



# **Electric Automation**

Automation specialists

Reference: AF52-30-00-13 Code: 1SBL367001R1300

AF52-30-00-13 100-250V50/60HZ-DC Contactor

Buy it at Electric Automation Network

AF52 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... contactors include an electronic coil interface accepting a wide control voltage Uc min. ... Uc max. Only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC. AF contactors can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. AF 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

EAN:	3471523132337
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085

#### Dimensions

Product Net Width:	55 mm
Product Net Depth:	111 mm



Product Net Height:	125.5 mm
Product Net Weight:	0.950 kg

#### **Container Information**

Package Level 1 Units:	1 piece
Package Level 1 Width:	150 mm
Package Level 1 Length:	150 mm
Package Level 1 Height:	97 mm
Package Level 1 Gross Weight:	1.05 kg
Package Level 1 EAN:	3471523132337
Package Level 2 Units:	12 piece
Package Level 2 Width:	300 mm
Package Level 2 Length:	320 mm
Package Level 2 Height:	500 mm

#### Technical

Number of Main Contacts NO:	3
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Auxiliary Contacts NC:	0
Rated Operational Voltage:	Main Circuit 690 V
Rated Frequency (f):	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (Ith):	acc. to IEC 60947-4-1, Open Contactors q = 40 $^{\circ}$ C 105 A
Rated Operational Current AC-1 (I <sub>e</sub> ):	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(220 / 230 / 240 V) 60 °C 53 A (380 / 400 V) 60 °C 53 A (415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 A
Rated Operational Power AC-3 (P <sub>e</sub> ):	(220 / 230 / 240 V) 15 kW (380 / 400 V) 22 kW (415 V) 30 kW (440 V) 30 kW (500 V) 30 kW (690 V) 30 kW

Rated Short-time Withstand Current (I <sub>cw</sub> ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 600 A
Maximum Electrical Switching Frequency:	AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 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 60 Hz 100 250 V DC Operation 100 250 V
Operate Time:	Between Coil De-energization and NC Contact Closing 19 105 ms Between Coil De-energization and NO Contact Opening 17 100 ms Between Coil Energization and NC Contact Opening 38 95 ms Between Coil Energization and NO Contact Closing 42 100 ms
Connecting Capacity-Main Circuit:	Flexible with Insulated Ferrule 1/2x 435 mm <sup>2</sup> Flexible with Ferrule 1/2x 435 mm <sup>2</sup> Rigid 1/2x 635 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 0.752.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.751.5 mm <sup>2</sup> Rigid 1/2x 12.5 mm <sup>2</sup>
Wire Stripping Length:	Main Circuit 16 mm
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Terminal Type:	Screw Terminals

## Environmental

Ambient Air Temperature:	Close to Contactor for Storage -60+80 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor without Thermal O/L Relay -40 +70 °C
Maximum Operating Altitude Permissible:	3000 m

Resistance to Shock acc. to IEC 60068-2-27:	Closed, Shock Direction: A 25 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: B1 5 g
Resistance to Vibrations acc. to IEC 60068-2-6:	5300 Hz 3 g closed position / 3 g open position

# Technical UL/CSA

General Use Rating UL/CSA:	(600 V AC) 80 A
Horsepower Rating UL/CSA:	(120 V AC) Single Phase 3 Hp (240 V AC) Single Phase 10 Hp (200 208 V AC) Three Phase 15 Hp (220 240 V AC) Three Phase 20 Hp (440 480 V AC) Three Phase 40 Hp (550 600 V AC) Three Phase 50 Hp
Tightening Torque UL/CSA:	Control Circuit 11 in·lb Main Circuit 35 in·lb

### Certificates and Declarations (Document Number)

ABS Certificate:	ABS_15-GE1349500-PDA_90682247
BV Certificate:	BV_2634H36994A
CB Certificate:	CB_SE_77418
CCC Certificate:	CCC_2012010304589737
cUL Certificate:	UL_20130926-E312527_14_1
Declaration of Conformity - CE:	1SBD250176C3000
DNV Certificate:	DNV-GL_E13871
EAC Certificate:	EAC_RU C-FR ME77 B01010
GL Certificate:	DNV-GL_E13871
LR Certificate:	LRS_1300087E1
RINA Certificate:	RINA_ELE084013XG
RMRS Certificate:	RMRS_1400682124
RoHS Information:	1SBD251021E1000

#### Classifications

E-nummer:	3210039
ETIM 5:	EC000066 - Magnet contactor, AC-switching
UNSPSC:	39121529