PRODUCT-DETAILS

BC6-30-01-03

BC6-30-01-03 Mini Contactor 60VDC



General Information

Extended Product Type	BC6-30-01-03
Product ID	GJL1213001R0013
EAN	4013614052842
Catalog Description	BC6-30-01-03 Mini Contactor 60VDC
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 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
Rated Impulse Withstand Voltage (U_{imp})	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage (U_i)	690 V 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 (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 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 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 (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
Conventional Free-air Thermal Current (I_{th})	Main Circuit 20 A
Rated Control Circuit Voltage (U_c)	60 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 Control Circuit Terminals IP20 Main Circuit Terminals IP20
Mechanical Durability	10000000 cycle
Minimum Switching Capacity	Auxiliary Circuit 17 V Auxiliary Circuit 5 mA
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
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm² Flexible 1/2x 1 ... 2.5 mm² Rigid 1/2x 1 ... 4 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm² Flexible 1/2x 1 ... 2.5 mm² Rigid 1/2x 1 ... 4 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm² Flexible 1/2x 1 ... 2.5 mm² Rigid 1/2x 1 ... 4 mm²
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 9 mm
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
Mounting on DIN Rail	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Power Loss	at Rated Operating Conditions per Pole 2 W at Rated Operating Conditions AC-1 per Pole 1 W
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 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 (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
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
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 Control Circuit 7 in·lb Main Circuit 7 in·lb

Environmental

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

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	4013614414497

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

