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 PRODUCT-DETAILS

## BC6-30-10-01

### BC6-30-10-01 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals




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#### General Information

Extended Product Type	BC6-30-10-01
Product ID	GJL1213001R0101
EAN	4013614052880
Catalog Description	BC6-30-10-01 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals

Long Description	<p>The BC6-30-10 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 (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.</p>
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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 Depth / Length	46.7 mm
Product Net Height	57.5 mm
Product Net Weight	0.175 kg

## Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	0
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

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 ( $U_c$ )	24 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 <sup>2</sup> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> 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> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> 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> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup>
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

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

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

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
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REACH Declaration	2CMT2021-006202
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RoHS Information	2CMT2021-006277
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RoHS Status	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

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

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

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### Container Information

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	4013614414541

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### External Classifications and Standards

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
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching
E-Number (Finland)	3709114
E-Number (Norway)	4184030
E-Number (Sweden)	3210051

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### 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	Auxiliary Contactor Motor
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

