

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

## General Information

<b>Extended Product Type:</b>	AF40-22-00-12
<b>Product ID:</b>	1SBL347501R1200
<b>EAN:</b>	3471523133822
<b>Catalog Description:</b>	AF40-22-00-12 48-130V50/60HZ-DC Contactor
<b>Long Description:</b>	<p>AF40 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 <math>U_c \text{ min.} \dots U_c \text{ max.}</math> 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: 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.</p>

## Ordering

<b>Minimum Order Quantity:</b>	1 piece
<b>Customs Tariff Number:</b>	85364900

## Popular Downloads

<b>Instructions and Manuals:</b>	1SBC101047M6801
----------------------------------	-----------------

## Dimensions

<b>Product Net Width:</b>	70 mm
<b>Product Net Depth / Length:</b>	113.5 mm
<b>Product Net Height:</b>	125.5 mm
<b>Product Net Weight:</b>	1.21 kg

## Technical

<b>Number of Main Contacts NO:</b>	2
<b>Number of Main Contacts NC:</b>	2
<b>Number of Auxiliary Contacts NO:</b>	0
<b>Number of Auxiliary Contacts NC:</b>	0

<b>Rated Operational Voltage:</b>	Main Circuit 690 V
<b>Rated Frequency (f):</b>	Main Circuit 50 / 60 Hz
<b>Conventional Free-air Thermal Current (<math>I_{th}</math>):</b>	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A
<b>Rated Operational Current AC-1 (<math>I_e</math>):</b>	(690 V) 40 °C 70 A (690 V) 60 °C 60 A (690 V) 70 °C 50 A
<b>Rated Operational Current AC-3 (<math>I_e</math>):</b>	(220 / 230 / 240 V) 60 °C 40 A (380 / 400 V) 60 °C 40 A (415 V) 60 °C 40 A (440 V) 60 °C 40 A (500 V) 60 °C 35 A (690 V) 60 °C 25 A
<b>Rated Operational Power AC-3 (<math>P_e</math>):</b>	(220 / 230 / 240 V) 11 kW (380 / 400 V) 18.5 kW (415 V) 22 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW
<b>Rated Short-time Withstand Current (<math>I_{cw}</math>):</b>	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
<b>Maximum Breaking Capacity:</b>	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
<b>Maximum Electrical Switching Frequency:</b>	AC-1 600 cycles per hour
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	6 kV
<b>Maximum Mechanical Switching Frequency:</b>	3600 cycles per hour
<b>Rated Control Circuit Voltage (<math>U_c</math>):</b>	50 Hz 48 ... 130 V 60 Hz 48 ... 130 V DC Operation 48 ... 130 V
<b>Connecting Capacity Main Circuit:</b>	Flexible with Ferrule 1/2x 4 ... 35 mm <sup>2</sup> Rigid 1/2x 6 ... 35 mm <sup>2</sup>
<b>Connecting Capacity Control Circuit:</b>	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>
<b>Wire Stripping Length:</b>	Main Circuit 16 mm
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10

<b>Terminal Type:</b>	Screw Terminals
-----------------------	-----------------

## Environmental

<b>Ambient Air Temperature:</b>	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... +70 °C
<b>Climatic Withstand:</b>	Category B according to IEC 60947-1 Annex Q
<b>Maximum Operating Altitude Permissible:</b>	3000 m
<b>Resistance to Vibrations acc. to IEC 60068-2-6:</b>	5 ... 300 Hz 3 g Closed position / 2 g Open position

## Technical UL/CSA

<b>General Use Rating UL/CSA:</b>	(600 V AC) 60 A
<b>Horsepower Rating UL/CSA:</b>	(120 V AC) Single Phase 3 Hp (240 V AC) Single Phase 7-1/2 Hp (200 ... 208 V AC) Three Phase 10 Hp (220 ... 240 V AC) Three Phase 15 Hp (440 ... 480 V AC) Three Phase 30 Hp (550 ... 600 V AC) Three Phase 40 Hp

## Certificates and Declarations (Document Number)

<b>CB Certificate:</b>	CB_SE_77418
<b>Declaration of Conformity - CE:</b>	1SBD250001U1000
<b>DNV Certificate:</b>	DNV-GL_TAE00001AF-1
<b>DNV GL Certificate:</b>	DNV-GL_TAE00001AF-1
<b>Instructions and Manuals:</b>	1SBC101047M6801
<b>KC Certificate:</b>	KC_HW02016-15009A
<b>UL Certificate:</b>	UL_20141124-E312527-14-2
<b>UL Listing Card:</b>	UL_E312527

## Container Information

<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	150 mm
<b>Package Level 1 Depth / Length:</b>	150 mm
<b>Package Level 1 Height:</b>	103 mm
<b>Package Level 1 Gross Weight:</b>	1.32 kg
<b>Package Level 1 EAN:</b>	3471523133822
<b>Package Level 2 Units:</b>	8 piece
<b>Package Level 2 Width:</b>	250 mm
<b>Package Level 2 Depth / Length:</b>	300 mm
<b>Package Level 2 Height:</b>	300 mm

Package Level 2 Gross Weight:	10.56 kg
Package Level 3 Units:	192 piece

Classifications

Object Classification Code:	Q
E-nummer:	3210305
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

