

# AF305-30-11-11



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

## General Information

<b>Extended Product Type:</b>	AF305-30-11-11
<b>Product ID:</b>	1SFL587002R1111
<b>EAN:</b>	7320500481707
<b>Catalog Description:</b>	AF305-30-11-11 Contactor
<b>Long Description:</b>	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, 50 and 60 Hz, 20-60 V DC

## Ordering

<b>Minimum Order Quantity:</b>	1 piece
<b>Customs Tariff Number:</b>	85364900

## Popular Downloads

<b>Data Sheet, Technical Information:</b>	1SFC101070D0201
<b>Instructions and Manuals:</b>	1SFC100008M0201

## Dimensions

<b>Product Net Width:</b>	140.0 mm
<b>Product Net Depth / Length:</b>	180.0 mm
<b>Product Net Height:</b>	225.0 mm
<b>Product Net Weight:</b>	4.640 kg

## Technical

<b>Number of Main Contacts NO:</b>	3
<b>Number of Main Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Auxiliary Contacts NC:</b>	1
<b>Rated Operational Voltage:</b>	Main Circuit 1000 V
<b>Rated Frequency (f):</b>	Main Circuit 50/60 Hz
<b>Conventional Free-air Thermal Current (<math>I_{th}</math>):</b>	acc. to IEC 60947-4-1, Open Contactors $q = 40$ °C 500 A
<b>Rated Operational Current AC-1 (<math>I_e</math>):</b>	(690 V) 55 °C 400 A (690 V) 40 °C 500 A (1000 V) 40 °C 375 A (1000 V) 55 °C 325 A (690 V) 70 °C 325 A (1000 V) 70 °C 260 A

<b>Rated Operational Current AC-3 (<math>I_e</math>):</b>	(1000 V) 55 °C 100 A (415 V) 55 °C 305 A (690 V) 55 °C 290 A (220 / 230 / 240 V) 55 °C 305 A (440 V) 55 °C 305 A (380 / 400 V) 55 °C 305 A (500 V) 55 °C 290 A
<b>Rated Operational Power AC-3 (<math>P_e</math>):</b>	(220 / 230 / 240 V) 90 kW (380 / 400 V) 160 kW (415 V) 160 kW (440 V) 160 kW (500 V) 200 kW (690 V) 250 kW (1000 V) 132 kW
<b>Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:</b>	8 x $I_e$ AC-3
<b>Rated Making Capacity AC-3 acc. to IEC 60947-4-1:</b>	10 x $I_e$ AC-3
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 500 A
<b>Rated Short-time Withstand Current (<math>I_{cw}</math>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 2440 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 1409 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 3050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 996 A
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 4600 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 3800 A
<b>Maximum Electrical Switching Frequency:</b>	AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour
<b>Rated Operational Current DC-1 (<math>I_e</math>):</b>	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
<b>Rated Operational Current DC-3 (<math>I_e</math>):</b>	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
<b>Rated Operational Current DC-5 (<math>I_e</math>):</b>	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	Main Circuit 8 kV
<b>Mechanical Durability:</b>	5 million
<b>Maximum Mechanical Switching Frequency:</b>	300 cycles per hour
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) 0.85 x $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70$ °C) °C

<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	60 Hz 24 ... 60 V 50 Hz 24 ... 60 V DC Operation 20 ... 60 V
<b>Coil Consumption:</b>	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 475 V·A Holding at Max. Rated Control Circuit Voltage DC 3 W Holding at Max. Rated Control Circuit Voltage 50 Hz 8.5 V·A Pull-in at Max. Rated Control Circuit Voltage DC 400 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 475 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 8.5 V·A
<b>Operate Time:</b>	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
<b>Connecting Capacity Main Circuit:</b>	Rigid Al-Cable 1 x 185 ... 240 mm <sup>2</sup> Flexible 2 x 70 ... 185 mm <sup>2</sup> Rigid Cu-Cable 1 x 6 ... 300 mm <sup>2</sup>
<b>Connecting Capacity Auxiliary Circuit:</b>	Solid 2 x 1 ... 4 mm <sup>2</sup> Flexible with Insulated Ferrule 2 x 0.75 ... 2.5 mm <sup>2</sup> Stranded 2 x 1 ... 4 mm <sup>2</sup> Flexible 2x0.75 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2 x 0.75 ... 2.5 mm <sup>2</sup>
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
<b>Terminal Type:</b>	Main Circuit: Bars

## Environmental

<b>Ambient Air Temperature:</b>	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -25 ... +50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40 ... +70 °C Close to Contactor for Storage -40 ... +70 °C
<b>Maximum Operating Altitude Permissible:</b>	3000 m
<b>RoHS Status:</b>	Following EU Directive 2002/95/EC August 18, 2005 and amendment

## Technical UL/CSA

<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V
<b>General Use Rating UL/CSA:</b>	(600 V AC) 400 A
<b>Horsepower Rating UL/CSA:</b>	(208 V AC) Three Phase 100 Hp (440 ... 480 V AC) Three Phase 250 Hp (550 ... 600 V AC) Three Phase 300 Hp (220 ... 240 V AC) Three Phase 125 Hp (200 V AC) Three Phase 100 Hp

## Certificates and Declarations (Document Number)

<b>ABS Certificate:</b>	14-LD1092198-PDA
<b>BV Certificate:</b>	BV_36353_A0BV

<b>CB Certificate:</b>	SE-89316
<b>CCC Certificate:</b>	CQC_2014010304676670
<b>CCS Certificate:</b>	GB14T00030
<b>cUL Certificate:</b>	20121217-E36588
<b>Declaration of Conformity - CE:</b>	2CMT004749
<b>DNV Certificate:</b>	DNV_E-14043
<b>EAC Certificate:</b>	EAC_RUC-SE.ME77.B.01005
<b>Environmental Information:</b>	2CMT004732
<b>GL Certificate:</b>	GL_95073-14HH
<b>Instructions and Manuals:</b>	1SFC100008M0201
<b>LR Certificate:</b>	LR_14_70011(E1)
<b>PRS Certificate:</b>	TE_2092_880423_16
<b>RINA Certificate:</b>	ELE060313XG_002
<b>RMRS Certificate:</b>	9AKK107045A6978
<b>RoHS Information:</b>	1SFC101055D0202
<b>UL Listing Card:</b>	UL_E36588

## Container Information

<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	223 mm
<b>Package Level 1 Depth / Length:</b>	175 mm
<b>Package Level 1 Height:</b>	270 mm
<b>Package Level 1 Gross Weight:</b>	5.31 kg
<b>Package Level 1 EAN:</b>	7320500481707

## Classifications

<b>Object Classification Code:</b>	Q
<b>E-nummer:</b>	3210161
<b>ETIM 4:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 5:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 6:</b>	EC000066 - Power contactor, AC switching
<b>UNSPSC:</b>	39121529

