

**PRODUCT-DETAILS** 

# AF09Z-40-00-23 AF09Z-40-00-23 100-250V50/60HZ-DC Contactor



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Extended Product Type	AF09Z-40-00-23	
Product ID	1SBL136201R2300	
EAN	3471523115835	

Catalog Description

AF09Z-40-00-23 100-250V50/60HZ-DC Contactor

Long Description

AF09Z 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: 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.

## Classifications

Object Classification Code	Q
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
UNSPSC	39121529

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.31 kg
Package Level 1 EAN	3471523115835
Package Level 2 Units	box 27 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	16.74 kg
Package Level 3 Units	1296 piece

#### Certificates and Declarations (Document Number) **ABS** Certificate ABS\_15-GE1349500-PDA\_90682247 **BV** Certificate BV\_2634H24898B0 **CB** Certificate CB\_SE-80869M1 **CCC** Certificate CCC\_2010010304445624 **Declaration of Conformity** 1SBD250001U1000 - CE **DNV** Certificate DNV-GL\_TAE00001AF-3 DNV-GL\_TAE00001AF-3 **DNV GL Certificate EAC Certificate** EAC\_RU C-FR ME77 B03597 1SBD250147E1000 **Environmental Information GL** Certificate DNV-GL\_TAE00001AF-3 GOST\_POCCFR.ME77.B07175.pdf **GOST Certificate** 1SBC101027M6801 Instructions and Manuals **KC** Certificate KC\_HW02016-15007A LR Certificate LRS\_1300087E1 RINA Certificate RINA\_ELE240318XG RMRS\_1802705280 RMRS Certificate **RoHS Information** 1SBD250001U1000 UL\_20120918-E319322-3-1 **UL** Certificate **UL Listing Card** UL\_E319322

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 25 A
Tightening Torque UL/CSA	Control Circuit 11 IA Main Circuit 13 IA

Ambient Air Temperature	Close to Contactor for Storage -60 +80 °C Near Contactor for Operation in Free Air -40 +70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex C
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.	Shock Direction: A 30 K40
to IEC 60068-2-27	Shock Direction: B2 15 K40
	Shock Direction: C1 25 K40
	Shock Direction: C2 25 K40
	Closed, Shock Direction: B1 25 K40 Open, Shock Direction: B1 5 K40
RoHS Status	Following EU Directive 2011/65/EU

Technical	
Number of Main Contacts NO	4
Number of Main Contacts NC	C
Number of Auxiliary Contacts NO	C
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 $^{\circ}$
Rated Operational Voltage	Main Circuit 690 V
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 35 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) 40 °C 25 A (690 V) 60 °C 25 A (690 V) 70 °C 22 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(220 / 230 / 240 V) 60 °C 9 A (380 / 400 V) 60 °C 9 A (415 V) 60 °C 9 A (440 V) 60 °C 9 A (500 V) 60 °C 9.5 A (690 V) 60 °C 7 A
Rated Operational Power AC-3 (P <sub>e</sub> )	(220 / 230 / 240 V) 2.2 KWT (380 / 400 V) 4 KWT (415 V) 4 KWT (440 V) 4 KWT (500 V) 5.5 KWT (690 V) 5.5 KWT (400 V) 4 KWT
Rated Short-time	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A

	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 1 s -empty- A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 106 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour
Rated Insulation Voltage (U <sub>i</sub> )	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 100 250 V 50 Hz / 60 Hz 100 250 V 60 Hz 100 250 V DC Operation 100 250 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	Rigid $1/2x$ 1 6 m² Flexible with Ferrule $1/2x$ 0.75 6 m² Flexible with Insulated Ferrule 1x 0.75 4 m² Flexible with Insulated Ferrule 2x 0.75 2.5 m²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 2.5 m² Flexible with Insulated Ferrule 1x 0.75 2.5 m² Flexible with Insulated Ferrule 2x 0.75 1.5 m² Rigid 1/2x 1 2.5 m²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 10 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
Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	86 mm
Product Net Weight	0.31 kg
Popular Downloads	
Instructions and Manuals	1SBC101027M6801
Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

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# Categories

 $\text{Low Voltage Products and Systems} \rightarrow \text{Control Products} \rightarrow \text{Contactors} \rightarrow \text{Block Contactors}$ 

