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 PRODUCT-DETAILS

## AF52-30-00-11

### AF52-30-00-11 24-60V50/60HZ 20-60VDC Contactor




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#### General Information

<b>Extended Product Type:</b>	AF52-30-00-11
<b>Product ID:</b>	1SBL367001R1100
<b>EAN:</b>	3471523132313
<b>Catalog Description:</b>	AF52-30-00-11 24-60V50/60HZ 20-60VDC Contactor
<b>Long Description:</b>	The AF52-30-00-11 is a 3 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 22 kW / 400 V AC (AC-3) or 40 hp / 480 V UL and switching power circuits up to 100 A (AC-1) or 80 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.
<b>Display Name:</b>	AF52-30-00-11

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#### Ordering

<b>Minimum Order Quantity:</b>	1 piece
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Customs Tariff Number: 85364900

## Popular Downloads

EPLAN Data:	9AAC175973_EPLAN
Data Sheet, Technical Information:	1SBC100214C0202
Instructions and Manuals:	1SBC101036M6801
Instructions and Manuals (Part 2):	1SAC200017M0002
CAD Dimensional Drawing:	2CDC001079B0201

## Dimensions

Product Net Width:	55 mm
Product Net Depth / Length:	111 mm
Product Net Height:	125.5 mm
Product Net Weight:	0.97 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 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 $\Theta = 40\text{ °C}$ 105 A):	
Rated Operational Current AC-1 ( $I_e$ ):	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 ( $I_e$ ):	(415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 A (380 / 400 V) 60 °C 53 A (220 / 230 / 240 V) 60 °C 53 A
Rated Operational Current AC-3e ( $I_e$ ):	(415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 A (380 / 400 V) 60 °C 53 A (220 / 230 / 240 V) 60 °C 53 A

**Rated Operational Current DC-1 ( $I_e$ ):**

- (110 V) 2 Poles in Series, 40 °C 100 A
- (110 V) 2 Poles in Series, 60 °C 80 A
- (110 V) 2 Poles in Series, 70 °C 70 A
- (110 V) 3 Poles in Series, 40 °C 100 A
- (110 V) 3 Poles in Series, 60 °C 80 A
- (110 V) 3 Poles in Series, 70 °C 70 A
- (220 V) 3 Poles in Series, 40 °C 100 A
- (220 V) 3 Poles in Series, 60 °C 80 A
- (220 V) 3 Poles in Series, 70 °C 70 A
- (72 V) 1-Pole, 40 °C 100 A
- (72 V) 1-Pole, 60 °C 80 A
- (72 V) 1-Pole, 70 °C 70 A
- (72 V) 2 Poles in Series, 40 °C 100 A
- (72 V) 2 Poles in Series, 60 °C 80 A
- (72 V) 2 Poles in Series, 70 °C 70 A
- (72 V) 3 Poles in Series, 40 °C 100 A
- (72 V) 3 Poles in Series, 60 °C 80 A
- (72 V) 3 Poles in Series, 70 °C 70 A

**Rated Operational Current DC-3 ( $I_e$ ):**

- (110 V) 2 Poles in Series, 40 °C 100 A
- (110 V) 2 Poles in Series, 60 °C 80 A
- (110 V) 2 Poles in Series, 70 °C 70 A
- (110 V) 3 Poles in Series, 40 °C 100 A
- (110 V) 3 Poles in Series, 60 °C 80 A
- (110 V) 3 Poles in Series, 70 °C 70 A
- (220 V) 3 Poles in Series, 40 °C 100 A
- (220 V) 3 Poles in Series, 60 °C 80 A
- (220 V) 3 Poles in Series, 70 °C 70 A
- (72 V) 1-Pole, 40 °C 100 A
- (72 V) 1-Pole, 60 °C 80 A
- (72 V) 1-Pole, 70 °C 70 A
- (72 V) 2 Poles in Series, 40 °C 100 A
- (72 V) 2 Poles in Series, 60 °C 80 A
- (72 V) 2 Poles in Series, 70 °C 70 A
- (72 V) 3 Poles in Series, 40 °C 100 A
- (72 V) 3 Poles in Series, 60 °C 80 A
- (72 V) 3 Poles in Series, 70 °C 70 A

**Rated Operational Current DC-5 ( $I_e$ ):**

- (110 V) 2 Poles in Series, 40 °C 100 A
- (110 V) 2 Poles in Series, 60 °C 80 A
- (110 V) 2 Poles in Series, 70 °C 70 A
- (110 V) 3 Poles in Series, 40 °C 100 A
- (110 V) 3 Poles in Series, 60 °C 80 A
- (110 V) 3 Poles in Series, 70 °C 70 A
- (220 V) 3 Poles in Series, 40 °C 100 A
- (220 V) 3 Poles in Series, 60 °C 80 A
- (220 V) 3 Poles in Series, 70 °C 70 A
- (72 V) 1-Pole, 40 °C 100 A
- (72 V) 1-Pole, 60 °C 80 A
- (72 V) 1-Pole, 70 °C 70 A
- (72 V) 2 Poles in Series, 40 °C 100 A
- (72 V) 2 Poles in Series, 60 °C 80 A
- (72 V) 2 Poles in Series, 70 °C 70 A
- (72 V) 3 Poles in Series, 40 °C 100 A
- (72 V) 3 Poles in Series, 60 °C 80 A
- (72 V) 3 Poles in Series, 70 °C 70 A

**Rated Operational Power AC-3 ( $P_e$ ):**

- (400 V) 22 kW
- (415 V) 30 kW
- (440 V) 30 kW
- (500 V) 30 kW
- (690 V) 30 kW
- (380 / 400 V) 22 kW
- (220 / 230 / 240 V) 15 kW

**Rated Operational Power AC-3e ( $P_e$ ):**

- (415 V) 30 kW
- (440 V) 30 kW
- (500 V) 30 kW
- (690 V) 30 kW
- (380 / 400 V) 22 kW
- (220 / 230 / 240 V) 15 kW

<b>Rated Short-time Withstand Current Low Voltage (<math>I_{cw}</math>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 600 A
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	acc. to IEC 60947-4-1 690 V acc. to UL/CSA 600 V
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	6 kV
<b>Maximum Electrical Switching Frequency:</b>	(AC-1) 600 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour
<b>Maximum Mechanical Switching Frequency:</b>	3600 cycles per hour
<b>Rated Control Circuit Voltage (<math>U_c</math>):</b>	50 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 V
<b>Coil Consumption:</b>	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
<b>Power Loss:</b>	at Rated Operating Conditions AC-1 per Pole 6.3 W at Rated Operating Conditions AC-3 per Pole 1.7 W
<b>Operate Time:</b>	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
<b>Mounting on DIN Rail:</b>	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
<b>Mounting by Screws (not supplied) :</b>	2 x M4 or 2 x M6 Screws Placed Diagonally
<b>Connecting Capacity Main Circuit:</b>	Flexible with Ferrule 1/2x 4 ... 35 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 4 ... 35 mm <sup>2</sup> Rigid Stranded 1/2x 6 ... 35 mm <sup>2</sup>
<b>Connecting Capacity Control Circuit:</b>	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid Stranded 1/2x 1 ... 2.5 mm <sup>2</sup>
<b>Wire Stripping Length:</b>	Control Circuit 10 mm Main Circuit 16 mm
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
<b>Recommended Screw Driver:</b>	Pozidriv PZ
<b>Tightening Torque:</b>	Control Circuit 1.2 N·m Main Circuit 4 N·m
<b>Terminal Type:</b>	Screw Terminals
<b>Product Name:</b>	Block Contactor

## Technical UL/CSA

<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V
<b>General Use Rating UL/CSA:</b>	(600 V AC) 80 A

<b>Horsepower Rating UL/CSA:</b>	(120 V AC) Single Phase 3 hp (200 ... 208 V AC) Three Phase 15 hp (220 ... 240 V AC) Three Phase 20 hp (240 V AC) Single Phase 10 hp (440 ... 480 V AC) Three Phase 40 hp (550 ... 600 V AC) Three Phase 50 hp
<b>Connecting Capacity Main Circuit UL/CSA:</b>	Rigid Stranded 1/2x 10-2 AWG
<b>Connecting Capacity Control Circuit UL/CSA:</b>	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
<b>Tightening Torque UL/CSA:</b>	Control Circuit 11 in-lb Main Circuit 35 in-lb
<b>Full Load Amps Motor Use:</b>	(120 V AC) Single Phase 34 A (200 ... 208 V AC) Three Phase 48.3 A (220 ... 240 V AC) Three Phase 54 A (240 V AC) Single Phase 50 A (440 ... 480 V AC) Three Phase 52 A (550 ... 600 V AC) Three Phase 52 A

## Environmental

<b>Ambient Air Temperature:</b>	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
<b>Climatic Withstand:</b>	Category B according to IEC 60947-1 Annex Q
<b>Maximum Operating Altitude Permissible:</b>	Without Derating 3000 m
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	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
<b>Resistance to Vibrations:</b>	3g Closed Position & 3g Open Position 5 ... 300 Hz
<b>Pollution Degree:</b>	3

## Material Compliance

<b>Conflict Minerals Reporting Template (CMRT):</b>	9AKK108467A5658
<b>REACH Declaration:</b>	2CMT2021-006202
<b>RoHS Declaration:</b>	2CMT2021-006277
<b>RoHS Information:</b>	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
<b>SCIP:</b>	71c82dcf-217b-416b-9985-2f7ef9946893 France

<b>Simplified SCIP:</b>	d7b62b42-47ae-4d94-87de-e93def0da041 Poland f5d8d1fc-8bf8-48c5-bfdb-20cef1721db8 Belgium 41d365b9-6787-41d9-8e0e-bc7c12f402f2 Norway 1b310530-6a78-45e8-9afb-ec052a4c4935 Germany 94f6a63c-786b-43d1-99a4-941a55113656 Poland 9a382b80-274b-482a-93d3-78f69d135dbd Netherlands c2c5f2f9-f229-4952-942b-6dc8c6686ea8 Hungary bb467480-aa41-4817-8b2d-d219427d26de Estonia f672d4df-567d-4a50-adfb-77fa1693f2cd Greece 9c59f024-1b55-4c7f-954c-8069a5511e6f Portugal f14d220e-aef9-42d8-8bcc-03bc58528a3c Spain 283406d6-c2df-46a1-91f0-c230e668b4fa Finland 056ea954-00c9-48e4-be35-dbf3ee687e9 Belgium 8fd7c910-fbcf-49c0-a561-ead5ab5f2862 Italy 49825151-4c01-427e-a00b-7698594088f2 Denmark 68adf577-1672-4d1a-a553-3642ad614362 Germany 910d0247-288e-4a17-aa0f-b5021552b469 Croatia c5ba9d4c-04f6-4739-8eb5-ecdad7caad65 Czechia 52029c19-84ef-4600-86e1-d3fc82ecb72 Bulgaria 4e18e19e-8a6d-4c84-9311-779c3b7f88da Sweden 51a03e87-9ce8-4b45-8554-4515476bd870 Poland cfc6ba7f-17d5-482a-9a9f-01fd3ef91047 France 274ec7be-1bb8-40e9-ba0a-a941c7477ff5 Sweden e8814343-5757-4823-818c-3235209edffc Germany 552e7560-16eb-44ad-922b-e4b9fda30832 Germany 6b4ebdff-859b-4e97-86f3-2dbcd41a3a5b Hungary 5bc2e6a1-266c-40c8-b71c-ee13c6cdf12c Germany
<b>Toxic Substances Control Act - TSCA:</b>	2CMT2023-006525
<b>WEEE B2C / B2B:</b>	Business To Business
<b>WEEE Category:</b>	5. Small Equipment (No External Dimension More Than 50 cm)

**ABB EcoSolutions**

<b>ABB EcoSolutions:</b>	Yes
<b>ABB Site Meeting Group Waste To Landfill Target:</b>	No non-hazardous waste is sent to a landfill
<b>EcoSolutions Profile:</b>	1SBC100156C0308
<b>End Of Life Disassembling Instructions:</b>	1SBC101081M6801
<b>Environmental Product Declaration - EPD:</b>	1SBD250584E1000
<b>Improved Energy Efficiency for Customers:</b>	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
<b>Recyclability Rate of the Product acc. to EN45555:</b>	Design for Closing Resource Loops - Standard EN45555 - 91.9 %

**Certificates and Declarations**

<b>A2L Certificate – UL:</b>	9AKK108469A4890 9AKK108469A4892
<b>ABS Certificate:</b>	ABS_20-2060694-PDA
<b>BV Certificate:</b>	BV_2634H36994B2
<b>CB Certificate:</b>	SE-115941
<b>CCC Certificate:</b>	CCC_2024010304648524

<b>Declaration of Conformity - CCC:</b>	2020980304001256 2020980304001074
<b>Declaration of Conformity - CE:</b>	1SBD250000U1000
<b>Declaration of Conformity - UKCA:</b>	1SBD250031U1000
<b>DNV Certificate:</b>	DNV_TAE00001AF-4
<b>KC Certificate:</b>	KC_HW02016-15010C
<b>LR Certificate:</b>	LRS_LR23403517TA-02
<b>RINA Certificate:</b>	RINA_ELE084013XG
<b>RMRS Certificate:</b>	RMRS_1802705280
<b>UL Certificate:</b>	UL-US-L312527-1141-10303102-19 UL-CA-L312527-4141-10303102-19
<b>UL Listing Card:</b>	UL_E312527

## Container Information

<b>Package Level 1 Units:</b>	box 1 piece
<b>Package Level 1 Width:</b>	150 mm
<b>Package Level 1 Depth / Length:</b>	150 mm
<b>Package Level 1 Height:</b>	97 mm
<b>Package Level 1 Gross Weight:</b>	1.07 kg
<b>Package Level 1 EAN:</b>	3471523132313

## External Classifications and Standards

<b>Object Classification Code:</b>	Q
<b>ETIM 7:</b>	EC000066 - Power contactor, AC switching
<b>ETIM 8:</b>	EC000066 - Power contactor, AC switching
<b>ETIM 9:</b>	EC000066 - Power contactor, AC switching
<b>eClass:</b>	V11.0 : 27371003
<b>UNSPSC:</b>	39121529
<b>IDEA Granular Category Code (IGCC):</b>	4758 >> lec Contactors
<b>E-Number (Finland):</b>	3707014
<b>E-Number (Sweden):</b>	3210037

## 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
1SBN010151R1011	CAT4-11E Auxiliary Contact / Coil Terminal Block	CAT4-11E	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
1SBN040100R1011	WA4-11 24-60V50/60HZ-DC Mechanical Latching Unit	WA4-11	1	piece
1SBN083413R2000	BEY65-4 Connection Set for Star-Delta Starter	BEY65-4	1	piece
1SBN040100R1014	WA4-14 250-500V50/60HZ-DC Mechanical Latching Unit	WA4-14	1	piece
1SBN110122T1000	BDT4 Test Block	BDT4	1	piece
1SBN083411R1000	BER65-4 Connection Set for Reversing Contactors	BER65-4	1	piece
1SBN040100R1012	WA4-12 48-130V50/60HZ-DC Mechanical Latching Unit	WA4-12	1	piece
1SBN060100R1000	RA4 Interface Relay	RA4	1	piece
1SBN040100R1013	WA4-13 100-250V50/60HZ-DC Mechanical Latching Unit	WA4-13	1	piece
1SBN070159T1000	LDC4K Additional Coil Terminal Block	LDC4K	1	piece
1SBN083406R1000	BEA65-4 Connecting Link with Manual Motor Starter	BEA65-4	1	piece
1SBN010160R1001	CA4-01K Auxiliary Contact Block	CA4-01K	1	piece
1SBN010146R1022	CA4-22EK Auxiliary Contact Block	CA4-22EK	1	piece
1SBN010160R1010	CA4-10K Auxiliary Contact Block	CA4-10K	1	piece
1SBN010160T1001	CA4-01K-T Auxiliary Contact Block	CA4-01K-T	1	piece
1SBN010160T1010	CA4-10K-T Auxiliary Contact Block	CA4-10K-T	1	piece
1SBN010146R1031	CA4-31EK Auxiliary Contact Block	CA4-31EK	1	piece
1SBN010146R1040	CA4-40EK Auxiliary Contact Block	CA4-40EK	1	piece

## Categories

Products > Low Voltage Products and Systems > Control Products > Contactors > Block Contactors > AF Contactors > AF52

