

Products Low Voltage Products and Systems Control Products Contactors Block Contactors

General Information

Extended Product Type:	AF80-30-00-13
Product ID:	1SBL397001R1300
EAN:	3471523132931
Catalog Description:	AF80-30-00-13 100-250V50/60HZ-DC Contactor
Long Description:	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

ABB Industrial IT Suite:	Control IT
ABS Certificate:	ABS_15-GE1349500-PDA_90682247
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
BV Certificate:	BV_2634H36994A
Block Contactor Type:	3-Pole Contactor
CB Certificate:	CB_SE-77417M1
CCC Certificate:	CCC_2013010304646569
Climatic Withstand:	Category B according to IEC 60947-1 Annex Q
Coil Voltage Code:	13
Connecting Capacity Control Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 1 ... 2.5 mm ²
Connecting Capacity Main Circuit:	Flexible with Insulated Ferrule 1/2x 6...50 mm ² Flexible with Ferrule 1/2x 6...50 mm ² Rigid 1x 6...70 mm ² Rigid 2x 6...50 mm ²
Conventional Free-air Thermal Current (I_{th}):	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 130 A
Country of Origin:	France (FR)
Customs Tariff Number:	85364900
Data Sheet, Technical Information:	1SBC100173C0201
Declaration of Conformity - CE:	1SBD250000U1000
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
E-nummer:	3210053
EAC Certificate:	EAC_RU C-FR ME77 B01010
EAN:	3471523132931
EPLAN Catalog Tree:	Electrical engineering / Relays, contactors / Contactors
EPLAN Function Definition:	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

EPLAN Macro:	9AKK106930A0720
ETIM 4:	EC000066 - Magnet contactor, AC-switching
ETIM 5:	EC000066 - Magnet contactor, AC-switching
ETIM 6:	EC000066 - Power contactor, AC switching
Environmental Information:	1SBD250168E1000
Full Load Amps Motor Use:	(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
General Use Rating UL/CSA:	(600 V AC) 105 A
Horsepower Rating UL/CSA:	(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
IT Publishing Status:	Level 0 - Information enabled
Industrial IT Certification Level:	0
Instructions and Manuals:	1SBC101036M6801
Invoice Description:	AF80-30-00-13 100-250V50/60HZ-DC Contactor
LR Certificate:	LRS_1300087E1
Low Coil Consumption:	No
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 1150 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 750 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
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Maximum Operating Altitude Permissible:	3000 m
Minimum Order Quantity:	1 piece
Mounted Auxiliary Contacts:	0 NO, 0 NC
Mounted Auxiliary Contacts 1st Stack:	0 NO, 0 NC
Mounted Auxiliary Contacts 2nd Stack:	0 NO, 0 NC
Mounting Position:	Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF40 ... AF96
Mounting Positions:	1SBC500297F0000
Number of Auxiliary Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Main Contacts NC:	0
Number of Main Contacts NO:	3
Object Classification Code:	Q
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
Order Multiple:	1 piece
Package Level 1 EAN:	3471523132931
Package Level 1 Gross Weight:	1.29 kg
Package Level 1 Height:	103 mm

Package Level 1 Length:	150 mm
Package Level 1 Units:	1 piece
Package Level 1 Width:	150 mm
Package Level 2 Height:	300 mm
Package Level 2 Length:	300 mm
Package Level 2 Units:	8 piece
Package Level 2 Width:	250 mm
Package Level 3 Units:	192 piece
Packing Type:	Box
Power Loss:	at Rated Operating Conditions AC-1 per Pole 7.6 W at Rated Operating Conditions AC-3 per Pole 3 W
Product Main Type:	AF80
Product Name:	Block Contactor
Product Net Depth:	116 mm
Product Net Height:	125.5 mm
Product Net Weight:	1.170 kg
Product Net Width:	70 mm
Product Packing Type:	Box
RINA Certificate:	RINA_ELE084013XG
RMRS Certificate:	RMRS_1400682124
Rated Control Circuit Voltage (U_c):	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Rated Frequency (f):	Main Circuit 50 / 60 Hz
Rated Impulse Withstand Voltage (U_{imp}):	8 kV
Rated Insulation Voltage (U_i):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 125 A (690 V) 60 °C 100 A (690 V) 70 °C 85 A
Rated Operational Current AC-3 (I_e):	(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
Rated Operational Power AC-3 (P_e):	(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
Rated Operational Voltage:	Main Circuit 690 V
Rated Short-time Withstand Current (I_{cw}):	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
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: 5 ... 300 Hz 3 g closed position / 3 g open position

RoHS Information: 1SBD251021E1000

Selling Unit of Measure: piece

Short Description: AF80-30-00-13 100-250V50/60HZ-DC 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