



PRODUCT-DETAILS

B7D-30-10-05

B7D-30-10-05 Mini Contactor 220 ... 240 V DC - 3 NO - 0 NC - Screw Terminals



General Information	
Extended Product Type	B7D-30-10-05
Product ID	GJL1317001R0105
EAN	4013614262906
Catalog Description	B7D-30-10-05 Mini Contactor 220 ... 240 V DC - 3 NO - 0 NC - Screw Terminals
Long Description	The B7D-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. The mini contactor has a build-in surge suppressor diode. Further features are the noiseless and hum-free coil, the integrated overvoltage protection, 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

EPLAN Data	9AAC201026_EPLAN
Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	2CDC102047M6801
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	52.5 mm
Product Net Depth / Length	46.7 mm
Product Net Height	57.5 mm
Product Net Weight	0.175 kg
Dimension Diagram	GJL1200436F0001

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)	Control Circuit DC Main Circuit 50 Hz Main Circuit 60 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 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
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})	Auxiliary Circuit 6 kV 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 $\theta \leq 55$ °C)
Rated Control Circuit Voltage (U_c)	220 ... 240 V DC
Coil Consumption	Average Holding Value 50 Hz 3.5 V·A Average Pull-in Value 50 Hz 3.5 V·A
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	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
Recommended Screw Driver	M3 Pozidriv 1
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
Terminal Type	Screw Terminals
Mini Contactor Type	Mini Contactor
Product Name	Mini 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

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Declaration	2CMT2021-006277
RoHS Information	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	1SAC200409H0001

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 Depth / Length	280 mm
Package Level 1 Height	54 mm
Package Level 1 Gross Weight	1.82 kg
Package Level 1 EAN	4013614420139

External Classifications and Standards

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
GJL1201317R0002	CA6-11E Auxiliary Contact 1NO/1NC screw terminal, side mounted	CA6-11E	1	piece
GJL1201317R0003	CA6-11M Auxiliary Contact 1NO/1NC screw terminal, side mounted	CA6-11M	1	piece
GJL1201317R0004	CA6-11N Auxiliary Contact 1NO/1NC screw terminal, side mounted	CA6-11N	1	piece
GJL1201330R0003	CAF6-11M Auxiliary Contact 1NO/1NC screw terminal, front mounted	CAF6-11M	1	piece
GJL1201330R0006	CAF6-20E Auxiliary Contact 2NO/0NC screw terminal, front mounted	CAF6-20E	1	piece
GJL1201330R0011	CAF6-02M Auxiliary Contact 0NO/2NC screw terminal, front mounted	CAF6-02M	1	piece
GJL1201330R0007	CAF6-20M Auxiliary Contact 2NO/0NC screw terminal, front mounted	CAF6-20M	1	piece
GJL1201330R0012	CAF6-02N Auxiliary Contact 0NO/2NC screw terminal, front mounted	CAF6-02N	1	piece
GJL1201330R0008	CAF6-20N Auxiliary Contact 2NO/0NC screw terminal, front mounted	CAF6-20N	1	piece
GJL1201330R0002	CAF6-11E Auxiliary Contact 1NO/1NC screw terminal, front mounted	CAF6-11E	1	piece
GJL1201330R0004	CAF6-11N Auxiliary Contact 1NO/1NC screw terminal, front mounted	CAF6-11N	1	piece
GJL1201330R0010	CAF6-02E Auxiliary Contact 0NO/2NC screw terminal, front mounted	CAF6-02E	1	piece
GJL1201906R0001	LT6-B Mini Contactor Cover Cap	LT6-B	1	piece
GJL1201904R0001	BN6 Plunger for Mini Contactor (50 pcs) BN6 Plunger for Mini Contactor 50 pcs	BN6	1	piece

Categories

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

