| GJL1201317R0003 | CA6-11M Auxiliary Contact  | CA6-11M  | 1        | piece           |
| GJL1201317R0004 | CA6-11N Auxiliary Contact  | CA6-11N  | 1        | piece           |
| GJL1201330R0003 | CAF6-11M Auxiliary Contact | CAF6-11M | 1        | piece           |
| GJL1201330R0006 | CAF6-20E Auxiliary Contact | CAF6-20E | 1        | piece           |
| GJL1201330R0011 | CAF6-02M Auxiliary Contact | CAF6-02M | 1        | piece           |
| GJL1201330R0007 | CAF6-20M Auxiliary Contact | CAF6-20M | 1        | piece           |
| GJL1201330R0012 | CAF6-02N Auxiliary Contact | CAF6-02N | 1        | piece           |
| GJL1201330R0008 | CAF6-20N Auxiliary Contact | CAF6-20N | 1        | piece           |
| GJL1201330R0002 | CAF6-11E Auxiliary Contact | CAF6-11E | 1        | piece           |
| GJL1201330R0004 | CAF6-11N Auxiliary Contact | CAF6-11N | 1        | piece           |
| GJL1201330R0010 | CAF6-02E Auxiliary Contact | CAF6-02E | 1        | piece           |
| GJL1201906R0001 | LT6-B Cover Cap            | LT6-B    | 1        | piece           |
| GJL1201907R0001 | LP6 Connecting Link        | LP6      | 1        | piece           |
| GJL1201904R0001 | BN6 Plunger                | BN6      | 1        | piece           |

## Where Used (as a spare part for "Products")

| Identifier   | Description              | Quantity | Unit Of Measure |
|--------------|--------------------------|----------|-----------------|
| 9AAC30400163 | No Description Available | 1        | piece           |
| 9AAC30400421 | No Description Available | 1        | piece           |
| 9AAC30403877 | No Description Available | 1        | piece           |
| 9AAC30404896 | No Description Available | 1        | piece           |
| 9AAF404899   | No Description Available | 1        | piece           |
| 9AAF404900   | No Description Available | 1        | piece           |
| 9AAF407277   | No Description Available | 1        | piece           |
| 9AAF408067   | No Description Available | 1        | piece           |

## Product specific part data

| Product      | Category         | Switchgear Part Category     |
|--------------|------------------|------------------------------|
| 9AAC30400163 | SafePlus         | Auxiliary Contactor<br>Motor |
| 9AAC30400421 | SafeRing         | Auxiliary Contactor<br>Motor |
| 9AAC30403877 | SafeRing 36      | Auxiliary Contactor<br>Motor |
| 9AAC30404896 | SafePlus 36      | Auxiliary Contactor<br>Motor |
| 9AAF404899   | SafeRing Air     | Auxiliary Contactor<br>Motor |
| 9AAF404900   | SafePlus Air     | Motor<br>Auxiliary Contactor |
| 9AAF407277   | SafeRing AirPlus | Auxiliary Contactor<br>Motor |
| 9AAF408067   | SafePlus AirPlus | Auxiliary Contactor<br>Motor |

Categories

- Low Voltage Products and Systems → Control Products → Contactors → Mini Contactors
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Ring Main Units → SafeRing
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Ring Main Units → SafeRing 36
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Ring Main Units → SafeRing Air
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Ring Main Units → SafeRing AirPlus
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Secondary Switchgear → SafePlus
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Secondary Switchgear → SafePlus 36
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Secondary Switchgear → SafePlus Air
- Medium Voltage Products and Systems → Switchgear and Motor Control → Secondary Switchgear → Gas Insulated Secondary Switchgear → SafePlus AirPlus

