



Alternate Catalog No. AF38Z-30-00-30 Catalog No. 1SBL296001R3000

Description: AF38Z-30-00-30 24VDC Contactor

UPC No 3471523114791

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AF38Z 3-pole contactors are used for controlling power circuits up to 690 V AC and 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. AF38Z contactors with coil 30 include a 24 V DC electronic coil interface with a built-in surge suppression, obtaining a reduced holding coil consumption up to 1.7 W for a low panel energy consumption and a direct control by PLC-output \geq 250 mA 24 V DC, without need of additional interface relay. Only AF...Z..-30 contactors need to respect the polarity on the coil terminals (A1+ and A2-). The AF... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, front and side-mounted add-on auxiliary contact blocks. (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1. N.C. mirror contacts compliant with Annex F of IEC 60947-4-1) - Accessories: a wide range of accessories is available.

Descriptors	
Category	AF Contactors
Block Contactor Type	3-Pole Contactor

Specifications	
Product Type	AF
General Use Rating UL/CSA	(600 V AC) 50 A
Object Classification Code	Q
Terminal Type	Screw Terminals
Rated Control Circuit Voltage	DC Operation 24 V
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Resistance to Vibrations acc. to IEC 60068-2-6	5 300 Hz 4 g closed position / 2 g open position
Number of Auxiliary Contacts NO	0
RoHS Status	Following EU Directive 2011/65/EU
Reference 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
Rated Operational Voltage	Auxiliary Circuit 690 V
Number of Auxiliary Contacts NC	0
Maximum Operating Altitude Permissible	3000 m
Rated Operational Current AC-1	(690 V) 40 °C 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Rated Operational Power AC-3	(220 / 230 / 240 V) 11 KWT (380 / 400 V) 18.5 KWT (415 V) 18.5 KWT (440 V) 22 KWT (500 V) 22 KWT (690 V) 22 KWT
Horsepower Rating UL/CSA	(220 240 V AC) Three Phase 10 hp (440 480 V AC) Three Phase 25 hp (550 600 V AC) Three Phase 30 hp (120 V AC) Single Phase 2 hp (200 208 V AC) Three Phase 10 hp (240 V AC) Single Phase 5 hp

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Conventional Free-air Thermal Current	acc. to IEC 60947-5-1, $q = 40 ^{\circ}\text{C}$ 16 A acc. to IEC 60947-4-1, Open Contactors $q = 40 ^{\circ}\text{C}$ 50 A
	(220 / 240 V) 4 A
Debad Occuptional Course 1 4 C 15	(24 / 127 V) 6 A
Rated Operational Current AC-15	(500 V) 2 A (690 V) 2 A
	(400 / 440 V) 3 A
	Auxiliary Circuit 50 Hz
Rated Frequency	Auxiliary Circuit 60 Hz Main Circuit 50Hz
	Main Circuit 60 Hz
	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
Rated Short-time Withstand Current	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
	(220 / 230 / 240 V) 60 °C 40 A
	(380 / 400 V) 60 °C 38 A
Rated Operational Current AC-3	(415 V) 60 °C 38 A (440 V) 60 °C 38 A
	(500 V) 60 °C 33 A
	(690 V) 60 °C 24 A
	AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour
Maximum Electrical Switching Frequency	AC-3 1200 cycles per hour
•	AC-15 1200 cycles per hour
	DC-13 900 cycles per hour acc. to UL/CSA 600 V
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 500 A
Maximum Mechanical Switching Frequency	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 200 A 3600 cycles per hour
Maximum Mechanical Switching Frequency	Between Coil De-energization and NC Contact Closing 22 57 ms
	Between Coil De-energization and NO Contact Opening 17 29
Operate Time	ms
	Between Coil Energization and NC Contact Opening 20 35 ms Between Coil Energization and NO Contact Closing 27 53 ms
Secondary Rated Impulse Withstand Voltage	6 kV
, , , , , , , , , , , , , , , , , , ,	Rigid 1/2x 2.5 10 m ²
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1.5 10 m ²
	Flexible with Insulated Ferrule 1x 1.5 10 m²/2x 1.5 4 m² (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
Rated Operational Current DC-13	(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
Comparation Comparity Combart Circuit	Flexible with Ferrule 1/2x 0.75 2.5 m ² Flexible with Insulated Ferrule 1x 0.75 2.5 m ² /2x 0.75 1.5 m ²
Connecting Capacity Control Circuit	Rigid 1/2x 1 2.5 m ²
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 Screw Terminals
Screw Terminal Type	Control Circuit 10 mm
Wire Stripping Length	Main Circuit 14 mm
Classifications	
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 6.0	EC000066 - Power contactor, AC switching

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EC000066 - Power contactor, AC switching

EC000066 - Magnet contactor, AC-switching

ETIM 7

ETIM 5.0

Specifications

Dimensions		
Product Net Weight	0.48kg	
Product Net Depth / Length	106 mm	
Product Net Width	45 mm	
Product Net Height	86 mm	

Package Information	
Package Level 1 Width	96 mm
Package Level 1 Height	50 mm
Package Level 1 Depth / Length	112 mm
Package Level 1 EAN	3471523114791
Package Level 1 Units	box 1 piece
Package Level 2 Width	51 mm
Package Level 2 Height	114 mm
Package Level 1 Gross Weight	0.526 kg
Package Level 2 Units	box 12 piece
Package Level 3 Units	576 piece
Package Level 2 Depth / Length	98 mm
Package Level 2 Gross Weight	6.312 kg

Ordering	
Minimum Order Quantity	1
Customs Tariff Number	85364900

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