

PRODUCT-DETAILS

# B6-31-00-80

## B6-31-00-80 Mini Contactor 220-240V 40-450Hz



### General Information

Extended Product Type	B6-31-00-80
Product ID	GJL1211401R8000
EAN	4013614189258
Catalog Description	B6-31-00-80 Mini Contactor 220-240V 40-450Hz

**Long Description**

The B6-31-00 mini contactor is a compact 4 pole contactor with 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	1SBC100214C0201
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 / Length	46.5 mm
Product Net Weight	0.175 kg

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## Technical

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Number of Poles	4
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 400 Hz Control Circuit 50 Hz Control Circuit 60 Hz 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	1
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, NC 3 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	0
Number of Auxiliary Contacts NO	0
Conventional Free-air Thermal Current ( $I_{th}$ )	Main Circuit 20 A
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 Control Circuit Terminals IP20 Main Circuit Terminals IP20

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Mechanical Durability	10000000 cycle
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-15) 360 cycles per hour (AC-3) 600 cycles per hour (DC-1) 600 cycles per hour (DC-13) 360 cycles per hour (DC-3) 600 cycles per hour
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
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
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	Auxiliary Circuit 600 V AC/DC 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
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 -20 ... +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	1SAD938516-0001
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	1SAD938516-0001

## 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	4013614413421

## 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

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## 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

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## Categories

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

