



 PRODUCT-DETAILS

BC6-30-01-03

BC6-30-01-03 Mini Contactor 60 V DC - 3 NO - 0 NC - Screw Terminals



General Information

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| Extended Product Type | BC6-30-01-03 |
| Product ID | GJL1213001R0013 |
| EAN | 4013614052842 |
| Catalog Description | BC6-30-01-03 Mini Contactor 60 V DC - 3 NO - 0 NC - Screw Terminals |

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| 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 (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

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

Popular Downloads

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

Dimensions

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| Product Net Width | 52.5 mm |
| Product Net Depth / Length | 46.7 mm |
| Product Net Height | 57.5 mm |
| Product Net Weight | 0.175 kg |
| Dimension Diagram | GJL1200436F0001 |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Auxiliary Contacts NC | 1 |
| Number of Poles | 3P |
| Standards | IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 IEC 60335-2-40 A2L |
| Rated Operational Voltage | Auxiliary Circuit 690 V AC Auxiliary Circuit 250 V DC Main Circuit 690 V AC Main Circuit 220 V DC |
| Rated Frequency (f) | Control Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC |
| Conventional Free-air Thermal Current (I_{th}) | Main Circuit 20 A |
| Rated Operational Current AC-1 (I_e) | (220 / 240 V) 40 °C 20 A (220 / 240 V) 55 °C 16 A (380 / 440 V) 40 °C 20 A (380 / 440 V) 55 °C 16 A (690 V) 40 °C 6 A (690 V) 55 °C 6 A |
| Rated Operational Current AC-3 (I_e) | (230 V) 55°C 9 A (400 V) 55 °C 9 A (500 V) 55 °C 6.5 A (690 V) NO 55°C 3.5 A |
| Rated Operational Current AC-15 (I_e) | (24 V) 4 A (120 V) 4 A (500 V) 2 A (220 / 240 V) 4 A (380 / 400 V) 3 A |
| Rated Operational Current DC-13 (I_e) | (24 V) 2.5 A (110 V) 0.7 A (220 / 240 V) 0.4 A |

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| Rated Operational Power AC-3 (P_e) | (230 V) Three Phase 2.2 kW (400 V) Three Phase 4 kW (500 V) Three Phase 4 kW (690 V) Three Phase, NO 3 kW |
| Rated Breaking Capacity AC-3 | 8 x I_e / AC-3 |
| Rated Making Capacity AC-3 | 10 x I_e / AC-3 |
| Rated Short-time Withstand Current Low Voltage (I_{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 64 A |
| Rated Insulation Voltage (U_i) | 690 V acc. to UL/CSA 600 V |
| Rated Impulse Withstand Voltage (U_{imp}) | Auxiliary Circuit 6 kV Main Circuit 6 kV |
| Maximum Electrical Switching Frequency | (AC-1) 300 cycles per hour (AC-15) 600 cycles per hour (AC-3) 600 cycles per hour (DC-1) 600 cycles per hour (DC-13) 600 cycles per hour (DC-3) 600 cycles per hour |
| Mechanical Durability | Nr. Operations 10000000 cycle |
| Minimum Switching Capacity | Auxiliary Circuit 17 V Auxiliary Circuit 5 mA |
| Coil Operating Limits | (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x U_c (at $\theta \leq 55$ °C) |
| Rated Control Circuit Voltage (U_c) | 60 V DC |
| Coil Consumption | Average Holding Value DC 3.5 W Average Pull-in Value DC 3.5 W |
| Power Loss | at Rated Operating Conditions AC-1 per Pole 1 W |
| Mounting on DIN Rail | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ² |
| Wire Stripping Length | Auxiliary Circuit 9 mm Main Circuit 9 mm |
| Degree of Protection | Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20 |
| Recommended Screw Driver | M3 Pozidriv 1 |
| Tightening Torque | Auxiliary Circuit 0.8 ... 1.1 N·m Control Circuit 0.8 ... 1.1 N·m Main Circuit 0.8 ... 1.1 N·m |
| Terminal Type | Screw Terminals |
| Mini Contactor Type | Mini Contactor |
| Product Name | Mini Contactor |

Technical UL/CSA

Maximum Operating Main Circuit 600 V AC

Voltage UL/CSA

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| General Use Rating UL/CSA | (300 V AC) 12 A |
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| Horsepower Rating UL/CSA | (115 V AC) Single Phase 0.25 Hp (200 V AC) Three Phase 1 Hp (220 ... 240 V AC) Three Phase 2 Hp (230 V AC) Single Phase 0.5 Hp (440 ... 480 V AC) Three Phase 3 Hp (550 ... 600 V AC) Three Phase 1 Hp |
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| Connecting Capacity Main Circuit UL/CSA | Stranded 1/2x 22-10 AWG |
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| Connecting Capacity Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG |
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| Contact Rating UL/CSA | A600 |
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| Tightening Torque UL/CSA | Auxiliary Circuit 7 in-lb Control Circuit 7 in-lb Main Circuit 7 in-lb |
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| Full Load Amps Motor Use | (115 V AC) Single Phase 5.8 A (200 V AC) Three Phase 4.8 A (220 ... 240 V AC) Three Phase 6.8 A (230 V AC) Single Phase 4.9 A (440 ... 480 V AC) Three Phase 4.8 A (550 ... 600 V AC) Three Phase 1.7 A |
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Environmental

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

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

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| End Of Life Disassembling Instructions | 1SBC100156C0269 |
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| Environmental Product Declaration - EPD | 1SAC200409H0001 |
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Certificates and Declarations

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| A2L Certificate – IEC | 1SAA938000-4601 |
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| BV Certificate | 1SAA920000-0204 |
| CB Certificate | 1SAA938000-2002 |
| CQC Certificate | CQC2003010304064033 |
| cULus Certificate | cUL_E191658 |
| Declaration of Conformity - CCC | 2020980304001854 |
| Declaration of Conformity - CE | 1SAD101100-3101 |
| Declaration of 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 |

Container Information

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| Package Level 1 Units | box 10 piece |
| Package Level 1 Width | 115 mm |
| Package Level 1 Depth / Length | 280 mm |
| Package Level 1 Height | 54 mm |
| Package Level 1 Gross Weight | 1.82 kg |
| Package Level 1 EAN | 4013614414497 |

External Classifications and Standards

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| Object Classification Code | Q |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 8 | EC000066 - Power contactor, AC switching |
| ETIM 9 | EC000066 - Power contactor, AC switching |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| E-Number (Norway) | 4184032 |

Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|-----------------|---|----------|----------|-----------------|
| GJL1201317R0002 | CA6-11E Auxiliary Contact 1NO/1NC screw terminal, side mounted | CA6-11E | 1 | piece |
| GJL1201317R0003 | CA6-11M Auxiliary Contact 1NO/1NC screw terminal, side mounted | CA6-11M | 1 | piece |
| GJL1201317R0004 | CA6-11N Auxiliary Contact 1NO/1NC screw terminal, side mounted | CA6-11N | 1 | piece |
| GJL1201330R0003 | CAF6-11M Auxiliary Contact 1NO/1NC screw terminal, front mounted | CAF6-11M | 1 | piece |
| GJL1201330R0006 | CAF6-20E Auxiliary Contact 2NO/0NC screw terminal, front mounted | CAF6-20E | 1 | piece |
| GJL1201330R0011 | CAF6-02M Auxiliary Contact 0NO/2NC screw terminal, front mounted | CAF6-02M | 1 | piece |
| GJL1201330R0007 | CAF6-20M Auxiliary Contact 2NO/0NC screw terminal, front mounted | CAF6-20M | 1 | piece |
| GJL1201330R0012 | CAF6-02N Auxiliary Contact 0NO/2NC screw terminal, front mounted | CAF6-02N | 1 | piece |
| GJL1201330R0008 | CAF6-20N Auxiliary Contact 2NO/0NC screw terminal, front mounted | CAF6-20N | 1 | piece |
| GJL1201330R0002 | CAF6-11E Auxiliary Contact 1NO/1NC screw terminal, front mounted | CAF6-11E | 1 | piece |
| GJL1201330R0004 | CAF6-11N Auxiliary Contact 1NO/1NC screw terminal, front mounted | CAF6-11N | 1 | piece |
| GJL1201330R0010 | CAF6-02E Auxiliary Contact 0NO/2NC screw terminal, front mounted | CAF6-02E | 1 | piece |
| GJL1201906R0001 | LT6-B Mini Contactor Cover Cap | LT6-B | 1 | piece |
| GJL1201904R0001 | BN6 Plunger for Mini Contactor (50 pcs) BN6 Plunger for Mini Contactor 50 pcs | 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 |
| 9AAF626992 | No Description Available | 1 | piece |

Product specific part data

| Product | Category | Switchgear Part Category |
|--------------|-------------------------|---------------------------|
| 9AAC30400163 | SafePlus IEC up to 24kV | Auxiliary Contactor Motor |
| 9AAC30400421 | SafeRing IEC up to 24kV | Auxiliary Contactor Motor |

| Product | Category | Switchgear Part Category |
|--------------|---------------------------------|------------------------------|
| 9AAC30403877 | SafeRing IEC 36kV | Auxiliary Contactor Motor |
| 9AAC30404896 | SafePlus IEC 36kV | 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 |
| 9AAF626992 | All Spare Parts (Relays-SWG-CB) | Auxiliary Contactor Motor |

Categories

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

Medium Voltage Products and Systems → Service → Spares and Consumables → Parts → All Spare Parts (Relays-SWG-CB)

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6 free) → SafePlus (SF6 free) → SafePlus Air up to 12kV

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

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6 free) → SafeRing (SF6 free) → SafeRing Air up to 12kV

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

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6) → SafePlus → SafePlus IEC 36kV

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

Medium Voltage Products and Systems → Switchgear and Motor Control → Gas Insulated Secondary Switchgear (SF6) → SafeRing → SafeRing IEC 36kV

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

