

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

Parts & Services → Robotics → Controllers → IRC5 → IRC5 Process Module

General Information

Extended Product Type:	AF116-30-11-13
Product ID:	1SFL427001R1311
EAN:	7320500476376
Catalog Description:	AF116-30-11-13 Contactor
Long Description:	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 690 V. Operated with wide control voltage range 100-250 V, 50/60 Hz and DC

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

Data Sheet, Technical Information:	1SFC101070D0201
Instructions and Manuals:	1SFC100003M0201
Dimension Diagram:	1SFB535001G1051

Dimensions

Product Net Width:	90.0 mm
Product Net Depth / Length:	126.0 mm
Product Net Height:	150.0 mm
Product Net Weight:	1.644 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 690 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 160 A
Rated Operational Current AC-1 (I_e):	(690 V) 55 °C 145 A (690 V) 40 °C 160 A (690 V) 70 °C 130 A

Rated Operational Current AC-3 (I_e):	(690 V) 55 °C 65 A (415 V) 55 °C 116 A (220 / 230 / 240 V) 55 °C 116 A (440 V) 55 °C 116 A (380 / 400 V) 55 °C 116 A (500 V) 55 °C 110 A
Rated Operational Power AC-3 (P_e):	(220 / 230 / 240 V) 30 kW (380 / 400 V) 55 kW (415 V) 55 kW (440 V) 75 kW (500 V) 75 kW (690 V) 55 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 250 A
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 160 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 536 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 928 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1160 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 379 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 2000 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 1000 A
Maximum Electrical Switching Frequency:	AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour
Rated Operational Current DC-1 (I_e):	(110 V) 2 Poles in Series, 40 °C 145 A (220 V) 3 Poles in Series, 40 °C 145 A
Rated Operational Current DC-3 (I_e):	(110 V) 2 Poles in Series, 40 °C 145 A (220 V) 3 Poles in Series, 40 °C 145 A
Rated Operational Current DC-5 (I_e):	(110 V) 2 Poles in Series, 40 °C 145 A (220 V) 3 Poles in Series, 40 °C 145 A
Rated Insulation Voltage (U_i):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 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):	60 Hz 100 ... 250 V 50 Hz 100 ... 250 V DC Operation 100 ... 250 V

Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 130 V·A Holding at Max. Rated Control Circuit Voltage DC 3 W Holding at Max. Rated Control Circuit Voltage 50 Hz 6 V·A Pull-in at Max. Rated Control Circuit Voltage DC 135 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 130 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 6 V·A
Operate Time:	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
Connecting Capacity Main Circuit:	Flexible 2 x 10 ... 70 mm ² Rigid Cu-Cable 2 x 10 ... 95 mm ²
Connecting Capacity Auxiliary Circuit:	Solid 2 x 1 ... 4 mm ² Flexible with Insulated Ferrule 1 x 0.75 ... 2.5 mm ² Stranded 2 x 1 4 mm ² Flexible 2x0.75 ... 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:	Double Clamp

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
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) 160 A
Horsepower Rating UL/CSA:	(208 V AC) Three Phase 30 Hp (440 ... 480 V AC) Three Phase 75 Hp (550 ... 600 V AC) Three Phase 100 Hp (220 ... 240 V AC) Three Phase 40 Hp (200 V AC) Three Phase 30 Hp

Certificates and Declarations (Document Number)

ABS Certificate:	14-LD1092198-PDA
BV Certificate:	BV_36353_A0BV
CB Certificate:	SEMKO_SE-70479M1
CCC Certificate:	2013010304604055
CCS Certificate:	GB14T00030

cUL Certificate:	20120925-E36588
Declaration of Conformity - CE:	2CMT004242
DNV Certificate:	DNV_E-14043
EAC Certificate:	EAC_RUC-SE.ME77.B.01005
Environmental Information:	2CMT004732
GL Certificate:	GL_95071-14HH
Instructions and Manuals:	1SFC100003M0201
LR Certificate:	LR_14_70011(E1)
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:	194 mm
Package Level 1 Depth / Length:	115 mm
Package Level 1 Height:	169 mm
Package Level 1 Gross Weight:	1.57 kg
Package Level 1 EAN:	7320500476376

Classifications

Object Classification Code:	Q
E-nummer:	3210068
ETIM 4:	EC000066 - Magnet contactor, AC-switching
ETIM 5:	EC000066 - Magnet contactor, AC-switching
ETIM 6:	EC000066 - Power contactor, AC switching
UNSPSC:	39121529

