

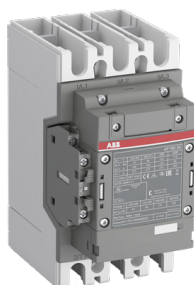



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 PRODUCT-DETAILS

# AF190-30-11-11

## AF190-30-11-11 Contactor




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**General Information**

<b>Extended Product Type:</b>	AF190-30-11-11
<b>Product ID:</b>	1SFL487002R1111
<b>EAN:</b>	7320500480410
<b>Catalog Description:</b>	AF190-30-11-11 Contactor
<b>Long Description:</b>	The AF190-30-11-11 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 90 kW / 400 V AC (AC-3) or 125 hp / 480 V UL and switching power circuits up to 275 A (AC-1) or 250 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.
<b>Display Name:</b>	AF190-30-11-11

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**Ordering**

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

### Popular Downloads

EPLAN Data:	9AAC174541_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:	105 mm
Product Net Depth / Length:	152 mm
Product Net Height:	196 mm
Product Net Weight:	2.4 kg
Dimension Diagram:	1SFB535001G1056.pdf

### 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 $\Theta = 40\text{ °C}$ 275 A
Rated Operational Current AC-1 (I <sub>e</sub> ):	(1000 V) 40 °C 250 A (1000 V) 60 °C 225 A (1000 V) 70 °C 185 A (690 V) 40 °C 275 A (690 V) 60 °C 250 A (690 V) 70 °C 200 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(415 V) 60 °C 190 A (440 V) 60 °C 190 A (500 V) 60 °C 156 A (690 V) 60 °C 85 A (1000 V) 60 °C 85 A (380 / 400 V) 60 °C 190 A (220 / 230 / 240 V) 60 °C 190 A

<b>Rated Operational Current AC-3e (<math>I_e</math>):</b>	(415 V) 60 °C 190 A (440 V) 60 °C 190 A (500 V) 60 °C 135 A (690 V) 60 °C 135 A (1000 V) 60 °C 85 A (380 / 400 V) 60 °C 190 A (220 / 230 / 240 V) 60 °C 190 A
<b>Rated Operational Current DC-1 (<math>I_e</math>):</b>	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
<b>Rated Operational Current DC-3 (<math>I_e</math>):</b>	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
<b>Rated Operational Current DC-5 (<math>I_e</math>):</b>	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
<b>Rated Operational Power AC-3 (<math>P_e</math>):</b>	(415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW
<b>Rated Operational Power AC-3e (<math>P_e</math>):</b>	(415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW
<b>Rated Breaking Capacity AC-3:</b>	8 x $I_e$ AC-3
<b>Rated Breaking Capacity AC-3e:</b>	8.5 x $I_e$ AC-3e
<b>Rated Making Capacity AC-3:</b>	10 x $I_e$ AC-3
<b>Rated Making Capacity AC-3e:</b>	12 x $I_e$ AC-3e
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 355 A
<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 275 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 878 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 1900 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1520 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 621 A
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 3300 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 2200 A
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	Main Circuit 8 kV
<b>Maximum Electrical Switching Frequency:</b>	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
<b>Mechanical Durability:</b>	5 million
<b>Maximum Mechanical Switching Frequency:</b>	300 cycles per hour
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) 0.85 x $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70$ °C)
<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>	Holding at Max. Rated Control Circuit Voltage 50 Hz 10 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 10 V-A Holding at Max. Rated Control Circuit Voltage DC 2.5 V-A Holding at Max. Rated Control Circuit Voltage DC 2.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 245 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 245 V-A Pull-in at Max. Rated Control Circuit Voltage DC 370 V-A Pull-in at Max. Rated Control Circuit Voltage DC 370 W
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 7 W
<b>Operate Time:</b>	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
<b>Connecting Capacity Main Circuit:</b>	Flexible 2 x 50 ... 95 mm <sup>2</sup> Rigid Al-Cable 1 x 95 ... 185 mm <sup>2</sup> Rigid Cu-Cable 2 x 50 ... 120 mm <sup>2</sup>
<b>Connecting Capacity Auxiliary Circuit:</b>	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>
<b>Connecting Capacity:</b>	Flexible 2 x 50 ... 95 mm <sup>2</sup> Rigid Al-Cable 1 x 95 ... 185 mm <sup>2</sup> Rigid Cu-Cable 2 x 10 ... 95 mm <sup>2</sup>
<b>Degree of Protection:</b>	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
<b>Tightening Torque:</b>	Cable Lug 9 N-m Main Circuit 14 ... 31 N-m
<b>Terminal Type:</b>	Main Circuit: Bars
<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>	(1000 V AC) 250 A
<b>Horsepower Rating UL/CSA:</b>	(200 V AC) Three Phase 50 hp (208 V AC) Three Phase 50 hp (220 ... 240 V AC) Three Phase 60 hp (440 ... 480 V AC) Three Phase 125 hp (550 ... 600 V AC) Three Phase 150 hp
<b>Full Load Amps Motor Use:</b>	(440 ... 480 V AC) Three Phase 156 A (550 ... 600 V AC) Three Phase 144 A

## Environmental

<b>Ambient Air Temperature:</b>	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
<b>Maximum Operating Altitude Permissible:</b>	Without Derating 3000 m

## Material Compliance

<b>Conflict Minerals Reporting Template (CMRT):</b>	9AKK108467A5658
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<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>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>	Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility UL 2799 Zero Waste To Landfill Validation available
<b>EcoSolutions Profile:</b>	1SFC100125C0366
<b>End Of Life Disassembling Instructions:</b>	1SFC100112M0001
<b>Environmental Product Declaration - EPD:</b>	1SFC100095D0201 2TFP200018A1001
<b>Extended Product Lifetime:</b>	Product Durability
<b>Improved Energy Efficiency for Customers:</b>	Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line Product Efficiency - Product considered more energy-efficient 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 - 79.1 %

## Certificates and Declarations

<b>A2L Certificate – UL:</b>	9AKK108468A6695
<b>ABS Certificate:</b>	14-LD1092198-PDA 14-LD1092198-1-PDA-DUP
<b>BV Certificate:</b>	BV_36353_A0BV
<b>CB Certificate:</b>	SE-82315
<b>CCS Certificate:</b>	GB14T00030 GZ15T00069
<b>CQC Certificate:</b>	CQC2014010304676685 CQC2014010304724672
<b>cULus Certificate:</b>	20121023-E36588
<b>Declaration of Conformity - CE:</b>	2CMT2015-005439
<b>Declaration of Conformity - UKCA:</b>	2CMT2020-006118
<b>DNV Certificate:</b>	DNV_E-14043
<b>KC Certificate:</b>	9AKK107046A9912 9AKK108472A2576
<b>LR Certificate:</b>	16-20064
<b>PRS Certificate:</b>	TE_2092_880423_16
<b>RINA Certificate:</b>	ELE060313XG_002
<b>UL Listing Card:</b>	UL_E36588

## Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	160 mm
Package Level 1 Depth / Length:	258 mm
Package Level 1 Height:	235 mm
Package Level 1 Gross Weight:	3 kg
Package Level 1 EAN:	7320500480410

## 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):	3706388
E-Number (Norway):	4117638
E-Number (Sweden):	3210132

## 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 > AF190

