

PRODUCT-DETAILS

# B6-30-10-80

## B6-30-10-80 Mini Contactor 220-240V 40-450Hz



### General Information

|                       |  |
|-----------------------|--|
| Extended Product Type | B6-30-10-80  |
| Product ID            | GJL1211001R8100  |
| EAN                   | 4013614150647  |
| Catalog Description   | B6-30-10-80 Mini Contactor 220-240V 40-450Hz   |
| Long Description      | The B6-30-10 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 silent 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 | 1SBC100173C0201 |
| Instructions and Manuals          | 2CDC102047M6801 |
| Dimension Diagram                 | GJL1200436F0001 |

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## Dimensions

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|                               |          |
|-------------------------------|----------|
| Product Net Width             | 52.5 mm  |
| Product Net Height            | 57.5 mm  |
| Product Net Depth /<br>Length | 46.5 mm  |
| Product Net Weight            | 0.175 kg |

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## Technical

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|--|--|
| Number of Poles                                    | 3  |
| Mini Contactor Type                                | Mini Contactor   |
| Rated Operational Voltage                          | Auxiliary Circuit 12 ... 240 V DC<br>Auxiliary Circuit 12 ... 500 V AC/DC<br>Main Circuit 12 ... 690 V AC/DC<br>Main Circuit 690 V AC                  |
| Rated Frequency (f)                                | Control Circuit 400 Hz<br>Control Circuit 50 Hz<br>Control Circuit 60 Hz<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC                |
| Rated Impulse Withstand<br>Voltage ( $U_{imp}$ )   | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV  |
| Rated Insulation Voltage<br>( $U_i$ )              | 690 V<br>acc. to UL/CSA 600 V  |
| Number of Main Contacts<br>NC                      | 0  |
| Number of Main Contacts<br>NO                      | 3  |
| Rated Operational Current<br>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<br>AC-3 ( $P_e$ )          | (220 / 230 / 240 V) 2.2 kW<br>(400 V) 4 kW<br>(400 V) Three Phase 4 kW<br>(440 V) 4 kW<br>(500 V) 4 kW<br>(690 V) 3 kW                                 |
| Rated Short-time<br>Withstand Current ( $I_{cw}$ ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 64 A  |
| Number of Auxiliary<br>Contacts NC                 | 0  |
| Number of Auxiliary<br>Contacts NO                 | 1  |
| Rated Operational Current<br>AC-15 ( $I_e$ )       | (120 V) 4 A<br>(220 / 240 V) 4 A<br>(24 V) 4 A<br>(380 / 400 V) 3 A<br>(500 V) 2 A   |
| Rated Operational Current<br>DC-13 ( $I_e$ )       | (110 V) 0.7 A<br>(220 / 240 V) 0.4 A<br>(24 V) 2.5 A   |
| Conventional Free-air                              | Main Circuit 20 A  |

|   |   |
|---|---|
| Thermal Current ( $I_{th}$ )            |   |
| Rated Control Circuit Voltage ( $U_c$ ) | 220 ... 240 V AC  |
| Coil Operating Limits                   | (acc. to IEC 60947-4-1) for AC supply 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55$ °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             | Main Circuit 600 V AC<br>Auxiliary Circuit 600 V AC/DC   |
| Full Load Amps Motor Use                     | (240 V AC) Single Phase 4.9 A<br>(440 ... 480 V AC) Three Phase 4.8 A  |
| Horsepower Rating UL/CSA                     | (208 V AC) Three Phase 1 Hp<br>(220 ... 240 V AC) Single Phase 0.5 Hp<br>(220 ... 240 V AC) Three Phase 2 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 Circuit UL/CSA      | Stranded 1/2x 22-10 AWG  |
| 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

## Environmental

|   |  |
|---|--|
| Ambient Air 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<br>acc. to IEC 60068-2-6 | 5g / 5 ... 150 Hz                                  |
| RoHS Status                                       | Following EU Directive 2011/65/EU                  |

## Certificates and Declarations (Document Number)

|                                   |                 |
|-----------------------------------|-----------------|
| BV Certificate                    | 1SAA920000-0204 |
| CB Certificate                    | 1SAA938000-2002 |
| CCC Certificate                   | 1SAA938001-3805 |
| cULus Certificate                 | cUL_E191658     |
| Declaration of Conformity<br>- CE | 1SAD938516-0001 |
| DNV GL Certificate                | 1SAA938000-0306 |
| EAC Certificate                   | 1SAA920000-2702 |
| Instructions and Manuals          | 2CDC102047M6801 |
| KC Certificate                    | 1SAA938000-1501 |
| LR Certificate                    | 1SAA938000-0504 |
| RMRS Certificate                  | 1SAA938000-0704 |
| RoHS Information                  | 1SAD938514-0001 |

## Container Information

|                                   |               |
|-----------------------------------|---------------|
| 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               | 4013614412677 |

## 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  |

|                   |              |
|-------------------|--------------|
| eClass            | 7.0 27371003 |
| UNSPSC            | 39121529     |
| E-Number (Sweden) | 3210024      |

### 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 |

| Product    | Category         | Switchgear Part Category  |
|------------|------------------|---------------------------|
| 9AAF404899 | SafeRing Air     | Auxiliary Contactor Motor |
| 9AAF404900 | SafePlus Air     | Auxiliary Contactor Motor |
| 9AAF407277 | SafeRing AirPlus | Auxiliary Contactor Motor |
| 9AAF408067 | SafePlus AirPlus | Auxiliary Contactor 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

