

AF460-30-11-68



AF460-30-11 24-60V DC Contactor

General Information

Extended Product Type	AF460-30-11-68
Product ID	1SFL597001R6811
EAN	7320500217887
Catalog Description	AF460-30-11 24-60V DC Contactor
Long Description	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 24-60 V, DC

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202
Instructions and Manuals	1SFC380023-en
Dimension Diagram	53540919-59

Dimensions

Product Net Width	186.0 mm
Product Net Depth / Length	216.0 mm
Product Net Height	278.0 mm
Product Net Weight	12.000 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
Rated Frequency (f)	Main Circuit 60 Hz Main Circuit 50 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 700 A
Rated Operational Current AC-1 (I_e)	(690 V) 55 °C 600 A

	(690 V) 40 °C 700 A (1000 V) 40 °C 700 A (1000 V) 55 °C 600 A (690 V) 70 °C 480 A (1000 V) 70 °C 480 A
Rated Operational Current AC-3 (I_e)	(1000 V) 55 °C 200 A (415 V) 55 °C 460 A (690 V) 55 °C 400 A (220 / 230 / 240 V) 55 °C 460 A (440 V) 55 °C 460 A (380 / 400 V) 55 °C 460 A (500 V) 55 °C 460 A
Rated Operational Power AC-3 (P_e)	(220 / 230 / 240 V) 132 kW (380 / 400 V) 250 kW (415 V) 250 kW (440 V) 250 kW (500 V) 315 kW (690 V) 355 kW (1000 V) 280 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x I_e AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x I_e AC-3
Short-Circuit Protective Devices	gG Type Fuses 800 A
Rated Short-time Withstand Current (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 840 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 4400 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 3100 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 4600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 2500 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 5000 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 4500 A
Maximum Electrical Switching Frequency	AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 60 cycles per hour
Rated Operational Current DC-1 (I_e)	(600 V) 3 Poles in Series, 40 °C 700 A (110 V) 1-Pole, 40 °C 700 A (110 V) 2 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 40 °C 700 A
Rated Operational Current DC-3 (I_e)	(600 V) 3 Poles in Series, 40 °C 700 A (110 V) 1-Pole, 40 °C 700 A (110 V) 2 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 40 °C 700 A
Rated Operational Current DC-5 (I_e)	(600 V) 3 Poles in Series, 40 °C 700 A (110 V) 1-Pole, 40 °C 700 A (110 V) 2 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 40 °C 700 A
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 Impulse Withstand Voltage (U_{imp})	Main Circuit 8 kV
Mechanical Durability	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) °C
Rated Control Circuit Voltage (U_c)	DC Operation 24 ... 60 V
Coil Consumption	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 900 V·A Holding at Max. Rated Control Circuit Voltage DC 5 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Pull-in at Max. Rated Control Circuit Voltage DC 900 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 900 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A
Operate Time	Between Coil Energization and NO Contact Closing 50 ... 120 ms Between Coil De-energization and NO Contact Opening 48 ... 58 ms Between Coil De-energization and NC Contact Closing 45 ... 55 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms
Connecting Capacity Main Circuit	Rigid Al-Cable 2x240 mm ² Bar 47 mm Rigid Cu-Cable 240 mm ²

Connecting Capacity Auxiliary Circuit	Solid 2 x 1 ... 4 mm ² Flexible with Insulated Ferrule 2 x 0.75 ... 2.5 mm ² Stranded 2 x 1 ... 4 mm ² Flexible 1x0.75 ... 2.5 mm ² Flexible with Ferrule 2 x 0.75 ... 2.5 mm ²
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
Terminal Type	Main Circuit: Bars

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... +50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +70 °C Close to Contactor for Storage -40 ... +70 °C
Maximum Operating Altitude Permissible	3000 m
Resistance to Shock acc. to IEC 60068-2-27	Shock Direction: A 5 g Shock Direction: C2 5 g Shock Direction: C1 5 g Shock Direction: B2 5 g Shock Direction: B1 5 g
RoHS Status	Following EU Directive 2002/95/EC August 18, 2005 and amendment

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 650 A
Horsepower Rating UL/CSA	(208 V AC) Three Phase 150 Hp (440 ... 480 V AC) Three Phase 400 Hp (550 ... 600 V AC) Three Phase 500 Hp (220 ... 240 V AC) Three Phase 200 Hp (200 V AC) Three Phase 150 Hp

Certificates and Declarations (Document Number)

ABS Certificate	15-LD1408622-PDA
BV Certificate	BV_13409-C0BV
CB Certificate	SE-82316
CCC Certificate	CQC_2007010304256683
CCS Certificate	GB14T00030
CSA Certificate	306711
cUL Certificate	20121207-E36588
Declaration of Conformity - CE	1SFA1-65
DNV Certificate	DNV_E-10966
EAC Certificate	EAC_RUC-SE.ME77.B.01005
Environmental Information	1SFC101004D0201
GL Certificate	GL_42988-02HH
Instructions and Manuals	1SFC380023-en
LOVAG Certificate	SE-0115087
LR Certificate	16-20064
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
RoHS Information	1SFC101055D0202
UL Listing Card	UL_E36588

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	260 mm
Package Level 1 Depth / Length	250 mm
Package Level 1 Height	350 mm
Package Level 1 Gross Weight	12 kg
Package Level 1 EAN	7320500217887

Classifications

Object Classification Code	Q
E-nummer	3228342
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
UNSPSC	39121529

Categories

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

