



PRODUCT-DETAILS

BC7-30-10-1.4-81

BC7-30-10-1.4-81 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals



360°

General Information	
Extended Product Type	BC7-30-10-1.4-81
Product ID	GJL1313001R8101
EAN	4013614152917
Catalog Description	BC7-30-10-1.4-81 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals
Long Description	The BC7-30-10 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 buildings, commercial buildings and industrial applications for the control of single or three-phase loads up to 5.5 kW (AC-3) and 20 A (AC-1) or switching of control signals. Due to the low coil consumption, this device can be directly controlled by a PLC. 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
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	GJL1200436F0001

Dimensions	
Product Net Width	52.5 mm
Product Net Height	57.5 mm
Product Net Depth / Length	46.7 mm
Product Net Weight	0.175 kg

Technical	
Number of Poles	3P
Mini Contactor Type	Interface 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 3 kW (400 V) Three Phase 5.5 kW (500 V) Three Phase 5.5 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 96 A
Number of Auxiliary Contacts NC	0
Number of Auxiliary Contacts NO	1
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)	24 V DC
Coil Operating Limits	(acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x U _c (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 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
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
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 1.4 W
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
Remarks	No CA6 or CAF6 mountable

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
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
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
General Use Rating UL/CSA	(600 V AC) 16 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)

ABB EcoSolutions

Environmental Product Declaration - EPD	1SAC200409H0001
End of Life Instructions	1SBC100156C0269

Certificates and Declarations

A2L Certificate – IEC	1SAA938000-4601
BV Certificate	1SAA920000-0204
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
LR Certificate	1SAA938000-0504
RMRS Certificate	1SAA938000-0704
UL Certificate	E191658-19881208

Container Information

Package Level 1 Units	box 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	4013614418419

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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching

Categories

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

