

**PRODUCT-DETAILS** 

## AF38Z-30-00-22 AF38Z-30-00-22 48-130V50/60HZ-DC Contactor



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General	Information

Extended Product Type	AF38Z-30-00-22
Product ID	1SBL296001R2200
EAN	3471523114722

Catalog Description

AF38Z-30-00-22 48-130V50/60HZ-DC Contactor

Long Description

AF38Z 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. AF..Z contactors include an electronic coil interface accepting a wide control voltage Uc min. ... Uc max. Only four coils cover control voltages between 24...250 V 50/60 Hz or 12...250 V DC. AF..Z contactors can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. AF..Z contactors allow direct control by PLC-output ≥ 24 V DC 500 mA and obtain a reduced holding coil consumption. AF..Z contactors withstand short voltage dips and voltage sags (SEMI F47-0706 compliance) between 24...250 V 50/60 Hz AF..Z contactors have built-in surge protection and do not require additional surge suppressors 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) - Control circuit: AC or DC operated - Accessories: a wide range of accessories is available.

## Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
Instructions and Manuals	1SBC101027M680 <sup>-</sup>
Dimensions	
Product Net Width	45 mn
Product Net Depth / Length	86 mn
Product Net Height	86 mn
Product Net Weight	0.35 kg
Technical	
Number of Main Contacts NO	3
Number of Main Contacts NC	
Number of Auxiliary Contacts NO	
Number of Auxiliary Contacts NC	
Standards	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N
Rated Operational Voltage	Main Circuit 690 \
Rated Frequency (f)	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 50 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 50 (690 V) 60 °C 42 A (690 V) 70 °C 37
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Rated Operational Power AC-3 (P <sub>e</sub> )	(400 V) 18.5 kW (415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW
Rated Short-time Withstand Current (I <sub>cw</sub> )	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 1 s -empty- A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 500 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 200 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hou (AC-2 / AC-4) 150 cycles per hou (AC-3) 1200 cycles per hou
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V

(U <sub>i</sub> )	acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage $(U_c)$	50 Hz 48 130 V 50 Hz / 60 Hz 48 130 V 60 Hz 48 130 V DC Operation 48 130 V
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
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 1/2x 2.5 10 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 1.5 mm <sup>2</sup> Rigid 1/2x 1 2.5 mm <sup>2</sup>
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
Terminal Type	Screw Terminals
Technical UL/CSA	
General Use Rating	(600 V AC) 50 A

Technical UL/CSA	
General Use Rating UL/CSA	(600 V AC) 50 A
Horsepower Rating	(120 V AC) Single Phase 2 hp
UL/CSA	(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 25 hp
	(550 600 V AC) Three Phase 30 hp
Tightening Torque	Control Circuit 11 IA
UL/CSA	Main Circuit 22 IA

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	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.	Closed, Shock Direction: B1 25 K40
to IEC 60068-2-27	Open, Shock Direction: B1 5 K40
	Shock Direction: A 30 K40
	Shock Direction: B2 15 K40
	Shock Direction: C1 25 K40
	Shock Direction: C2 25 K40
RoHS Status	Following EU Directive 2011/65/EU

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ABS Certificate	ABS_15-GE1349500-PDA_90682247
BV Certificate	BV_2634H24898B0
CB Certificate	CB_SE-96552
CCC Certificate	CCC_2010010304445623
cUL Certificate	UL_20180227_E312527_7_
Declaration of Conformity - CE	1SBD250000U1000
DNV Certificate	DNV-GL_TAE00001AF-
DNV GL Certificate	DNV-GL_TAE00001AF-
EAC Certificate	EAC_RU_FRME77B0344
Environmental Information	1SBD250149E1000
GL Certificate	DNV-GL_TAE00001AF-3
GOST Certificate	GOST_POCCFR.ME77.B07175.pd
Instructions and Manuals	1SBC101027M680
KC Certificate	KC_HW02016-150010
LR Certificate	LRS_1300087E
RINA Certificate	RINA_ELE240318XC
RMRS Certificate	RMRS_1802705280
RoHS Information	1SBD250000U1000
UL Certificate	UL_20140305-E312527_7_
UL Listing Card	E312527
Package Level 1 Width	87 mn
Package Level 1 Width Package Level 1 Depth / Length	87 mn
Package Level 1 Width Package Level 1 Depth / Length	87 mm 87 mm
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross	87 mn 87 mn
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight	87 mn 87 mn 47 mn 0.35 kg
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN	87 mn 87 mn 47 mn 0.35 kg 3471523114722
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN  Package Level 2 Units	87 mn 87 mn 47 mn 0.35 kg 3471523114722 box 21 piece
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN  Package Level 2 Units  Package Level 2 Width  Package Level 2 Depth /	87 mn 87 mn 47 mn 0.35 kg 3471523114722 box 21 piece 250 mn
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN  Package Level 2 Units  Package Level 2 Width  Package Level 2 Depth / Length	87 mr 87 mr 47 mr 0.35 kr 347152311472: box 21 piece 250 mr 300 mr
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN  Package Level 2 Units  Package Level 2 Width  Package Level 2 Depth / Length  Package Level 2 Height  Package Level 2 Gross	87 mr 87 mr 47 mr 0.35 kr 347152311472 box 21 piece 250 mr 300 mr
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN  Package Level 2 Units  Package Level 2 Width  Package Level 2 Depth / Length  Package Level 2 Height  Package Level 2 Gross  Weight	87 mn  87 mn  47 mn  0.35 kg  3471523114722  box 21 piece  250 mn  300 mn  15.75 kg
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 2 Units  Package Level 2 Width  Package Level 2 Depth / Length  Package Level 2 Height  Package Level 2 Gross  Weight  Package Level 3 Units	87 mn  87 mn  47 mn  0.35 kg  3471523114722  box 21 piece  250 mn  300 mn  15.75 kg
Package Level 1 Width Package Level 1 Depth / Length Package Level 1 Height Package Level 1 Gross Weight Package Level 2 EAN Package Level 2 Units Package Level 2 Width Package Level 2 Depth / Length Package Level 2 Gross Weight Package Level 3 Units Classifications	87 mm  87 mm  47 mm  0.35 kg  3471523114722  box 21 piece  250 mm  300 mm  315 mm  15.75 kg
Package Level 1 Width  Package Level 1 Depth / Length  Package Level 1 Height  Package Level 1 Gross  Weight  Package Level 1 EAN  Package Level 2 Units  Package Level 2 Width  Package Level 2 Depth / Length  Package Level 2 Height  Package Level 2 Gross  Weight  Package Level 3 Units  Classifications  Object Classification Code	87 mm  87 mm  47 mm  0.35 kg  3471523114722  box 21 piece  250 mm  300 mm  15.75 kg  1080 piece
Package Level 1 Units Package Level 1 Width Package Level 1 Depth / Length Package Level 1 Height Package Level 1 Gross Weight Package Level 1 EAN Package Level 2 Units Package Level 2 Width Package Level 2 Depth / Length Package Level 2 Height Package Level 2 Gross Weight Package Level 3 Units  Classifications Object Classification Code ETIM 4 ETIM 5	box 1 piece 87 mm 87 mm 0.35 kg 3471523114722 box 21 piece 250 mm 300 mm 15.75 kg 1080 piece

 ETIM 7
 EC000066 - Power contactor, AC switching

 UNSPSC
 39121529

 E-Number (Finland)
 3706319

## Categories

Low Voltage Products and Systems  $\rightarrow$  Control Products  $\rightarrow$  Contactors  $\rightarrow$  Block Contactors

