

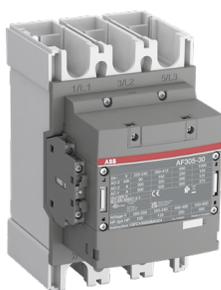



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 PRODUCT-DETAILS

# AF305-30-11-11

## AF305-30-11-11 Contactor




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**General Information**

Extended Product Type	AF305-30-11-11
Product ID	1SFL587002R1111
EAN	7320500481707
Catalog Description	AF305-30-11-11 Contactor

Long Description	<p>The AF305-30-11-11 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 160 kW / 400 V AC (AC-3) or 250 hp / 480 V UL and switching power circuits up to 500 A (AC-1) or 400 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. Includes Mounting kit, containing all necessary screws, washers and sockets for connecting the terminals, and screws for mounting the device.</p>
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**Ordering**

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

## Popular Downloads

EPLAN Data	9AAC175203_EPLAN
Data Sheet, Technical Information	1SBC100214C0202
Data Sheet, Technical Information (Part 2)	1SAC200017M0002
Instructions and Manuals	1SFC100008M0201
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	140 mm
Product Net Depth / Length	180 mm
Product Net Height	225 mm
Product Net Weight	3.9 kg
Dimension Diagram	1SFB535001G1060

## Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Number of Poles	3P
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 500 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(1000 V) 40 °C 375 A (1000 V) 55 °C 325 A (1000 V) 60 °C 325 A (1000 V) 70 °C 260 A (690 V) 40 °C 500 A (690 V) 55 °C 400 A (690 V) 70 °C 325 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 305 A (440 V) 55 °C 305 A (500 V) 55 °C 290 A (690 V) 55 °C 290 A (1000 V) 55 °C 131 A (380 / 400 V) 55 °C 305 A (220 / 230 / 240 V) 55 °C 305 A
Rated Operational Current DC-1 (I <sub>e</sub> )	(110 V) 1-Pole, 40 °C 500 A (220 V) 2 Poles in Series, 40 °C 500 A (220 V) 3 Poles in Series, 40 °C 500 A
Rated Operational Current DC-3 (I <sub>e</sub> )	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
Rated Operational Current DC-5 (I <sub>e</sub> )	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
Rated Operational Power	(415 V) 160 kW

AC-3 (P <sub>e</sub> )	(440 V) 160 kW (500 V) 200 kW (690 V) 250 kW (1000 V) 185 kW (380 / 400 V) 160 kW (220 / 230 / 240 V) 90 kW
Rated Breaking Capacity AC-3	8 x I <sub>e</sub> AC-3
Rated Breaking Capacity AC-3e	8.5 x I <sub>e</sub> AC-3e
Rated Making Capacity AC-3	10 x I <sub>e</sub> AC-3
Rated Making Capacity AC-3e	12 x I <sub>e</sub> AC-3e
Short-Circuit Protective Devices	gG Type Fuses 500 A
Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1409 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 2440 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 996 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 4600 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 3800 A
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x U <sub>c</sub> Min. ... 1.1 x U <sub>c</sub> Max. (at θ ≤ 70 °C)
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 8.5 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 8.5 V-A Holding at Max. Rated Control Circuit Voltage DC 3 V-A Holding at Max. Rated Control Circuit Voltage DC 3 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 475 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 475 V-A Pull-in at Max. Rated Control Circuit Voltage DC 400 V-A Pull-in at Max. Rated Control Circuit Voltage DC 400 W
Power Loss	at Rated Operating Conditions per Pole 19 W
Operate Time	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
Connecting Capacity Main Circuit	Flexible 2 x 70 ... 185 mm <sup>2</sup> Rigid Al-Cable 1 x 185 ... 240 mm <sup>2</sup> Rigid Cu-Cable 1 x 6 ... 300 mm <sup>2</sup> Rigid Cu-Cable 2 x 70 ... 185 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 2x0.75 ... 2.5 mm <sup>2</sup> Solid 2 x 1 ... 4 mm <sup>2</sup> Stranded 2 x 1 ... 4 mm <sup>2</sup>
Connecting Capacity	Flexible 2 x 70 ... 185 mm <sup>2</sup> Rigid Al-Cable 1 x 185 ... 240 mm <sup>2</sup> Rigid Cu-Cable 2 x 70 ... 185 mm <sup>2</sup>
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00

Tightening Torque	Cable Lug 9 N-m Main Circuit 22 ... 43 N-m
Terminal Type	Main Circuit: Bars
Product Name	Block Contactor

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(1000 V AC) 400 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 100 hp (208 V AC) Three Phase 100 hp (220 ... 240 V AC) Three Phase 125 hp (440 ... 480 V AC) Three Phase 250 hp (550 ... 600 V AC) Three Phase 300 hp
Full Load Amps Motor Use	(440 ... 480 V AC) Three Phase 302 A (550 ... 600 V AC) Three Phase 289 A

## Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 50 °C Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 55 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 70 °C Close to Contactor for Storage -40 ... 70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m

## 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

ABB EcoSolutions	Yes
ABB Site Meeting Group Waste To Landfill Target	Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility
End Of Life Disassembling Instructions	1SFC100112M0002
Environmental Product Declaration - EPD	1SFC100104D0201 2TFP200030A1001
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
Recyclability Rate of the Product acc. to EN45555	Design for Closing Resource Loops - Standard EN45555 - 76.3 %

Sustainable Material  
Content in Product (wt.  
%)

Recycled Metal - 33 %

## Certificates and Declarations

A2L Certificate – UL	9AKK108468A6695
ABS Certificate	14-LD1092198-PDA
BV Certificate	BV_36353_AOBV
CB Certificate	SE-89316
CCS Certificate	GB14T00030
CQC Certificate	CQC2014010304676670 CQC2014010304673866
Declaration of Conformity - CCC	2020980304001305 2020980304001068
Declaration of Conformity - CE	2CMT2015-005439
Declaration of Conformity - UKCA	2CMT2020-006118
DNV Certificate	DNV_E-14043
EAC Certificate	9AKK107046A8618
GL Certificate	GL_95073-14HH
LR Certificate	LR_14_70011(E1)
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
UL Certificate	20121217-E36588
UL Listing Card	UL_E36588

## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	263 mm
Package Level 1 Depth / Length	203 mm
Package Level 1 Height	289 mm
Package Level 1 Gross Weight	4.6 kg
Package Level 1 EAN	7320500481707

## 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)	3706480
E-Number (Norway)	4117651
E-Number (Sweden)	3210161

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**Accessories**

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Identifier	Description	Type	Quantity	Unit Of Measure
1SFN170801R1001	RU19/120 LVRT-Module	RU19/120	1	piece
1SFN170801R1002	RU19/240 LVRT-Module	RU19/240	1	piece

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**Categories**

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF305

