

## PRODUCT-DETAILS

# AF1250-30-11-68

## AF1250-30-11 24-60V DC Contactor



### General Information

Extended Product Type	AF1250-30-11-68
Product ID	1SFL647001R6811
EAN	7320500346075
Catalog Description	AF1250-30-11 24-60V DC Contactor

### Long Description

The AF1250-30-11-68 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, switching power circuits up to 1260 A (AC-1) or 1210 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (24-60 V 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

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	1SFC380023-en
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	210 mm
Product Net Depth / Length	242 mm
Product Net Height	344 mm
Product Net Weight	14.6 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	Main Circuit 1000 V
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 1050 A
Rated Operational Current AC-1 ( $I_e$ )	(1000 V) 40 °C 1260 A (1000 V) 55 °C 1040 A (1000 V) 70 °C 875 A (690 V) 40 °C 1260 A (690 V) 55 °C 1040 A (690 V) 70 °C 875 A
Rated Breaking Capacity AC-3	8 x $I_e$ AC-3
Rated Making Capacity AC-3	10 x $I_e$ AC-3
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 7200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 4000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 8000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 5200 A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100\text{ A}$ ) at 440 V 7500 A $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100\text{ A}$ ) at 690 V 7000 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour
Rated Operational Current DC-1 ( $I_e$ )	(220 V) 3 Poles in Series, 40 °C 1250 A (600 V) 3 Poles in Series, 40 °C 1250 A (850 V) 3 Poles in Series, 40 °C 1250 A
Rated Operational Current DC-3 ( $I_e$ )	(220 V) 3 Poles in Series, 40 °C 1250 A (600 V) 3 Poles in Series, 40 °C 1250 A (850 V) 3 Poles in Series, 40 °C 1250 A
Rated Operational Current	(220 V) 3 Poles in Series, 40 °C 1250 A

DC-5 ( $I_e$ )	(600 V) 3 Poles in Series, 40 °C 1250 A (850 V) 3 Poles in Series, 40 °C 1250 A
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 ( $U_{imp}$ )	Main Circuit 8 kV
Mechanical Durability	0.5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70$ °C)
Rated Control Circuit Voltage ( $U_c$ )	DC Operation 24 ... 60 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage DC 5.5 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 780 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 780 V·A Pull-in at Max. Rated Control Circuit Voltage DC 785 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 50 ... 70 ms Between Coil De-energization and NO Contact Opening 53 ... 73 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms Between Coil Energization and NO Contact Closing 50 ... 120 ms
Connecting Capacity Main Circuit	Bar 50 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible 1x0.75 ... 2.5 mm² Solid 2 x 1 ... 4 mm² Stranded 2 x 1 ... 4 mm²
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 IP00
Connecting Terminals (delivered in open position) Main Poles	M 3.5 (+,-) pozidriv 2 screw with cable clamp
Terminal Type	Main Circuit: Bars

### Technical UL/CSA

Horsepower Rating NEMA	(230 V AC) Three Phase 300 Hp (460 V AC) Three Phase 600 Hp (575 V AC) Three Phase 600 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 1000 V
General Use Rating UL/CSA	(1000 V AC) 1210 A

### Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -25 ... 50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -40 ... 70 °C Close to Contactor for Storage -40 ... 70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc.	Shock Direction: A 5 g

to IEC 60068-2-27

Shock Direction: B1 5 g  
 Shock Direction: B2 5 g  
 Shock Direction: C1 5 g  
 Shock Direction: C2 5 g

## Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## Certificates and Declarations

ABS Certificate	15-LD1408622-PDA
BV Certificate	BV_13409-C0BV
CB Certificate	SE-82865
CCS Certificate	GB14T00030
CQC Certificate	CQC2006010304213519 CQC2012010304540079
Declaration of Conformity - CCC	2020980304001302 2020980304001044
Declaration of Conformity - CE	2CMT2019-005796
Declaration of Conformity - UKCA	2CMT2020-006118
DNV GL Certificate	TAE00001W1
EAC Certificate	9AKK107046A8618
LR Certificate	16-20064
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
UL Certificate	UL_20130930-E73397
UL Listing Card	UL_E73397

## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	280 mm
Package Level 1 Depth / Length	375 mm
Package Level 1 Height	310 mm

Package Level 1 Gross Weight	16 kg
Package Level 1 EAN	7320500346075

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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4758 >> Iec Contactors
E-Number (Norway)	4115380
E-Number (Sweden)	4115380

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF1250

