

PRODUCT-DETAILS

AF12N0-30-10-14

AF12N0-30-10-14 250-500V50/60HZ-DC Contactor



General Information

Extended Product Type	AF12N0-30-10-14
Product ID	1SBL157001N1410
EAN	3471523016583
Catalog Description	AF12N0-30-10-14 250-500V50/60HZ-DC Contactor
Long Description	The AF12N0-30-10-14 is a 3 pole - 600 V UL, NEMA size N0 contactor with 1 built-in auxiliary contact and Screw, switching power circuits up to 28 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.

Technical

Standards	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14
Product Name	Block Contactor
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Insulation Voltage (U _i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U _{imp})	6 kV
Rated Control Circuit Voltage (U _c)	50 Hz 250 ... 500 V 50 Hz / 60 Hz 250 ... 500 V

	60 Hz 250 ... 500 V DC Operation 250 ... 500 V
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
Maximum Breaking Capacity	$\cos \phi=0.45$ ($\cos \phi=0.35$ for $I_e > 100$ A) at 440 V 250 A $\cos \phi=0.45$ ($\cos \phi=0.35$ for $I_e > 100$ A) at 690 V 106 A
Rated Short-time Withstand Current Low Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 0.1 s 140 A for 1 s 100 A
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Power Loss	at Rated Operating Conditions AC-1 per Pole 1 W at Rated Operating Conditions AC-3 per Pole 0.2 W
Number of Main Contacts NC	0
Number of Main Contacts NO	3
Number of Auxiliary Contacts NC	0
Number of Auxiliary Contacts NO	1
Low Coil Consumption	No
Tightening Torque	Auxiliary Circuit 1.2 N·m Control Circuit 1.2 N·m Main Circuit 1.5 N·m
Mounted Auxiliary Contacts	1 NO, 0 NC
Mounting Position	Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF09 ... AF38
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.75 ... 6 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 4 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 6 mm ²
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 10 mm
Terminal Type	Screw Terminals

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
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
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 4 g closed position / 2 g open position
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 30 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 30 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

RoHS Status

Following EU Directive 2011/65/EU

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 28 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1 hp (200 ... 208 V AC) Three Phase 3 hp (220 ... 240 V AC) Three Phase 3 hp (240 V AC) Single Phase 2 hp (440 ... 480 V AC) Three Phase 7-1/2 hp (550 ... 600 V AC) Three Phase 10 hp
Tightening Torque UL/CSA	Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb Main Circuit 13 in-lb

Dimensions

Product Net Width	45 mm
Product Net Height	86 mm
Product Net Depth / Length	77 mm
Product Net Weight	0.31 kg

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Height	47 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Gross Weight	0.31 kg
Package Level 1 EAN	3471523016583
Package Level 3 Units	1296 piece

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Country of Origin	United States (US)
Selling Unit of Measure	piece

Certificates and Declarations (Document Number)

CB Certificate	CB_SE-96551M1
CQC Certificate	CQC2010010304445624 CQC2020010304298240
cUL Certificate	UL_20180227_E312527_7_1
Declaration of Conformity - CCC	2020980304001253 2020980304001082
Declaration of Conformity - CE	1SBD250027U1000
Instructions and Manuals	1SBC101027M6801
RoHS Information	1SBD250027U1000
UL Certificate	UL_20140305-E312527_7_1
UL Listing Card	E312527

Popular Downloads	
Instructions and Manuals	1SBC101027M6801
Mounting Positions	1SBC500297F0000
UL Listing Card	E312527
EPLAN Graphical Macro	9AKK106930A0693
EPLAN Macro	9AKK106930A0692

Classifications	
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
WEEE Category	Product Not in WEEE Scope
CN8	8536 49 00
UNSPSC	39121529
eClass	V11.0 : 27371003
Object Classification Code	Q

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

