PRODUCT-DETAILS

# BC6-30-01-16

# BC6-30-01-16 Mini Contactor 48VDC




## General Information

| | |
|---|---|
| Extended Product Type | BC6-30-01-16 |
| Product ID | GJL1213001R1016 |
| EAN | 4013614052941 |
| Catalog Description | BC6-30-01-16 Mini Contactor 48VDC |
| 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 buldings, 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 | 1SBC100214C0202 |
| 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 ($U_c$) | 48 V DC |
| Coil Operating Limits | (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x Uc (at θ ≤ 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 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| 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<br>at Rated Operating Conditions AC-1 per Pole 1 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 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 |

| | |
|---|---|
| Contact Rating UL/CSA | A600 |
| 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<br>Control Circuit 7 in·lb<br>Main Circuit 7 in·lb |

## Environmental

| | |
|---|---|
| Ambient Air Temperature | Operation -25 ... +55 °C<br>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 |

## Certificates and Declarations (Document Number)

| | |
|---|---|
| BV Certificate | 1SAA920000-0204 |
| CB Certificate | 1SAA938000-2002 |
| CQC Certificate | CQC2003010304064033 |
| cULus Certificate | cUL_E191658 |
| Declaration of Conformity - CCC | 2020980304001854 |
| Declaration of Conformity - CE | 1SAD938517-0001 |
| Declaration of Conformity - UKCA | 1SAD938500-1001 |
| 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 | 1SAD938517-0001 |

## Container Information

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

| | |
|---|---|
| Package Level 1 EAN | 4013614414633 |

## 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 | V11.0 : 27371003 |
| UNSPSC | 39121529 |

## 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 up to 24kV | Auxiliary Contactor Motor |
| 9AAC30400421 | SafeRing up to 24kV | Auxiliary Contactor Motor |
| 9AAC30403877 | SafeRing 36-40,5kV | Auxiliary Contactor Motor |
| 9AAC30404896 | SafePlus 36-40,5kV | Auxiliary Contactor Motor |
| 9AAF404899 | SafeRing Air up to 12kV | Auxiliary Contactor Motor |
| 9AAF404900 | SafePlus Air up to 12kV | Motor Auxiliary Contactor |
| 9AAF407277 | SafeRing AirPlus up to 24kV | Auxiliary Contactor Motor |
| 9AAF408067 | SafePlus AirPlus up to 24kV | Auxiliary Contactor Motor |

## Categories

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

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (ecoGIS) → SafePlus (ecoGIS) → SafePlus Air up to 12kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (ecoGIS) → SafePlus (ecoGIS) → SafePlus AirPlus up to 24kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (ecoGIS) → SafeRing (ecoGIS) → SafeRing Air up to 12kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (ecoGIS) → SafeRing (ecoGIS) → SafeRing AirPlus up to 24kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6) → SafePlus → SafePlus 36-40,5kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6) → SafePlus → SafePlus up to 24kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6) → SafeRing → SafeRing 36-40,5kV

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6) → SafeRing → SafeRing up to 24kV

