

## General Information

<b>Extended Product Type:</b>	AF80-30-00-11
<b>Product ID:</b>	1SBL397001R1100
<b>EAN:</b>	3471523132917
<b>Catalog Description:</b>	AF80-30-00-11 24-60V50/60HZ 20-60VDC Contactor
<b>Long Description:</b>	AF80 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 $U_c \text{ min} \dots U_c \text{ max}$ . 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.

## Additional Information

<b>ABB Industrial IT Suite:</b>	Control IT
<b>ABS Certificate:</b>	ABS_15-GE1349500-PDA_90682247
<b>Ambient Air Temperature:</b>	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
<b>BV Certificate:</b>	BV_2634H36994A
<b>Block Contactor Type:</b>	3-Pole Contactor
<b>CB Certificate:</b>	CB_SE-77417M1
<b>CCC Certificate:</b>	CCC_2013010304646569
<b>Climatic Withstand:</b>	Category B according to IEC 60947-1 Annex Q
<b>Coil Voltage Code:</b>	11
<b>Connecting Capacity Control Circuit:</b>	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>
<b>Connecting Capacity Main Circuit:</b>	Flexible with Insulated Ferrule 1/2x 6...50 mm <sup>2</sup> Flexible with Ferrule 1/2x 6...50 mm <sup>2</sup> Rigid 1x 6...70 mm <sup>2</sup> Rigid 2x 6...50 mm <sup>2</sup>
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 130 A
<b>Country of Origin:</b>	France (FR)
<b>Customs Tariff Number:</b>	85364900
<b>Data Sheet, Technical Information:</b>	1SBC100173C0201
<b>Declaration of Conformity - CE:</b>	1SBD250000U1000
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
<b>E-nummer:</b>	3210050
<b>EAC Certificate:</b>	EAC_RU C-FR ME77 B01010
<b>EAN:</b>	3471523132917
<b>EPLAN Catalog Tree:</b>	Electrical engineering / Relays, contactors / Contactors
<b>EPLAN Function Definition:</b>	Coil / Coil, 2 connection points / Coil for power contactor A1_A2 NO contact / NO contact, 2 connection points / Power NO contact 1_2 NO contact / NO contact, 2 connection points / Power NO contact 2_4

NO contact / NO contact, 2 connection points / Power NO contact 3\_4  
NO contact / NO contact, 2 connection points / Power NO contact 5\_6

<b>EPLAN Macro:</b>	9AKK106930A0720
<b>ETIM 4:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 5:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 6:</b>	EC000066 - Power contactor, AC switching
<b>Environmental Information:</b>	1SBD250168E1000
<b>Full Load Amps Motor Use:</b>	(120 V AC) Single Phase 80 A (240 V AC) Single Phase 68 A (200 ... 208 V AC) Three Phase 78.2 A (220 ... 240 V AC) Three Phase 80 A (440 ... 480 V AC) Three Phase 77 A (550 ... 600 V AC) Three Phase 77 A
<b>General Use Rating UL/CSA:</b>	(600 V AC) 105 A
<b>Horsepower Rating UL/CSA:</b>	(120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 15 Hp (200 ... 208 V AC) Three Phase 25 Hp (220 ... 240 V AC) Three Phase 30 Hp (440 ... 480 V AC) Three Phase 60 Hp (550 ... 600 V AC) Three Phase 75 Hp
<b>IT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	1SBC101036M6801
<b>Invoice Description:</b>	AF80-30-00-11 24-60V50/60HZ 20-60VDC Contactor
<b>LR Certificate:</b>	LRS_1300087E1
<b>Low Coil Consumption:</b>	No
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 1150 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 750 A
<b>Maximum Electrical Switching Frequency:</b>	AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour
<b>Maximum Mechanical Switching Frequency:</b>	3600 cycles per hour
<b>Maximum Operating Altitude Permissible:</b>	3000 m
<b>Minimum Order Quantity:</b>	1 piece
<b>Mounted Auxiliary Contacts:</b>	0 NO, 0 NC
<b>Mounted Auxiliary Contacts 1st Stack:</b>	0 NO, 0 NC
<b>Mounted Auxiliary Contacts 2nd Stack:</b>	0 NO, 0 NC
<b>Mounting Position:</b>	Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF40 ... AF96
<b>Mounting Positions:</b>	1SBC500297F0000
<b>Number of Auxiliary Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	0
<b>Number of Main Contacts NC:</b>	0
<b>Number of Main Contacts NO:</b>	3
<b>Object Classification Code:</b>	Q
<b>Operate Time:</b>	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
<b>Order Multiple:</b>	1 piece
<b>Package Level 1 EAN:</b>	3471523132917
<b>Package Level 1 Gross Weight:</b>	1.34 kg
<b>Package Level 1 Height:</b>	103 mm

<b>Package Level 1 Length:</b>	150 mm
<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	150 mm
<b>Package Level 2 Height:</b>	300 mm
<b>Package Level 2 Length:</b>	300 mm
<b>Package Level 2 Units:</b>	8 piece
<b>Package Level 2 Width:</b>	250 mm
<b>Package Level 3 Units:</b>	192 piece
<b>Packing Type:</b>	Box
<b>Power Loss:</b>	at Rated Operating Conditions AC-1 per Pole 7.6 W at Rated Operating Conditions AC-3 per Pole 3 W
<b>Product Main Type:</b>	AF80
<b>Product Name:</b>	Block Contactor
<b>Product Net Depth:</b>	116 mm
<b>Product Net Height:</b>	125.5 mm
<b>Product Net Weight:</b>	1.220 kg
<b>Product Net Width:</b>	70 mm
<b>Product Packing Type:</b>	Box
<b>RINA Certificate:</b>	RINA_ELE084013XG
<b>RMRS Certificate:</b>	RMRS_1400682124
<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	50 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 V
<b>Rated Frequency (f):</b>	Main Circuit 50 / 60 Hz
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	8 kV
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
<b>Rated Operational Current AC-1 (I<sub>e</sub>):</b>	(690 V) 40 °C 125 A (690 V) 60 °C 100 A (690 V) 70 °C 85 A
<b>Rated Operational Current AC-3 (I<sub>e</sub>):</b>	(220 / 230 / 240 V) 60 °C 80 A (380 / 400 V) 60 °C 80 A (415 V) 60 °C 80 A (440 V) 60 °C 80 A (500 V) 60 °C 65 A (690 V) 60 °C 49 A (1000 V) 60 °C 25 A
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(220 / 230 / 240 V) 22 kW (380 / 400 V) 37 kW (400 V) 37 kW (415 V) 45 kW (440 V) 45 kW (500 V) 45 kW (690 V) 45 kW
<b>Rated Operational Voltage:</b>	Main Circuit 690 V
<b>Rated Short-time Withstand Current (I<sub>cw</sub>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 780 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	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:** 5 ... 300 Hz 3 g closed position / 3 g open position

**RoHS Information:** 1SBD251021E1000

**Selling Unit of Measure:** piece

**Short Description:** AF80-30-00-11 24-60V50/60HZ 20-60VDC Contactor

**Terminal Type:** Screw Terminals

**Tightening Torque:** Control Circuit 1.2 N·m  
Main Circuit 6 N·m

**Tightening Torque UL/CSA:** Control Circuit 11 in·lb  
Main Circuit 53 in·lb

**UL Certificate:** UL\_20130926-E312527\_14\_1

**UL Listing Card:** UL\_E312527

**UNSPSC:** 39121529

**Wire Stripping Length:** Main Circuit 17 mm

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