



PRODUCT-DETAILS

AF30-30-00-11

AF30-30-00-11 24-60V50/60HZ 20-60VDC

Contactor



General Information	
Extended Product Type	AF30-30-00-11
Product ID	1SBL277001R1100
EAN	3471523111219
Catalog Description	AF30-30-00-11 24-60V50/60HZ 20-60VDC Contactor
Long Description	The AF30-30-00-11 is a 3 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 15 kW / 400 V AC (AC-3) or 20 hp / 480 V UL and switching power circuits up to 50 A (AC-1) or 50 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.

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

EPLAN Data	9AAC159660 EPLAN
Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	1SBC101027M6801
Instructions and Manuals (Part 2)	1SAC200017M0002
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	45 mm
Product Net Depth / Length	86 mm
Product Net Height	86 mm
Product Net Weight	0.31 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 60947-4-1, CSA C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 60947-4-1
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 Θ = 40 °C 50 A
Rated Operational Current AC-1 (I _e)	(690 V) 40 °C 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (I _e)	(415 V) 60 °C 32 A (440 V) 60 °C 32 A (500 V) 60 °C 28 A (690 V) 60 °C 21 A (380 / 400 V) 60 °C 32 A (220 / 230 / 240 V) 60 °C 33 A
Rated Operational Current AC-3e (I _e)	(415 V) 60 °C 32 A (440 V) 60 °C 32 A (500 V) 60 °C 28 A (690 V) 60 °C 21 A (380 / 400 V) 60 °C 32 A (220 / 230 / 240 V) 60 °C 33 A
Rated Operational Current DC-1 (I _e)	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 50 A (220 V) 3 Poles in Series, 60 °C 42 A (220 V) 3 Poles in Series, 70 °C 37 A (72 V) 1-Pole, 40 °C 50 A (72 V) 1-Pole, 60 °C 42 A (72 V) 1-Pole, 70 °C 37 A (72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A

Rated Operational Current
DC-3 (I_e)

(110 V) 2 Poles in Series, 40 °C 50 A
(110 V) 2 Poles in Series, 60 °C 42 A
(110 V) 2 Poles in Series, 70 °C 37 A
(110 V) 3 Poles in Series, 40 °C 50 A
(110 V) 3 Poles in Series, 60 °C 42 A
(110 V) 3 Poles in Series, 70 °C 37 A
(220 V) 3 Poles in Series, 40 °C 50 A
(220 V) 3 Poles in Series, 60 °C 42 A
(220 V) 3 Poles in Series, 70 °C 37 A
(72 V) 1-Pole, 40 °C 50 A
(72 V) 1-Pole, 60 °C 42 A
(72 V) 1-Pole, 70 °C 37 A
(72 V) 2 Poles in Series, 40 °C 50 A
(72 V) 2 Poles in Series, 60 °C 42 A
(72 V) 2 Poles in Series, 70 °C 37 A
(72 V) 3 Poles in Series, 40 °C 50 A
(72 V) 3 Poles in Series, 60 °C 42 A
(72 V) 3 Poles in Series, 70 °C 37 A

Rated Operational Current
DC-5 (I_e)

(110 V) 2 Poles in Series, 40 °C 50 A
(110 V) 2 Poles in Series, 60 °C 42 A
(110 V) 2 Poles in Series, 70 °C 37 A
(110 V) 3 Poles in Series, 40 °C 50 A
(110 V) 3 Poles in Series, 60 °C 42 A
(110 V) 3 Poles in Series, 70 °C 37 A
(220 V) 3 Poles in Series, 40 °C 25 A
(220 V) 3 Poles in Series, 60 °C 25 A
(220 V) 3 Poles in Series, 70 °C 25 A
(72 V) 1-Pole, 40 °C 25 A
(72 V) 1-Pole, 60 °C 25 A
(72 V) 1-Pole, 70 °C 25 A
(72 V) 2 Poles in Series, 40 °C 50 A
(72 V) 2 Poles in Series, 60 °C 42 A
(72 V) 2 Poles in Series, 70 °C 37 A
(72 V) 3 Poles in Series, 40 °C 50 A
(72 V) 3 Poles in Series, 60 °C 42 A
(72 V) 3 Poles in Series, 70 °C 37 A

Rated Operational Power
AC-3 (P_e)

(400 V) 15 kW
(415 V) 15 kW
(440 V) 18.5 kW
(500 V) 18.5 kW
(690 V) 18.5 kW
(380 / 400 V) 15 kW
(220 / 230 / 240 V) 9 kW

Rated Operational Power
AC-3e (P_e)

(415 V) 15 kW
(440 V) 18.5 kW
(500 V) 18.5 kW
(690 V) 18.5 kW
(380 / 400 V) 15 kW
(220 / 230 / 240 V) 9 kW

Rated Short-time
Withstand Current Low
Voltage (I_{cw})

at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 50 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 700 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A

Maximum Breaking
Capacity

cos phi=0.45 (cos phi=0.35 for I_e > 100 A) at 440 V 500 A
cos phi=0.45 (cos phi=0.35 for I_e > 100 A) at 690 V 200 A

Rated Insulation Voltage
(U_i)

acc. to IEC 60947-4-1 690 V
acc. to UL/CSA 600 V

Rated Impulse Withstand
Voltage (U_{imp})

6 kV

Maximum Electrical
Switching Frequency

(AC-1) 600 cycles per hour
(AC-2 / AC-4) 150 cycles per hour
(AC-3) 1200 cycles per hour

Maximum Mechanical
Switching Frequency

3600 cycles per hour

Rated Control Circuit
Voltage (U_c)

50 Hz 24 ... 60 V
60 Hz 24 ... 60 V
DC Operation 20 ... 60 V

Power Loss

at Rated Operating Conditions AC-1 per Pole 2.4 W
at Rated Operating Conditions AC-3 per Pole 0.9 W

Operate Time

Between Coil De-energization and NC Contact Closing 13 ... 98 ms
Between Coil De-energization and NO Contact Opening 11 ... 95 ms
Between Coil Energization and NC Contact Opening 38 ... 90 ms
Between Coil Energization and NO Contact Closing 40 ... 95 ms

Mounting on DIN Rail

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	
Mounting by Screws (not supplied)	2 x M4 Screws Placed Diagonally
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1.5 ... 10 mm² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm² Flexible with Insulated Ferrule 2x 1.5 ... 4 mm² Rigid Solid 1/2x 2.5 ... 4 mm² Rigid Stranded 1/2x 2.5 ... 10 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid Solid 1/2x 1 ... 2.5 mm² Rigid Stranded 1/2x 1 ... 2.5 mm²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 14 mm
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 IP20
Tightening Torque	Control Circuit 1.2 N·m Main Circuit 2.5 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 50 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 2 hp (200 ... 208 V AC) Three Phase 10 hp (220 ... 240 V AC) Three Phase 10 hp (240 V AC) Single Phase 5 hp (440 ... 480 V AC) Three Phase 20 hp (550 ... 600 V AC) Three Phase 25 hp
Connecting Capacity Main Circuit UL/CSA	Rigid Solid 1/2x 14-10 AWG Rigid Stranded 1/2x 14-8 AWG
Connecting Capacity Control Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Control Circuit 11 in·lb Main Circuit 22 in·lb
Full Load Amps Motor Use	(120 V AC) Single Phase 24 A (200 ... 208 V AC) Three Phase 32.2 A (220 ... 240 V AC) Three Phase 28 A (240 V AC) Single Phase 28 A (440 ... 480 V AC) Three Phase 27 A (550 ... 600 V AC) Three Phase 27 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
Climatic Withstand	according to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 Specification II
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g
Resistance to Vibrations	4g Closed Position & 2g Open position 5 ... 300 Hz
Pollution Degree	3

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
SCIP	ad5f74ad-61e0-4faa-a03b-3791158b39ba China
Simplified SCIP	1f436266-dbc6-4be8-81d1-c4e5045e2dad Norway 6baadbd4-e49c-406a-b0e0-8a995b3409cf Netherlands 2997af4b-1f2d-4a0f-a8db-3a59b3b84dba Hungary 2eb75364-1d07-465f-a25f-c21c5eff9a45 Estonia 6bea83b3-ec70-427b-b8ea-9a8585290f4f Poland 06beb437-d27b-423d-b6ca-3ae1d3edfc70 Germany ac271a96-fd33-47fc-ac74-9144dcf4b701 Hungary 566d8162-9baf-461d-be19-49c1b77046b0 Portugal 11637aed-991e-4aaf-ba95-cc7309b6b3d2 Belgium e571c41a-fbdb-4474-8acd-cb691abe60af Germany d055e1cb-7c95-4b69-9efd-02d9eb2bf1dd Denmark 3c536b7a-cf1d-496f-b267-fbc39bf3c11e Finland 02606fd5-84cd-411a-a5a3-d06dc5137ce2 Greece 418f2e4f-e524-436c-8069-cfcf3cfac194 Spain cdceae0c-c1b1-4694-ab1d-ee4c49cc092c Germany 27fba4d3-a083-469e-b074-c5bddd487922 France f3ff523a-5ae4-48c5-97ec-2f7ed80fe012 Germany 32ff2620-0a2c-45fb-9d9c-780840c9a7a2 Sweden 79ed5a9e-e03b-49e5-91a5-974983d51958 Bulgaria 10d8280f-d349-4850-ab51-49caeb8a6089 Poland 62bcdaf-a576-4f3e-9ee4-ba6fe5679172 Czech Republic 29c97c5f-e6b4-41fa-83ba-98864f835a33 Croatia f90b1f93-4bb4-4dc2-9cd2-28748d64425e Belgium 07c190f8-03d3-49cc-9956-68982a9af446 Sweden 40de624d-a213-4dfb-8788-60df12f96be5 France 53a2b53f-3c24-47d9-89e1-2ad047aab4c7 Poland cf892f20-66eb-4279-8377-5d06188b94d1 Germany
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	No non-hazardous waste is sent to a landfill
End Of Life Disassembling Instructions	1SBC101080M6801
Environmental Product Declaration - EPD	1SBD250584E4000
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 - 94.3 %

Certificates and Declarations

A2L Certificate - UL	9AKK108469A4875 9AKK108469A4879
ABS Certificate	ABS 20-2060694-PDA
BV Certificate	BV_2634H24898C0
CB Certificate	CB_SE-116364
CCC Certificate	CCC 2024010304656668
CQC Certificate	CQC2010010304445623 CQC2020010304294316
Declaration of Conformity - CCC	2020980304001254 2020980304001052
Declaration of Conformity - CE	1SBD250000U1000

Declaration of Conformity - UKCA	1SBD250031U1000
DNV Certificate	DNV_TAE00001AF-4
GOST Certificate	GOST_POCCFR.ME77.B07175.pdf
KC Certificate	KC_HW02016-15001C
LR Certificate	LRS_LR23403517TA-02
RINA Certificate	RINA_ELE142224XG
RMRS Certificate	RMRS_1802705280
UL Certificate	UL-US-2150887-5 UL-CA-2142658-5
UL Listing Card	E312527

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	87 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.31 kg
Package Level 1 EAN	3471523111219
Package Level 2 Units	box 21 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	13.95 kg

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)	3705807
E-Number (Sweden)	3211345

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF30

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