

## **General Information**

Extended Product Type:	AF38Z-40-00-22
Product ID:	1SBL296201R2200
EAN:	3471523116122
Catalog Description:	AF38Z-40-00-22 48-130V50/60HZ-DC Contactor
Long Description:	AF38Z 4-pole contactors are used for controlling power circuits up to 690 V AC and 440 V DC. They are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces). AFZ contactors include an electronic coil interface accepting a wide control voltage Uc min Uc max. Only four coils cover control voltages between 24250 V 50/60 Hz or 12250 V DC. AFZ contactors can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. AFZ contactors allow direct control by PLC-output $\geq$ 24 V DC 500 mA and obtain a reduced holding coil consumption. AFZ contactors withstand short voltage dips and voltage sags (SEMI F47-0706 compliance) between 24250 V 50/60 Hz AFZ contactors have built-in surge protection and do not require additional surge suppressors The AF series 4-pole contactors are of the block type design Main poles and auxiliary contact blocks: 4 N.O. 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.

## Categories

Products » Low Voltage Products and Systems » Control Products » Contactors » Block Contactors

Ordering	
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085
EAN:	3471523116122
Dimensions	
Product Net Depth:	101 mm
Product Net Height:	86 mm
Product Net Weight:	0.400 kg
Product Net Width:	45 mm
Container Information	
Package Level 1 Width:	87 mm
Package Level 1 Length:	103 mm
Package Level 1 Height:	47 mm
Package Level 1 Gross Weight:	0.4 kg
Package Level 1 EAN:	3471523116122
Package Level 2 Units:	36 piece
Package Level 2 Width:	250 mm
Package Level 2 Length:	300 mm
Package Level 2 Height:	315 mm
Package Level 3 Units:	864 piece
Package Level 1 Units:	1 piece
Technical	
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NC:	0
Number of Auxiliary Contacts NC:	0
Standards:	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N°14
Rated Operational Voltage:	Main Circuit 690 V
Rated Frequency (f):	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal	acc. to IEC 60947-4-1, Open Contactors $q = 40$ °C 55 A
Current (I <sub>th</sub> ):	
Rated Operational Current AC-1 (I <sub>e</sub> ):	(690 V) 40 °C 55 A (690 V) 60 °C 45 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(220 / 230 / 240 V) 60 °C 23.2 A (380 / 400 V) 60 °C 22 A (415 V) 60 °C 21.2 A (440 V) 60 °C 20 A (500 V) 60 °C 17.6 A (690 V) 60 °C 10.5 A

Rated Operational Power AC-3 (P <sub>e</sub> )	: (220 / 230 / 240 V) 5.5 kW (400 V) 11 kW (415 V) 11 kW (440 V) 11 kW (500 V) 11 kW (690 V) 9 kW
Rated Short-time Withstand Curren (I <sub>cw</sub> ):	t at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 55 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 450 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A
Maximum Electrical Switching Frequency:	AC-1 600 cycles per hour
Rated Insulation Voltage (Ui):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> ):	6 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> ):	50 Hz 48 130 V 60 Hz 48 130 V DC Operation 48 130 V
Operate Time:	Between Coil De-energization and NC Contact Closing 1398 ms Between Coil De-energization and NO Contact Opening 1195 ms Between Coil Energization and NC Contact Opening 3890 ms Between Coil Energization and NO Contact Closing 4095 ms
Connecting Capacity Main Circuit:	Flexible with Insulated Ferrule 1x 1.516 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 1.516 mm <sup>2</sup> Flexible with Ferrule 1/2x 1.516 mm <sup>2</sup> Rigid 1/2x 1.516 mm <sup>2</sup>
Connecting Capacity Control Circui	t: 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 12 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
Number of Main Contacts NO:	4
Environmental	
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. to IEC 60068-2-27:	Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g
RoHS Status:	Planned to follow EU Directive 2002/95/EC August 18, 2005 and amendment after 2008 Q1
Ambient Air Temperature:	Close to Contactor for Storage -60+80 °C Near Contactor for Operation in Free Air -40 +70 °C
Technical UL/CSA	
General Use Rating UL/CSA:	(600 V AC) 55 A
Tightening Torque UL/CSA:	Control Circuit 11 in·lb Main Circuit 22 in·lb

## Certificates and Declarations (Document Number)

Instructions and Manuals:	1SBC101027M6801
ABS Certificate:	ABS_15-GE1349500-PDA_90682247
CB Certificate:	CB_SE_70858M1
CCC Certificate:	CCC_2010010304445623
Data Sheet, Technical Information:	1SBC101424D0201
Declaration of Conformity - CE:	1SBD250001U1000
DNV Certificate:	DNV-GL_E13871
EAC Certificate:	EAC_RU C-FR ME77 B01010
GL Certificate:	DNV-GL_E13871

GOST Certificate:	GOST_POCCFR.ME77.B07175.pdf
LR Certificate:	LRS_1300087E1
RINA Certificate:	RINA_ELE084013XG
RMRS Certificate:	RMRS_1400682124
<b>RoHS Information:</b>	1SBD251015E1000
UL Certificate:	UL_20120918-E319322-3-1
UL Listing Card:	UL_E319322

## Classifications

ETIM 4:	EC000066 - Magnet contactor, AC-switching
ETIM 5:	EC000066 - Magnet contactor, AC-switching
ETIM 6:	EC000066 - Power contactor, AC switching
UNSPSC:	39121529
Object Classification Code:	Q

