

PRODUCT-DETAILS

AF40N2-30-11-13

AF40N2-30-11-13 100-250V50/60HZ-DC Contactor



General Information

Extended Product Type	AF40N2-30-11-13
Product ID	1SBL347001N1311
Catalog Description	AF40N2-30-11-13 100-250V50/60HZ-DC Contactor
Long Description	AF09N00 ... AF1650N8 NEMA contactors are mainly used for controlling 3-phase motors and power circuits up to 600 VAC. These contactors are of the block type design with 3 main poles.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Dimensions

Product Net Width	67 mm
Product Net Height	125.5 mm
Product Net Depth / Length	111 mm
Product Net Weight	0.99 kg

Container Information

Package Level 1 Units	box 1 piece
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Package Level 1 Width	150 mm
Package Level 1 Height	97 mm
Package Level 1 Depth / Length	150 mm
Package Level 1 Gross Weight	1.09 kg
Package Level 2 Units	box 10 piece
Package Level 2 Width	250 mm
Package Level 2 Height	300 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Gross Weight	10.9 kg
Package Level 3 Units	240 piece

Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C
Maximum Operating Altitude Permissible	3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 3 g closed position / 3 g open position
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 25 K40 Closed, Shock Direction: B1 25 K40 Closed, Shock Direction: B2 15 K40 Closed, Shock Direction: C1 25 K40 Closed, Shock Direction: C2 25 K40 Open, Shock Direction: B1 5 K40

Technical UL/CSA

Horsepower Rating UL/CSA	(220 ... 240 V AC) Three Phase 15 hp (440 ... 480 V AC) Three Phase 30 hp (550 ... 600 V AC) Three Phase 40 hp (120 V AC) Single Phase 3 hp (200 ... 208 V AC) Three Phase 10 hp (240 V AC) Single Phase 7-1/2 hp
General Use Rating UL/CSA	(600 V AC) 60 A
Tightening Torque UL/CSA	Auxiliary Circuit 11 IA Control Circuit 11 IA Main Circuit 35 IA

Additional Information

Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 m ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 Flexible with Insulated Ferrule 2x 0.75 ... 1.5 m ² Rigid 1/2x 1 ... 2.5 m ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 m ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 m ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 m ² Rigid 1/2x 1 ... 2.5 m ²
Connecting Capacity Main Circuit	Rigid 1/2x 6 ... 3.5 m ² Flexible with Ferrule 1/2x 4 ... 35 m ² Flexible with Insulated Ferrule 1/2x 4 ... 35 m ²
Conventional Free-air Thermal Current (I _{th})	acc. to IEC 60947-5-1, q = 40 °C 16 A acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A
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 IP10
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 600 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour AC-15 1200 cycles per hour DC-13 900 cycles per hour
Maximum Mechanical Switching Frequency	3600 cycles per hour
Mounted Auxiliary Contacts	1 NO, 1 NC
Mounted Auxiliary Contacts 1st Stack	0 NO, 0 NC
Mounted Auxiliary Contacts 2nd Stack	1 NO, 1 NC
Mounting Position	Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF40 ... AF96
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	1
Number of Main Contacts NC	0
Number of Main Contacts NO	3
Operate Time	Between Coil De-energization and NC Contact Closing 19 ... 105 ms Between Coil De-energization and NO Contact Opening 17 ... 100 ms Between Coil Energization and NC Contact Opening 38 ... 95 ms Between Coil Energization and NO Contact Closing 42 ... 100 ms
Order Multiple	1 piece
Power Loss	at Rated Operating Conditions AC-1 per Pole 3 W at Rated Operating Conditions AC-3 per Pole 1 W
Product Main Type	AF40N2
Product Name	Block Contactor
Rated Control Circuit Voltage (U _c)	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Rated Impulse Withstand Voltage (U _{imp})	6 kV
Rated Insulation Voltage (U _i)	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Operational Current AC-1 (I _e)	(690 V) 40 °C 70 A (690 V) 60 °C 60 A (690 V) 70 °C 50 A
Rated Operational Current AC-15 (I _e)	(220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A
Rated Operational Current AC-3 (I _e)	(220 / 230 / 240 V) 60 °C 40 A (380 / 400 V) 60 °C 40 A (415 V) 60 °C 40 A (440 V) 60 °C 40 A (500 V) 60 °C 35 A (690 V) 60 °C 25 A
Rated Operational Current DC-13 (I _e)	(125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (220 V) 0.27 A / 60 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)	(220 / 230 / 240 V) 11 KWT (380 / 400 V) 18.5 KWT (415 V) 22 KWT (440 V) 22 KWT (500 V) 22 KWT (690 V) 22 KWT (400 V) 18.5 KWT
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Short-time Withstand Current (I _{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A for 0.1 s 140 A for 1 s 100 A
Terminal Type	Screw Terminals
Tightening Torque	Auxiliary Circuit 1.2 N·m Main Circuit 4 N·m Control Circuit 1.2 N·m
Wire Stripping Length	Main Circuit 16 mm

Certificates and Declarations (Document Number)

Instructions and Manuals	1SBC101036M6801
RoHS Information	1SBD251021E1000
UL Listing Card	UL_E312527

Classifications

ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
Object Classification Code	Q
UNSPSC	39121529
WEEE Category	Product Not in WEEE Scope

Categories

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

