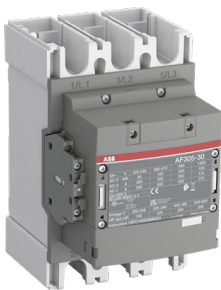




PRODUCT-DETAILS

AF305-30-11-13

AF305-30-11-13 Contactor



General Information	
Extended Product Type:	AF305-30-11-13
Product ID:	1SFL587002R1311
EAN:	7320500481776
Catalog Description:	AF305-30-11-13 Contactor
Long Description:	The AF305-30-11-13 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 (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. Includes Mounting kit, containing all necessary screws, washers and sockets for connecting the terminals, and screws for mounting the device.
Display Name:	AF305-30-11-13

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 _{th}):	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 500 A
Rated Operational Current AC-1 (I _e):	(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 _e):	(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 _e):	(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 _e):	(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_e):	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
Rated Operational Power AC-3 (P_e):	(415 V) 160 kW (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_e AC-3
Rated Making Capacity AC-3:	10 x I_e AC-3
Short-Circuit Protective Devices:	gG Type Fuses 500 A
Rated Short-time Withstand Current Low Voltage (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 2440 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 996 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 3050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 1409 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 4600 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 3800 A
Rated Insulation Voltage (U_i):	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 1000 V
Rated Impulse Withstand Voltage (U_{imp}):	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_c Min. ... 1.1 x U_c Max. (at $\theta \leq 70$ °C)
Rated Control Circuit Voltage (U_c):	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Coil Consumption:	Holding at Max. Rated Control Circuit Voltage 50 Hz 32 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 32 V·A Holding at Max. Rated Control Circuit Voltage DC 4.2 V·A Holding at Max. Rated Control Circuit Voltage DC 4.2 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 590 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 590 V·A Pull-in at Max. Rated Control Circuit Voltage DC 720 V·A Pull-in at Max. Rated Control Circuit Voltage DC 720 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 1 x 16 ... 240 mm ² Rigid Al-Cable 1 x 185 ... 240 mm ² Rigid Cu-Cable 2 x 70 ... 185 mm ²
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 1x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 1 x 1 ... 4 mm ²
Connecting Capacity:	Flexible 2 x 70 ... 185 mm ² Rigid Al-Cable 1 x 185 ... 240 mm ² Rigid Cu-Cable 2 x 70 ... 185 mm ²
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 IP00

Tightening Torque: Cable Lug 28 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 1000 V

General Use Rating UL/CSA: (1000 V AC) 350 A
(600 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 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

EcoSolutions Profile: 1SFC100125C0366

End Of Life Disassembling Instructions: 1SFC100112M0002

Environmental Product Declaration - EPD: 1SFC100104D0201
2TFP200030A1001

Extended Product Lifetime: Product Durability

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 14-LD1092198-1-PDA-DUP
BV Certificate:	BV_36353_A0BV
CB Certificate:	SE-89316
CCS Certificate:	GB14T00030 GZ15T00069
CQC Certificate:	CQC2014010304676670 CQC2014010304673866
cULus Certificate:	20121217-E36588
Declaration of Conformity - CE:	2CMT2015-005439
Declaration of Conformity - UKCA:	2CMT2020-006118
DNV Certificate:	DNV_E-14043
LR Certificate:	16-20064
PRS Certificate:	TE_2092_880423_16
RINA Certificate:	ELE060313XG_002
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:	7320500481776

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):	3706486
E-Number (Norway):	4117650
E-Number (Sweden):	3210163

Accessories

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

Categories

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

