PRODUCT-DETAILS

AF80-30-11-12

AF80-30-11-12 48-130V50/60HZ-DC Contactor



General Information

Extended Product Type	AF80-30-11-12
Product ID	1SBL397001R1211
EAN	3471523133020
Catalog Description	AF80-30-11-12 48-130V50/60HZ-DC Contactor
Long Description	The AF80-30-11-12 is a 3 pole - 1000 V IEC or 600 UL contactor with pre-mounted auxiliary contacts and screw terminals, controlling motors up to 37 kW / 400 V AC (AC-3) or 60 hp / 480 V UL and switching power circuits up to 125 A (AC-1) or 105 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (48-130 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Instructions and Manuals	1SBC101036M6801

Dimensions

Product Net Width	82 mm
Product Net Depth / Length	116 mm
Product Net Height	125.5 mm
Product Net Weight	1.26 kg

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 1000 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 130 A acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 125 (690 V) 60 °C 100 A (690 V) 70 °C 85
Rated Operational Current AC-3 (I_e)	(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 (380 / 400 V) 60 °C 80 A (220 / 230 / 240 V) 60 °C 80 A
Rated Operational Power AC-3 (P_e)	(400 V) 37 kW (415 V) 45 kW (440 V) 45 kW (500 V) 45 kW (690 V) 45 kW (1000 V) 35 kW (380 / 400 V) 37 kW (220 / 230 / 240 V) 22 kW
Rated Operational Current AC-15 (I_e)	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 A
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 for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 1150 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 750 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 1200 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Rated Operational Current DC-13 (I_e)	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W

	(400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	8 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	50 Hz 48 ... 130 V 50 Hz / 60 Hz 48 ... 130 V 60 Hz 48 ... 130 V DC Operation 48 ... 130 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 Ferrule 1/2x 6 ... 50 mm² Flexible with Insulated Ferrule 1/2x 6 ... 50 mm² Rigid 1x 6 ... 70 mm² Rigid 2x 6 ... 50 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Rigid 1/2x 1 ... 2.5 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 1/2x 1 ... 2.5 mm²
Wire Stripping Length	Main Circuit 17 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40 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

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 105 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 7-1/2 hp (200 ... 208 V AC) Three Phase 25 hp (220 ... 240 V AC) Three Phase 30 hp (240 V AC) Single Phase 15 hp (440 ... 480 V AC) Three Phase 60 hp (550 ... 600 V AC) Three Phase 75 hp
Tightening Torque UL/CSA	Auxiliary Circuit 11 IA Control Circuit 11 IA Main Circuit 53 IA

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C Close to Contactor for Storage -60 ... +80 °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 / 3 g open position
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 25 K40 Closed, Shock Direction: B1 25 K40 Closed, Shock Direction: B2 15 K40 Closed, Shock Direction: C1 25 K40 Closed, Shock Direction: C2 25 K40 Open, Shock Direction: B1 5 K40

RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

ABS Certificate	ABS_15-GE1349500-PDA_90682247
BV Certificate	BV_2634H36994A
CB Certificate	CB_SE-96557M2
CCC Certificate	CCC_2013010304646569
CQC Certificate	CQC2013010304646569
Declaration of Conformity - CCC	2020980304001255
Declaration of Conformity - CE	1SBD250000U1000
DNV Certificate	DNV-GL_TAE00001AF-3
DNV GL Certificate	DNV-GL_TAE00001AF-3
EAC Certificate	EAC_RU_FRME77B03447
Environmental Information	1SBD250168E1000
GL Certificate	DNV-GL_TAE00001AF-3
Instructions and Manuals	1SBC101036M6801
KC Certificate	KC_HW02016-15011C
LR Certificate	LRS_1300087E1
RINA Certificate	RINA_ELE084013XG
RMRS Certificate	RMRS_1802705280
RoHS Information	1SBD250000U1000
UL Certificate	UL_20130926-E312527_14_1
UL Listing Card	UL_E312527

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	1.38 kg
Package Level 1 EAN	3471523133020
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	11.04 kg
Package Level 3 Units	192 piece

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
eClass	V11.0 : 27371003
UNSPSC	39121529

E-Number (Finland)	3707126

Categories

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

