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 PRODUCT-DETAILS

## AF400-30-11-70

### AF400-30-11 100-250V 50/60Hz / 100-250V DC Contactor




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**General Information**

<b>Extended Product Type:</b>	AF400-30-11-70
<b>Product ID:</b>	1SFL577001R7011
<b>EAN:</b>	7320500217665
<b>Catalog Description:</b>	AF400-30-11 100-250V 50/60Hz / 100-250V DC Contactor
<b>Long Description:</b>	The AF400-30-11-70 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 200 kW / 400 V AC (AC-3) or 350 hp / 480 V UL and switching power circuits up to 600 A (AC-1) or 550 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.
<b>Display Name:</b>	AF400-30-11-70

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**Ordering**

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

## Popular Downloads

EPLAN Data:	9AAC200764_EPLAN
Data Sheet, Technical Information:	1SBC100214C0202
Data Sheet, Technical Information (Part 2):	1SAC200017M0002
Instructions and Manuals:	1SFC380023-en
CAD Dimensional Drawing:	2CDC001079B0201

## Dimensions

Product Net Width:	186 mm
Product Net Depth / Length:	216 mm
Product Net Height:	278 mm
Product Net Weight:	10.6 kg
Dimension Diagram:	53540919-59

## 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 $\Theta = 40\text{ °C}$ 600 A
Rated Operational Current AC-1 (I <sub>e</sub> ):	(1000 V) 40 °C 600 A (1000 V) 55 °C 500 A (1000 V) 70 °C 400 A (690 V) 40 °C 600 A (690 V) 55 °C 500 A (690 V) 70 °C 400 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(415 V) 55 °C 400 A (440 V) 55 °C 400 A (500 V) 55 °C 400 A (690 V) 55 °C 350 A (1000 V) 55 °C 155 A (380 / 400 V) 55 °C 400 A (220 / 230 / 240 V) 55 °C 400 A
Rated Operational Current DC-1 (I <sub>e</sub> ):	(110 V) 1-Pole, 40 °C 600 A (110 V) 2 Poles in Series, 40 °C 600 A (220 V) 3 Poles in Series, 40 °C 600 A (600 V) 3 Poles in Series, 40 °C 600 A

<b>Rated Operational Current DC-3 (<math>I_e</math>):</b>	(110 V) 1-Pole, 40 °C 600 A (110 V) 2 Poles in Series, 40 °C 600 A (220 V) 3 Poles in Series, 40 °C 600 A (600 V) 3 Poles in Series, 40 °C 600 A
<b>Rated Operational Current DC-5 (<math>I_e</math>):</b>	(110 V) 1-Pole, 40 °C 600 A (110 V) 2 Poles in Series, 40 °C 600 A (220 V) 3 Poles in Series, 40 °C 600 A (600 V) 3 Poles in Series, 40 °C 600 A
<b>Rated Operational Power AC-3 (<math>P_e</math>):</b>	(415 V) 220 kW (440 V) 220 kW (500 V) 250 kW (690 V) 315 kW (1000 V) 220 kW (380 / 400 V) 200 kW (220 / 230 / 240 V) 110 kW
<b>Rated Breaking Capacity AC-3:</b>	8 x $I_e$ AC-3
<b>Rated Making Capacity AC-3:</b>	10 x $I_e$ AC-3
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 630 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 840 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 3100 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 4600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 4400 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 2500 A
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 4000 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 3500 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 IEC 60947-5-1 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) 60 cycles per hour (AC-3) 300 cycles per hour
<b>Mechanical Durability:</b>	3 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 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
<b>Coil Consumption:</b>	Holding at Max. Rated Control Circuit Voltage 50 Hz 31 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 31 V-A Holding at Max. Rated Control Circuit Voltage DC 4.3 V-A Holding at Max. Rated Control Circuit Voltage DC 4.3 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 990 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 990 V-A Pull-in at Max. Rated Control Circuit Voltage DC 1100 V-A Pull-in at Max. Rated Control Circuit Voltage DC 1100 W
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 16 W
<b>Operate Time:</b>	Between Coil De-energization and NC Contact Closing 45 ... 55 ms Between Coil De-energization and NO Contact Opening 48 ... 58 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms Between Coil Energization and NO Contact Closing 50 ... 120 ms
<b>Connecting Capacity Main Circuit:</b>	Bar 47 mm <sup>2</sup> Rigid Al-Cable 2x240 mm <sup>2</sup> Rigid Cu-Cable 240 mm <sup>2</sup> Rigid Cu-Cable 2x240 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>	Bar 47 mm <sup>2</sup> Rigid Al-Cable 2x240 mm <sup>2</sup> Rigid Cu-Cable 2x240 mm <sup>2</sup>
<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 IP00
<b>Connecting Terminals (delivered in open position) Main Poles:</b>	M 3.5 (+,-) pozidriv 2 screw with cable clamp
<b>Recommended Screw Driver:</b>	Main Circuit M10 Control Circuit Pozidriv 2 Control Circuit M3.5
<b>Tightening Torque:</b>	Cable Lug 35 N·m Main Circuit 35 N·m
<b>Terminal Type:</b>	Main Circuit: Bars
<b>Suitable for Product Class:</b>	Block Contactors Block Contactors
<b>Product Name:</b>	Block Contactor

## Technical UL/CSA

<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 1000 V
<b>General Use Rating UL/CSA:</b>	(1000 V AC) 550 A (600 V AC) 550 A
<b>Horsepower Rating UL/CSA:</b>	(200 ... 208 V AC) Three Phase 125 Hp (200 ... 208 V AC) Three Phase 125 hp (200 V AC) Three Phase 125 hp (208 V AC) Three Phase 125 hp (220 ... 240 V AC) Three Phase 150 Hp (220 ... 240 V AC) Three Phase 150 hp (440 ... 480 V AC) Three Phase 350 Hp (440 ... 480 V AC) Three Phase 350 hp (550 ... 600 V AC) Three Phase 400 Hp (550 ... 600 V AC) Three Phase 400 hp
<b>Full Load Amps Motor Use:</b>	(200 ... 208 V AC) Three Phase 358.8 A (220 ... 240 V AC) Three Phase 360 A (440 ... 480 V AC) Three Phase 414 A (550 ... 600 V AC) Three Phase 382 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 Operation -40 ... 70 °C Storage -40 ... +70 °C
<b>Maximum Operating Altitude Permissible:</b>	Without Derating 3000 m
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	Shock Direction: A 5 g Shock Direction: B1 5 g Shock Direction: B2 5 g Shock Direction: C1 5 g Shock Direction: C2 5 g

## 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>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>	UL 2799 Zero Waste To Landfill Validation available
<b>EcoSolutions Profile:</b>	1SFC100125C0366
<b>End Of Life Disassembling Instructions:</b>	1SFC100112M0003
<b>Environmental Product Declaration - EPD:</b>	1SFC100105D0201 2TFP200031A1001
<b>Extended Product Lifetime:</b>	Product Durability
<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
<b>Recyclability Rate of the Product acc. to EN45555:</b>	Design for Closing Resource Loops - Standard EN45555 - 63.1 %

## Certificates and Declarations

<b>ABS Certificate:</b>	15-LD1408622-PDA
<b>BV Certificate:</b>	BV_13409-C0BV
<b>CB Certificate:</b>	SE-82316
<b>CCS Certificate:</b>	GB14T00030 GZ15T00069
<b>CQC Certificate:</b>	CQC2007010304256683 CQC2011010304514755
<b>cULus Certificate:</b>	20121207-E36588
<b>Declaration of Conformity - CE:</b>	2CMT2019-005796
<b>Declaration of Conformity - UKCA:</b>	2CMT2020-006118
<b>DNV Certificate:</b>	TAE00001W1
<b>KC Certificate:</b>	9AKK108472A2578
<b>LOVAG Certificate:</b>	SE-0146190
<b>LR Certificate:</b>	16-20064
<b>PRS Certificate:</b>	TE_2092_880423_16
<b>RINA Certificate:</b>	ELE060313XG_002

UL Listing Card: UL\_E36588

### Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	280 mm
Package Level 1 Depth / Length:	375 mm
Package Level 1 Height:	310 mm
Package Level 1 Gross Weight:	12 kg
Package Level 1 EAN:	7320500217665

### 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 >> Iec Contactors
E-Number (Finland):	3709332
E-Number (Norway):	4115288
E-Number (Sweden):	3228336

### 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 > AF400

