

PRODUCT-DETAILS

# VBC6-30-01-01

## VBC6-30-01-01 Mini Reversing Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals



General Information	
Extended Product Type	VBC6-30-01-01
Product ID	GJL1213901R0011
EAN	4013614053689
Catalog Description	VBC6-30-01-01 Mini Reversing Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals
Long Description	The VBC6-30-01 mini reversing contactor is a compact 3 pole contactor with 1 auxiliary contact, screw terminals and normal mechanical interlock. They are ideally suited for applications where reliability is a must and space is at a premium. Mini reversing contactors are used in residential buildings, commercial buildings and industrial applications for the control of three-phase motor loads up to 4 kW (AC-3). 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	2CDC102046M6801

CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	GJL1200447F0001

## Dimensions

Product Net Width	96.2 mm
Product Net Height	57.5 mm
Product Net Depth / Length	46.7 mm
Product Net Weight	0.355 kg

## Technical

Number of Poles	3
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 ( $U_{imp}$ )	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 Low Voltage ( $I_{cw}$ )	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 ( $I_e$ )	(440 V AC) 3 A (24 V) 4 A (120 V) 4 A (240 V) 4 A (500 V) 2 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 ( $U_c$ )	24 V DC

Coil Operating Limits	(acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x U <sub>c</sub> (at $\theta \leq 55^\circ\text{C}$ )
Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
Pollution Degree	3
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 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	Control Circuit 0.8 ... 1.1 N·m Main Circuit 0.8 ... 1.1 N·m
Recommended Screw Driver	M3 Pozidriv 1
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
Power Loss	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 -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	5g 5 ... 150 Hz

## Material Compliance

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

## Certificates and Declarations

CB Certificate	1SAA938000-2002
CQC Certificate	CQC2003010304064033
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
RMRS Certificate	1SAA938000-0704
UL Certificate	E191658-19881208

## Container Information

Package Level 1 Units	5 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	1.845 kg
Package Level 1 EAN	4013614415746

Classifications		
Object Classification Code		Q
ETIM 4	EC000066 - Magnet contactor, AC-switching	
ETIM 5	EC000010 - Starter combination	
ETIM 6	EC000010 - Combination of contactors	
ETIM 7	EC000010 - Combination of contactors	
ETIM 8	EC000010 - Combination of contactors	
eClass	V11.0 : 27371009	
UNSPSC	39121529	
E-Number (Finland)	3709121	
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching	

Categories

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

