PRODUCT-DETAILS

AF460-30-11-70

AF460-30-11 100-250V 50/60Hz / 100-250V DC Contactor



General Information

Extended Product Type	AF460-30-11-70
Product ID	1SFL597001R7011
EAN	7320500217658
Catalog Description	AF460-30-11 100-250V 50/60Hz / 100-250V DC Contactor
Long Description	The AF460-30-11-70 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 250 kW / 400 V AC (AC-3) or 400 hp / 480 V UL and switching power circuits up to 700 A (AC-1) or 650 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 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

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	1SFC380023-en
Dimension Diagram	53540919-59

Dimensions

Product Net Width	186 mm
Product Net Depth / Length	216 mm
Product Net Height	278 mm
Product Net Weight	10.6 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
Rated Frequency (f)	Main Circuit 50/60 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)	(1000 V) 40 °C 700 A (1000 V) 55 °C 600 A (1000 V) 60 °C 600 A (1000 V) 70 °C 480 A (690 V) 40 °C 700 (690 V) 55 °C 600 (690 V) 70 °C 480
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 460 A (440 V) 55 °C 460 A (500 V) 55 °C 460 A (690 V) 55 °C 400 A (1000 V) 55 °C 200 A (380 / 400 V) 55 °C 460 A (220 / 230 / 240 V) 55 °C 460
Rated Operational Power AC-3 (P_e)	(415 V) 250 kW (440 V) 250 kW (500 V) 315 kW (690 V) 355 kW (1000 V) 280 kW (380 / 400 V) 250 kW (220 / 230 / 240 V) 132 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x Ie AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x Ie 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 10 s 4400 A 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 1 min 2500 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 30 s 3100 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 5000 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 4500 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 60 cycles per hour (AC-3) 300 cycles per hour
Rated Operational Current DC-1 (I_e)	(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 (600 V) 3 Poles in Series, 40 °C 700 A
Rated Operational Current DC-3 (I_e)	(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 (600 V) 3 Poles in Series, 40 °C 700 A
Rated Operational Current DC-5 (I_e)	(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 (600 V) 3 Poles in Series, 40 °C 700 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	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at θ ≤ 70 °C)
Rated Control Circuit Voltage (U_c)	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 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 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 955 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 955 V·A Pull-in at Max. Rated Control Circuit Voltage DC 895 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 45 ... 55 ms Between Coil De-energization and NO Contact Opening 48 ... 58 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 47 mm² Rigid Al-Cable 2x240 mm² Rigid Cu-Cable 240 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm² Flexible 2x0.75 ... 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
Terminal Type	Main Circuit: Bars

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 1000 V
General Use Rating UL/CSA	(600 V AC) 650 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 150 hp (208 V AC) Three Phase 150 hp (220 ... 240 V AC) Three Phase 200 hp (440 ... 480 V AC) Three Phase 400 hp (550 ... 600 V AC) Three Phase 500 hp

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 K40 Shock Direction: B1 5 K40 Shock Direction: B2 5 K40 Shock Direction: C1 5 K40 Shock Direction: C2 5 K40
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

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
CQC Certificate	CQC2007010304256683 CQC2011010304514755
CSA Certificate	306711
cUL Certificate	20121207-E36588
Declaration of Conformity - CCC	2020980304001300 2020980304001081
Declaration of Conformity - CE	2CMT2015-005436
DNV Certificate	DNV_E-10966
DNV GL Certificate	TAE00001W1
EAC Certificate	9AKK107046A8618
Environmental Information	1SFC101004D0201 1SFC101004D0202 1SAC200033H0002
GL Certificate	GL_42988-02HH
Instructions and Manuals	1SFC380023-en
LOVAG Certificate	FI102
LR Certificate	16-20064
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
RoHS Information	2CMT2015-005436
UL Listing Card	UL_E36588

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	12 kg
Package Level 1 EAN	7320500217658

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
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Finland)	3709333
E-Number (Norway)	4115292

E-Number (Sweden)	3228346

Categories

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

