



PRODUCT-DETAILS

AF96-30-00-13**AF96-30-00-13 100-250V50/60HZ-DC
Contactor****General Information**

Extended Product Type:	AF96-30-00-13
Product ID:	1SBL407001R1300
EAN:	3471523133235
Catalog Description:	AF96-30-00-13 100-250V50/60HZ-DC Contactor
Long Description:	The AF96-30-00-13 is a 3 pole - 1000 V IEC or 600 UL contactor with screw terminals, controlling motors up to 45 kW / 400 V AC (AC-3) or 60 hp / 480 V UL and switching power circuits up to 130 A (AC-1) or 115 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and 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.
Display Name:	AF96-30-00-13

Ordering

Minimum Order Quantity:	1 piece
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Customs Tariff Number: 85364900

Popular Downloads

EPLAN Data:	9AAC175976_EPLAN
Data Sheet, Technical Information:	1SBC100214C0202
Instructions and Manuals:	1SBC101036M6801
Instructions and Manuals (Part 2):	1SAC200017M0002
CAD Dimensional Drawing:	2CDC001079B0201

Dimensions

Product Net Width:	70 mm
Product Net Depth / Length:	116 mm
Product Net Height:	125.5 mm
Product Net Weight:	1.17 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 60947-1, UL 60947-4-1, CSA C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 60947-1:22, CSA C22.2 No. 60947-4-1:22
Rated Operational Voltage:	Main Circuit 1000 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 $\Theta = 40\text{ °C}$ 130 A):	
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 130 A (690 V) 60 °C 105 A (690 V) 70 °C 90 A
Rated Operational Current AC-3 (I_e):	(415 V) 60 °C 96 A (440 V) 60 °C 96 A (500 V) 60 °C 80 A (690 V) 60 °C 57 A (1000 V) 60 °C 30 A (380 / 400 V) 60 °C 105 A (220 / 230 / 240 V) 60 °C 105 A
Rated Operational Current AC-3e (I_e):	(415 V) 60 °C 96 A (440 V) 60 °C 96 A (500 V) 60 °C 80 A (690 V) 60 °C 57 A (380 / 400 V) 60 °C 105 A (220 / 230 / 240 V) 60 °C 105 A

Rated Operational Current DC-1 (I_e):

- (110 V) 2 Poles in Series, 40 °C 130 A
- (110 V) 2 Poles in Series, 60 °C 105 A
- (110 V) 2 Poles in Series, 70 °C 90 A
- (110 V) 3 Poles in Series, 40 °C 130 A
- (110 V) 3 Poles in Series, 60 °C 105 A
- (110 V) 3 Poles in Series, 70 °C 90 A
- (220 V) 3 Poles in Series, 40 °C 125 A
- (220 V) 3 Poles in Series, 60 °C 105 A
- (220 V) 3 Poles in Series, 70 °C 90 A
- (72 V) 1-Pole, 40 °C 130 A
- (72 V) 1-Pole, 60 °C 105 A
- (72 V) 1-Pole, 70 °C 90 A
- (72 V) 2 Poles in Series, 40 °C 130 A
- (72 V) 2 Poles in Series, 60 °C 105 A
- (72 V) 2 Poles in Series, 70 °C 90 A
- (72 V) 3 Poles in Series, 40 °C 130 A
- (72 V) 3 Poles in Series, 60 °C 105 A
- (72 V) 3 Poles in Series, 70 °C 90 A

Rated Operational Current DC-3 (I_e):

- (110 V) 2 Poles in Series, 40 °C 130 A
- (110 V) 2 Poles in Series, 60 °C 105 A
- (110 V) 2 Poles in Series, 70 °C 90 A
- (110 V) 3 Poles in Series, 40 °C 130 A
- (110 V) 3 Poles in Series, 60 °C 105 A
- (110 V) 3 Poles in Series, 70 °C 90 A
- (220 V) 3 Poles in Series, 40 °C 130 A
- (220 V) 3 Poles in Series, 60 °C 105 A
- (220 V) 3 Poles in Series, 70 °C 90 A
- (72 V) 1-Pole, 40 °C 130 A
- (72 V) 1-Pole, 60 °C 105 A
- (72 V) 1-Pole, 70 °C 90 A
- (72 V) 2 Poles in Series, 40 °C 130 A
- (72 V) 2 Poles in Series, 60 °C 105 A
- (72 V) 2 Poles in Series, 70 °C 90 A
- (72 V) 3 Poles in Series, 40 °C 130 A
- (72 V) 3 Poles in Series, 60 °C 105 A
- (72 V) 3 Poles in Series, 70 °C 90 A

Rated Operational Current DC-5 (I_e):

- (110 V) 2 Poles in Series, 40 °C 130 A
- (110 V) 2 Poles in Series, 60 °C 105 A
- (110 V) 2 Poles in Series, 70 °C 90 A
- (110 V) 3 Poles in Series, 40 °C 130 A
- (110 V) 3 Poles in Series, 60 °C 105 A
- (110 V) 3 Poles in Series, 70 °C 90 A
- (220 V) 3 Poles in Series, 40 °C 130 A
- (220 V) 3 Poles in Series, 60 °C 105 A
- (220 V) 3 Poles in Series, 70 °C 90 A
- (72 V) 1-Pole, 40 °C 130 A
- (72 V) 1-Pole, 60 °C 105 A
- (72 V) 1-Pole, 70 °C 90 A
- (72 V) 2 Poles in Series, 40 °C 130 A
- (72 V) 2 Poles in Series, 60 °C 105 A
- (72 V) 2 Poles in Series, 70 °C 90 A
- (72 V) 3 Poles in Series, 40 °C 130 A
- (72 V) 3 Poles in Series, 60 °C 105 A
- (72 V) 3 Poles in Series, 70 °C 90 A

Rated Operational Power AC-3 (P_e):

- (415 V) 55 kW
- (440 V) 55 kW
- (500 V) 55 kW
- (690 V) 55 kW
- (1000 V) 40 kW
- (380 / 400 V) 45 kW
- (380 / 400 V) 55 kW
- (220 / 230 / 240 V) 25 kW
- (220 / 230 / 240 V) 30 kW

Rated Operational Power AC-3e (P_e):	(415 V) 55 kW (440 V) 55 kW (500 V) 55 kW (690 V) 55 kW (380 / 400 V) 45 kW (380 / 400 V) 55 kW (220 / 230 / 240 V) 25 kW (220 / 230 / 240 V) 30 kW
Rated Short-time Withstand Current Low Voltage (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 840 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 1150 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 750 A
Rated Insulation Voltage (U_i):	acc. to IEC 60947-4-1 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp}):	8 kV
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 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Coil Consumption:	Average Holding Value 50 / 60 Hz 4 V·A Average Holding Value 50 Hz 4 V·A Average Holding Value 60 Hz 4 V·A Average Holding Value DC 2 W Average Holding Value, from Warm State 2 W
Power Loss:	at Rated Operating Conditions AC-1 per Pole 8.2 W at Rated Operating Conditions AC-3 per Pole 4.5 W
Operate Time:	Between Coil De-energization and NC Contact Closing 19 ... 105 ms Between Coil De-energization and NO Contact Opening 17 ... 100 ms Between Coil Energization and NC Contact Opening 38 ... 95 ms Between Coil Energization and NO Contact Closing 42 ... 100 ms
Mounting on DIN Rail:	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied) :	2 x M4 or 2 x M6 Screws Placed Diagonally
Connecting Capacity Main Circuit:	Flexible with Ferrule 1/2x 6 ... 50 mm ² Flexible with Insulated Ferrule 1/2x 6 ... 50 mm ² Rigid Stranded 1x 6 ... 70 mm ² Rigid Stranded 2x 6 ... 50 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 17 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 IP10
Recommended Screw Driver:	Pozidriv PZ
Tightening Torque:	Control Circuit 1.2 N·m Main Circuit 6 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) 115 A
Horsepower Rating UL/CSA:	(120 V AC) Single Phase 7-1/2 hp (200 ... 208 V AC) Three Phase 30 hp (220 ... 240 V AC) Three Phase 40 hp (240 V AC) Single Phase 20 hp (440 ... 480 V AC) Three Phase 75 hp (550 ... 600 V AC) Three Phase 75 hp
Connecting Capacity Main Circuit UL/CSA:	Rigid Stranded 1/2x 6-1 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 53 in-lb
Full Load Amps Motor Use:	(120 V AC) Single Phase 80 A (200 ... 208 V AC) Three Phase 92 A (220 ... 240 V AC) Three Phase 80 A (240 V AC) Single Phase 88 A (440 ... 480 V AC) Three Phase 77 A (550 ... 600 V AC) Three Phase 77 A

Environmental

Ambient Air Temperature:	Close to Contactor Fitted with Thermal O/L Relay -40 ... 70 °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: A 25 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: B2 15 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g Open, Shock Direction: B1 5 g
Resistance to Vibrations:	3g Closed Position & 3g Open Position 5 ... 300 Hz
Pollution Degree:	3

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
SCIP:	81df14b5-edb5-40f5-8e35-b316e417bef9 France

Simplified SCIP:	fb3f596b-c8fe-49cb-9b4f-a30aed5aed28 Germany f6d20ef4-4758-4a2b-9a84-7716191b9c37 Denmark e1ef6c99-d62f-43e1-9fc1-83a6eb57b5a4 Czechia 692bc6cd-cc1f-40a3-9531-fcd06075411 Germany 23fdf834-6560-4f22-9e99-6761a9d53fff Finland 123bc802-adcb-4fc9-8bb4-2d7dd8d92aed Italy 9206bd31-7c96-4f2e-a972-ea0bbbad9180 Germany 945a6df2-f86c-4a43-8f63-468ff61ab31f Spain 76aeb018-b24a-43f1-b0c9-4bf7423d9cef Portugal 06dd8d63-c226-4ebe-ac4f-bbcbfd9d062bc Greece fcf482ee-85e7-4bce-9ea1-433eb4a60616 Netherlands 8f9ad557-8bf9-4a4e-bc2d-14f715e59998 Belgium af53691b-5358-45af-944a-8a35038c7b6f Hungary 8b42f684-c4f1-4b3e-895f-557ee94ea3bf Sweden 312181f5-8c00-4a1e-b034-21e6bb3276f3 Estonia 29d1106e-a88b-4a95-ad7c-d8f9ebc4bd6f Poland 63a0ebd8-774d-43cd-8218-f3a3b1815bbf Croatia 33c66136-2501-43e3-b08b-881aaa3885f1 Norway a98d77fe-fb79-4e3c-bacc-fc3695b6c1aa Sweden 73026d12-0a4e-44d8-99a9-38dc86184479 Poland 17591b3f-db54-40d3-a2ea-87268e6cd61b Bulgaria f9d85048-ae86-4ada-aa92-7d4b5192f1c9 Belgium 5a523464-bcc7-4ecf-9740-ff5026268afc Hungary 313f20e6-357d-427d-ae07-38b05b7ec25d Germany 41be6b5b-f9c6-4a2d-a5dd-76c679ba423a Poland 41261ed1-832e-4eae-acb4-aabf716abe2c France 7933d999-2517-4ec7-8f44-d0e8e8fe2cc2 Germany
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

ABB EcoSolutions:	Yes
ABB Site Meeting Group Waste To Landfill Target:	No non-hazardous waste is sent to a landfill
EcoSolutions Profile:	1SBC100156C0308
End Of Life Disassembling Instructions:	1SBC101081M6801
Environmental Product Declaration - EPD:	1SBD250584E2000
Improved Energy Efficiency for Customers:	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line
Recyclability Rate of the Product acc. to EN45555:	Design for Closing Resource Loops - Standard EN45555 - 91.9 %

Certificates and Declarations

A2L Certificate – UL:	9AKK108469A4890 9AKK108469A4892
ABS Certificate:	ABS_20-2060694-PDA
BV Certificate:	BV_2634H36994B2
CB Certificate:	CB_SE-116522A2
CCC Certificate:	CCC_2024010304656667
Declaration of Conformity - CCC:	2020980304001255

Declaration of Conformity - CE:	1SBD250000U1000
Declaration of Conformity - UKCA:	1SBD250031U1000
DNV Certificate:	DNV_TAE00001AF-4
KC Certificate:	KC_HW02016-15011C
LR Certificate:	LRS_LR23403517TA-02
RINA Certificate:	RINA_ELE084013XG
RMRS Certificate:	RMRS_1802705280
UL Certificate:	UL-US-L312527-1141-10303102-19 UL-CA-L312527-4141-10303102-19
UL Listing Card:	UL_E312527

Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	150 mm
Package Level 1 Depth / Length:	150 mm
Package Level 1 Height:	103 mm
Package Level 1 Gross Weight:	1.29 kg
Package Level 1 EAN:	3471523133235

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):	3707137
E-Number (Sweden):	3210057

Accessories

Identifier	Description	Type	Qty	Unit Of Measure
1SBN010015R1001	CE5-01D0.1 Auxiliary Contact Block	CE5-01D0.1	1	piece
1SBN010015R1010	CE5-10D0.1 Auxiliary Contact Block	CE5-10D0.1	1	piece
1SBN010016R1001	CE5-01W0.1 Auxiliary Contact Block	CE5-01W0.1	1	piece
1SBN010016R1010	CE5-10W0.1 Auxiliary Contact Block	CE5-10W0.1	1	piece

1SBN010017R1001	CE5-01D2 Auxiliary Contact Block	CE5-01D2	1	piece
1SBN010017R1010	CE5-10D2 Auxiliary Contact Block	CE5-10D2	1	piece
1SBN010018R1001	CE5-01W2 Auxiliary Contact Block	CE5-01W2	1	piece
1SBN010018R1010	CE5-10W2 Auxiliary Contact Block	CE5-10W2	1	piece
1SBN010013R1010	CB5-10 Impulse Contact Block	CB5-10	1	piece
1SBN010013R1001	CB5-01 Impulse Contact Block	CB5-01	1	piece
1SBN010110R1010	CA4-10 Auxiliary Contact Block	CA4-10	1	piece
1SBN010110T1010	CA4-10-T Auxiliary Contact Block	CA4-10-T	1	piece
1SBN010110R1001	CA4-01 Auxiliary Contact Block	CA4-01	1	piece
1SBN010110T1001	CA4-01-T Auxiliary Contact Block	CA4-01-T	1	piece
1SBN010111R1010	CC4-10 Leading Auxiliary Contact Block	CC4-10	1	piece
1SBN010111R1001	CC4-01 Lagging Auxiliary Contact Block	CC4-01	1	piece
1SBN010120R1011	CAL4-11 Auxiliary Contact Block	CAL4-11	1	piece
1SBN010120T1011	CAL4-11-T Auxiliary Contact Block	CAL4-11-T	1	piece
1SBN010140R1022	CA4-22E Auxiliary Contact Block	CA4-22E	1	piece
1SBN010140R1031	CA4-31E Auxiliary Contact Block	CA4-31E	1	piece
1SBN010140R1040	CA4-40E Auxiliary Contact Block	CA4-40E	1	piece
1SBN010140R1004	CA4-04E Auxiliary Contact Block	CA4-04E	1	piece
1SBN070156T1000	LDC4 Additional Coil Terminal Block	LDC4	1	piece
1SBN020112R1000	TEF4-ON Frontal Electronic Timer	TEF4-ON	1	piece
1SBN020113R1000	TEF4S-ON Frontal Electronic Timer	TEF4S-ON	1	piece
1SBN010134R1011	CAL4-11K Auxiliary Contact Block	CAL4-11K	1	piece
1SBN020114R1000	TEF4-OFF Frontal Electronic Timer	TEF4-OFF	1	piece
1SBN020115R1000	TEF4S-OFF Frontal Electronic Timer	TEF4S-OFF	1	piece
1SBN033405T1000	VM96-4 Mechanical Interlock Unit	VM96-4	1	piece
1SBN110108T1000	BX4 Protective Cover	BX4	1	piece
1SBN110122T1000	BDT4 Test Block	BDT4	1	piece

1ISBN040200R1011	WA4-96-11 24-60V50/60HZ-DC Mechanical Latching Unit	WA4-96-11	1	piece
1ISBN083911R1000	BER96-4 Connection Set for Reversing Contactors	BER96-4	1	piece
1ISBN060100R1000	RA4 Interface Relay	RA4	1	piece
1ISBN083913R2000	BEY96-4 Connection Set for Star-Delta Starter	BEY96-4	1	piece
1ISBN040200R1013	WA4-96-13 100-250V50/60HZ-DC Mechanical Latching Unit	WA4-96-13	1	piece
1ISBN040200R1014	WA4-96-14 250-500V50/60HZ-DC Mechanical Latching Unit	WA4-96-14	1	piece
1ISBN040200R1012	WA4-96-12 48-130V50/60HZ-DC Mechanical Latching Unit	WA4-96-12	1	piece
1ISBN070159T1000	LDC4K Additional Coil Terminal Block	LDC4K	1	piece
1ISBN010160R1001	CA4-01K Auxiliary Contact Block	CA4-01K	1	piece
1ISBN010146R1022	CA4-22EK Auxiliary Contact Block	CA4-22EK	1	piece
1ISBN010160R1010	CA4-10K Auxiliary Contact Block	CA4-10K	1	piece
1ISBN010160T1001	CA4-01K-T Auxiliary Contact Block	CA4-01K-T	1	piece
1ISBN010160T1010	CA4-10K-T Auxiliary Contact Block	CA4-10K-T	1	piece
1ISBN010146R1031	CA4-31EK Auxiliary Contact Block	CA4-31EK	1	piece
1ISBN010146R1040	CA4-40EK Auxiliary Contact Block	CA4-40EK	1	piece

Categories

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