PRODUCT-DETAILS

VBC6-30-01-03

VBC6-30-01-03 Mini Rev.Contactor 60VDC



General Information

Extended Product Type	VBC6-30-01-03
Product ID	GJL1213901R0013
EAN	4013614224386
Catalog Description	VBC6-30-01-03 Mini Rev.Contactor 60VDC
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 buldings, 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 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

Dimension Diagram	GJL1200447F0001

Dimensions

Product Net Width	96.5 mm
Product Net Height	57.5 mm
Product Net Depth / Length	46.5 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 (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	60 V DC

Voltage (U_c)	
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
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 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	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 -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)

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	2CDC102046M6801
KC Certificate	1SAA938000-1501
RMRS Certificate	1SAA938000-0704
RoHS Information	1SAD938517-0001

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	4013614415760

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
eClass	V11.0 : 27371009
UNSPSC	39121529

Categories

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

