



PRODUCT-DETAILS

AF26N1-30-11-14

AF26N1-30-11-14 250-500V50/60HZ-DC Contactor



General Information	
Extended Product Type	AF26N1-30-11-14
Product ID	1SBL237001N1411
ABB Global ID	ABB1SBL237001N1411
EAN	3471523016590
Catalog Description	AF26N1-30-11-14 250-500V50/60HZ-DC Contactor
Long Description	The AF26N1-30-11-14 is a 3 pole - 600 V UL, NEMA size N1 contactor with pre-mounted auxiliary contacts and Screw, switching power circuits up to 45 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (250-500 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.

Ordering	
Minimum Order Quantity	1 piece
ECCN	N
ECN	N

Popular Downloads

Instructions and Manuals	1SBC101027M6801
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	45 mm
Product Net Depth / Length	111.5 mm
Product Net Height	86 mm
Product Net Weight	0.35 kg

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
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	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz 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 $\Theta = 40\text{ }^{\circ}\text{C}$ 50 A acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 $^{\circ}\text{C}$ 45 A (690 V) 60 $^{\circ}\text{C}$ 40 A (690 V) 70 $^{\circ}\text{C}$ 32 A
Rated Operational Current AC-3 (I_e)	(415 V) 60 $^{\circ}\text{C}$ 26 A (440 V) 60 $^{\circ}\text{C}$ 26 A (500 V) 60 $^{\circ}\text{C}$ 23 A (690 V) 60 $^{\circ}\text{C}$ 17 A (380 / 400 V) 60 $^{\circ}\text{C}$ 26 A (220 / 230 / 240 V) 60 $^{\circ}\text{C}$ 26 A
Rated Operational Current AC-3e (I_e)	(415 V) 60 $^{\circ}\text{C}$ 26 A (440 V) 60 $^{\circ}\text{C}$ 26 A (500 V) 60 $^{\circ}\text{C}$ 23 A (690 V) 60 $^{\circ}\text{C}$ 17 A (380 / 400 V) 60 $^{\circ}\text{C}$ 26 A (220 / 230 / 240 V) 60 $^{\circ}\text{C}$ 26 A
Rated Operational Current AC-15 (I_e)	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 A
Rated Operational Current DC-13 (I_e)	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W

	(220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W
Rated Operational Power AC-3 (P _e)	(400 V) 11 kW (415 V) 11 kW (440 V) 15 kW (500 V) 15 kW (690 V) 15 kW (380 / 400 V) 11 kW (220 / 230 / 240 V) 6.5 kW
Rated Operational Power AC-3e (P _e)	(415 V) 11 kW (440 V) 15 kW (500 V) 15 kW (690 V) 15 kW (380 / 400 V) 11 kW (220 / 230 / 240 V) 6.5 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 for 0.1 s 140 A for 1 s 100 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 IEC 60947-5-1 690 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-15) 1200 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U _c)	50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V
Power Loss	at 6 A per Pole 0.1 W at Rated Operating Conditions AC-1 per Pole 1.8 W at Rated Operating Conditions AC-3 per Pole 0.6 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 mm ² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 2x 1.5 ... 4 mm ² Rigid Solid 1/2x 2.5 ... 4 mm ² Rigid Stranded 1/2x 2.5 ... 10 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ²

	Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 14 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 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	Auxiliary Circuit 1.2 N-m Control Circuit 1.2 N-m Main Circuit 2.5 N-m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA

NEMA Size	1
Continuous Current Rating NEMA	27 A
Horsepower Rating NEMA	(115 V AC) Single Phase 2 Hp (200 V AC) Three Phase 7-1/2 Hp (230 V AC) Single Phase 3 Hp (230 V AC) Three Phase 7-1/2 Hp (460 V AC) Three Phase 10 Hp (575 V AC) Three Phase 10 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 45 A
Connecting Capacity Main Circuit UL/CSA	Rigid Solid 1/2x 14-10 AWG Rigid Stranded 1/2x 14-8 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 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	Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb Main Circuit 22 in-lb
Full Load Amps Motor Use	(120 V AC) Single Phase 2 A (200 ... 208 V AC) Three Phase 7-1/2 A (220 ... 240 V AC) Three Phase 7-1/2 A (240 V AC) Single Phase 3 A (440 ... 480 V AC) Three Phase 15 A (550 ... 600 V AC) Three Phase 20 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	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 25 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: B2 15 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g Open, Shock Direction: A 25 g Open, Shock Direction: B1 5 g Open, Shock Direction: B2 15 g

	Open, Shock Direction: C1 25 g
	Open, 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 Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE Category	Product Not in WEEE Scope

ABB EcoSolutions

End Of Life Disassembling Instructions	1SBC101080M6801
Sustainable Material Content in Packaging (wt. %)	Recycled Cardboard - 86 %
Sustainable Material Content in Product (wt. %)	Recycled Metal - 28 %

Certificates and Declarations

A2L Certificate – UL	9AKK108469A4875;9AKK108469A4879
CB Certificate	CB_SE-112316
CQC Certificate	CQC2010010304445623 CQC2020010304294316
Declaration of Conformity - CCC	2020980304001254 2020980304001052
Declaration of Conformity - CE	1SBD250027U1000
Declaration of Conformity - UKCA	1SBD250056U1000
UL Certificate	UL-US-2150887-5 UL-CA-2142658-5

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	121 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.35 kg
Package Level 1 EAN	3471523016590
Package Level 3 Units	864 piece

External Classifications and Standards		
Object Classification		Q
Code		
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

Categories

Low Voltage Products and Systems → Control Products → Contactors → NEMA Contactors

