



PRODUCT-DETAILS

AF38-30-00-11

AF38-30-00-11 24-60V50/60HZ 20-60VDC

Contactors



General Information	
Extended Product Type	AF38-30-00-11
Product ID	1SBL297001R1100
EAN	3471523111516
Catalog Description	AF38-30-00-11 24-60V50/60HZ 20-60VDC Contactor
Long Description	The AF38-30-00-11 is a 3 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 18.5 kW / 400 V AC (AC-3) or 25 hp / 480 V UL and switching power circuits up to 50 A (AC-1) or 50 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (24-60 V 50/60 Hz and 20-60 V DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

Ordering	
Minimum Order Quantity	1 piece

Popular Downloads	
Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	1SBC101027M6801
Instructions and Manuals (Part 2)	1SAC200017M0002
CAD Dimensional Drawing	2CDC001079B0201

Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	86 mm
Product Net Height	86 mm
Product Net Weight	0.31 kg

Technical	
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	0
Number of Poles	3P
Standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60335-2-40 LZGH2 A2L, UL 60947-4-1, CSA C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 60947-4-1
Rated Operational Voltage	Main Circuit 690 V
Rated Frequency (f)	Control Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I _{th})	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 50 A
Rated Operational Current AC-1 (I _e)	(690 V) 40 °C 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (I _e)	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Rated Operational Current AC-3e (I _e)	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Rated Operational Current DC-1 (I _e)	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 50 A (220 V) 3 Poles in Series, 60 °C 42 A

	(220 V) 3 Poles in Series, 70 °C 37 A (72 V) 1-Pole, 40 °C 50 A (72 V) 1-Pole, 60 °C 42 A (72 V) 1-Pole, 70 °C 37 A (72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A
Rated Operational Current DC-3 (I _e)	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 50 A (220 V) 3 Poles in Series, 60 °C 42 A (220 V) 3 Poles in Series, 70 °C 37 A (72 V) 1-Pole, 40 °C 50 A (72 V) 1-Pole, 60 °C 42 A (72 V) 1-Pole, 70 °C 37 A (72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A
Rated Operational Current DC-5 (I _e)	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 25 A (220 V) 3 Poles in Series, 60 °C 25 A (220 V) 3 Poles in Series, 70 °C 25 A (72 V) 1-Pole, 40 °C 25 A (72 V) 1-Pole, 60 °C 25 A (72 V) 1-Pole, 70 °C 25 A (72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A
Rated Operational Power AC-3 (P _e)	(400 V) 18.5 kW (415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW
Rated Operational Power AC-3e (P _e)	(415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW
Rated Short-time Withstand Current Low Voltage (I _{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 50 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 700 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 500 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 200 A
Rated Insulation Voltage (U _i)	acc. to IEC 60947-4-1 690 V acc. to UL/CSA 600 V
Rated Impulse	6 kV

Withstand Voltage (U_{imp})	
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	50 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 V
Power Loss	at Rated Operating Conditions AC-1 per Pole 2.4 W at Rated Operating Conditions AC-3 per Pole 1.3 W
Operate Time	Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 ms
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
Mounting by Screws (not supplied)	2 x M4 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 2x 1.5 ... 4 mm ² Rigid Solid 1/2x 2.5 ... 4 mm ² Rigid Stranded 1/2x 2.5 ... 10 mm ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 14 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20
Tightening Torque	Control Circuit 1.2 N·m Main Circuit 2.5 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 50 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 2 hp (200 ... 208 V AC) Three Phase 10 hp (220 ... 240 V AC) Three Phase 10 hp (240 V AC) Single Phase 5 hp (440 ... 480 V AC) Three Phase 25 hp (550 ... 600 V AC) Three Phase 30 hp
Connecting Capacity Main Circuit UL/CSA	Rigid Solid 1/2x 14-10 AWG Rigid Stranded 1/2x 14-8 AWG
Connecting Capacity Control Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Control Circuit 11 in·lb Main Circuit 22 in·lb
Full Load Amps Motor Use	(120 V AC) Single Phase 24 A (200 ... 208 V AC) Three Phase 32.2 A (220 ... 240 V AC) Three Phase 28 A (240 V AC) Single Phase 28 A (440 ... 480 V AC) Three Phase 34 A (550 ... 600 V AC) Three Phase 32 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g
Resistance to Vibrations	4g Closed Position & 2g Open position 5 ... 300 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
SCIP	2910d4fd-645e-4583-b988-7b7438a6327d China
Simplified SCIP	4ff4cd13-e815-4cb0-987b-028866a71719 France 6d899484-7f84-4f3b-aace-9f901ba080d2 Belgium 20c06465-5b24-4a1d-b281-342139a75f81 Croatia 6163d8e9-2df8-4c1f-8b9f-0f7d022694af Czech Republic 173b2841-ed17-48a9-a55d-c5b8d9c73ed6 Poland 2363dfcc-4c23-4db2-997f-f63968aa7aa5 Spain 43fe5263-5be9-461a-acdd-bfd177cafa10 Germany facf5983-3daa-4b56-9ed1-bba496ce710b Portugal 12bf3e47-bf91-49e2-a4ee-672e83d15fcc Belgium d916b870-4e76-4a93-942d-6f58c9463978 Germany 2833c4c3-dd2f-4666-9df3-455b69321cb2 Poland 3b418373-82b4-4512-80c0-776c2006a7f6 Norway 83c60499-8e5c-467c-9c93-d098ea531ea9 Hungary 61172e4b-d5dc-465c-82b8-605b9dc54114 Netherlands 77e73bc3-2055-45b0-9a6a-487babaeafb8 Estonia 0205a6d2-9155-4a9d-b5a9-df50be018615 Hungary d7ed7981-16ec-4b2e-a962-2904e8f8c0e6 Finland 24def38b-0f5e-4c6a-bcc0-61286bb11cfa Greece 0fc5ea3b-4f3b-4b35-af34-c52fd7e171e8 Bulgaria 0c959e4e-3ee1-466d-a847-56bc7485ca25 Denmark 7c5c60c0-3afb-4b50-b52d-f30b0d81f5fe Germany b411b403-a877-4cb8-b119-f1ac9e869b07 Sweden c02300d8-7ea8-43fa-a4d9-53517e63c698 France fac81d6f-bd61-4cb3-bb00-7f953db44092 Germany 0430fa3c-b301-4498-8b28-66c1c87620e3 Poland a09b0c92-d4bd-4881-893c-c3abdc868888 Germany ac9ba9fb-4a80-4801-b8eb-b7b99d6ecd95 Sweden
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	1SBC101080M6801
-------------	-----------------

Disassembling
InstructionsEnvironmental Product
Declaration - EPD1SBD250584E4000
2TFP200036A1001Sustainable Material
Content in Packaging
(wt. %)

Recycled Cardboard - 86 %

Sustainable Material
Content in Product (wt.
%)

Recycled Metal - 28 %

Certificates and Declarations

A2L Certificate – UL

9AKK108469A4875
9AKK108469A4879

ABS Certificate

ABS_20-2060694-PDA

BV Certificate

BV_2634H24898C0

CB Certificate

CB_SE-112316

CCC Certificate

CCC_2010010304445623

CQC Certificate

CQC2010010304445623
CQC2020010304294316Declaration of
Conformity - CCC2020980304001254
2020980304001052Declaration of
Conformity - CE

1SBD250000U1000

Declaration of
Conformity - UKCA

1SBD250031U1000

DNV Certificate

DNV_TAE00001AF-4

GOST Certificate

GOST_POCCFR.ME77.B07175.pdf

KC Certificate

KC_HW02016-15001C

LR Certificate

LRS_LR23403517TA-02

RINA Certificate

RINA_ELE142224XG

RMRS Certificate

RMRS_1802705280

UL Certificate

UL-US-2150887-5
UL-CA-2142658-5

UL Listing Card

E312527

Container Information

Package Level 1 Units

box 1 piece

Package Level 1 Width

87 mm

Package Level 1 Depth /
Length

87 mm

Package Level 1 Height

47 mm

Package Level 1 Gross
Weight

0.31 kg

Package Level 1 EAN

3471523111516

Package Level 2 Units

box 21 piece

Package Level 2 Width

250 mm

Package Level 2 Depth /
Length

300 mm

Package Level 2 Height

315 mm

Package Level 2 Gross
Weight

13.95 kg

Package Level 3 Units

1080 piece

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)	4758 >> lec Contactors	
E-Number (Finland)	3705808	
E-Number (Sweden)	3211346	

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF38

