



 PRODUCT-DETAILS

VBC7-30-10-05

VBC7-30-10-05 Mini Reversing Contactor 220 ... 240 V DC - 3 NO - 0 NC - Screw Terminals



General Information

Extended Product Type	VBC7-30-10-05
Product ID	GJL1313901R0105
EAN	4013614191558
Catalog Description	VBC7-30-10-05 Mini Reversing Contactor 220 ... 240 V DC - 3 NO - 0 NC - Screw Terminals
Long Description	The VBC7-30-10 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 5.5 kW (AC-3). Further features are the noiseless and hum-free coil, a switch position indication and the integrated possibility for rail or wall <u>mounting</u> .

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

Popular Downloads

EPLAN Data	9AAC205204_EPLAN
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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 Depth / Length	46.7 mm
Product Net Height	57.5 mm
Product Net Weight	0.355 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)	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 12 A (400 V) 55 °C 12 A (500 V) 55 °C 9 A (690 V) NO 55 °C 3.5 A
Rated Operational Power AC-3 (P_e)	(230 V) Three Phase 3 kW (400 V) Three Phase 5.5 kW (500 V) Three Phase 5.5 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 96 A
Rated Insulation Voltage (U_i)	690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	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 $\theta \leq 55^\circ\text{C}$)
Rated Control Circuit Voltage (U _c)	220 ... 240 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 1.4 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 ² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ²
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 9 mm
Degree of Protection	Main Circuit Terminals IP20
Recommended Screw Driver	M3 Pozidriv 1
Tightening Torque	Control Circuit 0.8 ... 1.1 N·m Main Circuit 0.8 ... 1.1 N·m
Terminal Type	Screw Terminals
Product Name	Mini Reversing Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
General Use Rating UL/CSA	(600 V AC) 16 A
Horsepower Rating UL/CSA	(115 V AC) Single Phase 0.75 Hp (200 V AC) Three Phase 2 Hp (220 ... 240 V AC) Three Phase 3 Hp (230 V AC) Single Phase 1.5 Hp (440 ... 480 V AC) Three Phase 5 Hp (550 ... 600 V AC) Three Phase 5 Hp
Connecting Capacity Main Circuit UL/CSA	Stranded 1/2x 22-10 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 22-10 AWG
Contact Rating UL/CSA	A600
Tightening Torque UL/CSA	Auxiliary Circuit 7 in·lb Control Circuit 7 in·lb Main Circuit 7 in·lb
Full Load Amps Motor Use	(115 V AC) Single Phase 13.8 A (200 V AC) Three Phase 7.8 A (220 ... 240 V AC) Three Phase 9.6 A (230 V AC) Single Phase 10 A (440 ... 480 V AC) Three Phase 7.6 A (550 ... 600 V AC) Three Phase 6.1 A

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
Pollution Degree	3

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)

ABB EcoSolutions

End Of Life Disassembling Instructions	1SBC100156C0269
Environmental Product Declaration - EPD	1SAC200410H0001

Certificates and Declarations

A2L Certificate - IEC	1SAA938000-4601
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	box 5 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	1.845 kg
Package Level 1 EAN	4013614419249

External Classifications and Standards

Object Classification Code	Q
ETIM 7	EC000010 - Combination of contactors
ETIM 8	EC000010 - Combination of contactors
ETIM 9	EC000010 - Combination of contactors
eClass	V11.0 : 27371009
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching

Categories

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

