

### **General Information**

AF38Z-22-00-22 **Extended Product Type:** Product ID: 1SBL296501R2200 EAN: 3471523116924

**Catalog Description:** AF38Z-22-00-22 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...). 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 4-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 2 N.O. + 2 N.C. 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

**Minimum Order Quantity:** 1 piece **Customs Tariff Number:** 85369085 EAN: 3471523116924

#### **Dimensions**

**Product Net Depth:** 101 mm **Product Net Height:** 86 mm 0.400 kg **Product Net Weight: Product Net Width:** 45 mm

## **Container Information**

87 mm Package Level 1 Width: 103 mm Package Level 1 Length: 47 mm Package Level 1 Height: Package Level 1 Gross Weight: 0.4 kg 3471523116924 Package Level 1 EAN: 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: 2 **Number of Auxiliary Contacts NO:** 0 **Number of Auxiliary Contacts NC:** n

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  $q = 40 \,^{\circ}\text{C}$  55 A

Current (Ith):

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 (Pe): (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 Current at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 300 A

 $(I_{cw})$ :

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

50 Hz 48 ... 130 V

Rated Control Circuit Voltage (U<sub>c</sub>): 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 Insulated Ferrule 1x 1.5...16 mm<sup>2</sup>

Flexible with Insulated Ferrule 2x 1.5...16 mm<sup>2</sup>

Flexible with Ferrule 1/2x 1.5...16 mm<sup>2</sup>

Rigid 1/2x 1.5...16 mm<sup>2</sup>

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>

Control Circuit 10 mm Wire Stripping Length:

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:** 

**Environmental** 

Climatic Withstand: Category B according to IEC 60947-1 Annex Q

**Maximum Operating Altitude** 

Permissible:

3000 m

Resistance to Vibrations acc. to IEC 5 ... 300 Hz 4 g closed position / 2 g open position

60068-2-6:

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 25 g

Open, Shock Direction: B1 5 g Open, Shock Direction: B2 10 g Open, Shock Direction: C1 20 g Open, Shock Direction: C2 20 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: 1SBC101426D0201

Declaration of Conformity - CE: 1SBD250001U1000
DNV Certificate: DNV-GL\_E13871

**EAC Certificate:** EAC\_RU C-FR ME77 B01010

**GL Certificate**: DNV-GL\_E13871

GOST\_POCCFR.ME77.B07175.pdf

 LR Certificate:
 LRS\_1300087E1

 RINA Certificate:
 RINA\_ELE084013XG

 RMRS Certificate:
 RMRS\_1400682124

 RoHS Information:
 1SBD251015E1000

 UL Certificate:
 UL\_20100802-E319322-3-1

# 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

