

# AF52-40-00-13



AF52-40-00-13 100-250V50/60HZ-DC Contactor

## General Information

Extended Product Type	AF52-40-00-13
Product ID	1SBL367201R1300
EAN	3471523133631
Catalog Description	AF52-40-00-13 100-250V50/60HZ-DC Contactor
Long Description	AF52 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... contactors include an electronic coil interface accepting a wide control voltage $U_c$ min. ... $U_c$ 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 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.

## Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

## Popular Downloads

Instructions and Manuals	1SBC101047M6801
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## Dimensions

Product Net Width	70 mm
Product Net Depth / Length	113.5 mm
Product Net Height	125.5 mm
Product Net Weight	1.16 kg

## Technical

Number of Main Contacts NO	4
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 ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 ( $I_e$ )	(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 45 A (690 V) 60 °C 35 A
Rated Operational Power AC-3 ( $P_e$ )	(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 ( $I_{cw}$ )	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 for 1 s -empty- A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 600 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour
Rated Insulation Voltage ( $U_i$ )	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 4 ... 35 mm <sup>2</sup> Rigid 1/2x 6 ... 3 5 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Main Circuit 16 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 IP10
Terminal Type	Screw Terminals

## Environmental

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 Q
Maximum Operating Altitude Permissible	3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 3 g Closed position / 2 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

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## Certificates and Declarations (Document Number)

ABS Certificate	ABS_15-GE1349500-PDA_90682247
CB Certificate	CB_SE_77418
Declaration of Conformity - CE	1SBD250001U1000
DNV Certificate	DNV-GL_TAE00001AF-3
DNV GL Certificate	DNV-GL_TAE00001AF-3
GL Certificate	DNV-GL_TAE00001AF-3
Instructions and Manuals	1SBC101047M6801
KC Certificate	KC_HW02016-15012A
LR Certificate	LRS_1300087E1
RMRS Certificate	RMRS_1400682124
UL Certificate	UL_20141124-E312527-14-2
UL Listing Card	UL_E312527

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## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	150 mm
Package Level 1 Depth / Length	150 mm
Package Level 1 Height	103 mm
Package Level 1 Gross Weight	1.27 kg
Package Level 1 EAN	3471523133631
Package Level 2 Units	box 8 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	300 mm
Package Level 2 Gross Weight	10.16 kg
Package Level 3 Units	192 piece

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## 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
E-Number (Sweden)	3210311

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## Categories

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

