AF305-30-11-13 100-250V 50/60Hz / DC



General Information

AF305-30-11-13 100-250V 50/60Hz / DC **Extended Product Type:**

Product ID: 1SEL587002R1311 EAN: 7320500481776

Catalog Description: AF305-30-11-13 Contactor

A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-Long Description:

pass and Distribution application up to max 1000 V. Operated with wide control voltage

range 100-250 V, 50/60 Hz and DC

Categories

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

Ordering

Minimum Order Quantity: 1 piece **Customs Tariff Number:** 85364900 EAN: 7320500481776

Dimensions

Product Net Depth: 180.0 mm **Product Net Height:** 225.0 mm **Product Net Weight:** 4.640 kg **Product Net Width:** 140.0 mm

Container Information

Package Level 1 Width: 223 mm Package Level 1 Length: 175 mm Package Level 1 Height: 270 mm Package Level 1 Gross Weight: 5.31 kg Package Level 1 EAN: 7320500481776 Package Level 1 Units: 1 piece

Technical

Number of Main Contacts NC: 0 **Number of Auxiliary Contacts NO:** 1 **Number of Auxiliary Contacts NC:**

Rated Operational Voltage: Main Circuit 1000 V Rated Frequency (f): Main Circuit 50/60 Hz

Conventional Free-air Thermal

Current (Ith):

acc. to IEC 60947-4-1, Open Contactors q = 40 °C 500 A

Rated Operational Current AC-1 (Ie): (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

Rated Operational Current AC-3 (Ie): (1000 V) 55 °C 100 A

(220 / 230 / 240 V) 55 °C 305 A

(690 V) 55 °C 290 A (415 V) 55 °C 305 A (440 V) 55 °C 305 A (380 / 400 V) 55 °C 305 A (500 V) 55 °C 290 A

Rated Operational Power AC-3 (Pe): (500 V) 200 kW

(1000 V) 132 kW (690 V) 250 kW (220 / 230 / 240 V) 90 kW (380 / 400 V) 160 kW (440 V) 160 kW (415 V) 160 kW

Rated Breaking Capacity AC-3 acc. 8 x le AC-3

to IEC 60947-4-1:

Rated Making Capacity AC-3 acc. to 10 x le AC-3

IEC 60947-4-1:

Short-Circuit Protective Devices: gG Type Fuses 500 A

Rated Short-time Withstand Current at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 500 A (I_{cw}):

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 1 s 3050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 996 A

Maximum Breaking Capacity:

cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 4600 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 3800 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 400 A

(220 V) 3 Poles in Series, 40 °C 400 A

Rated Operational Current DC-3 (I $_{e}$): (110 V) 2 Poles in Series, 40 °C 400 A

(220 V) 3 Poles in Series, 40 °C 400 A

Rated Operational Current DC-5 (I_e): (110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 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

Coil Operating Limits:

Frequency:

300 cycles per hour

(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at θ ≤ 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 385 V·A
Holding at Max. Rated Control Circuit Voltage DC 4.5 W
Holding at Max. Rated Control Circuit Voltage 50 Hz 17.5 V·A
Pull-in at Max. Rated Control Circuit Voltage DC 410 W
Pull-in at Max. Rated Control Circuit Voltage 50 Hz 385 V·A
Holding at Max. Rated Control Circuit Voltage 60 Hz 17.5 V·A

Operate Time:

Between Coil Energization and NO Contact Closing 25...55 ms Between Coil De-energization and NO Contact Opening 37...47 ms

Connecting Capacity Main Circuit:

Rigid Al-Cable 1x185...240 mm² Flexible 1x16...240 mm² Rigid Cu-Cable 2x70...185 mm²

Connecting Capacity Auxiliary

Circuit:

Solid 2x1...4 mm²

Flexible with Insulated Ferrule 2x0.75...2.5 mm²

Stranded 1x1...4 mm² Flexible 1x0.75...2.5 mm²

Flexible with Ferrule 1x0.75...2.5 mm²

acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00

Main Circuit: Bars

Number of Main Contacts NO:

Environmental

Terminal Type:

Maximum Operating Altitude

Permissible:

3000 m

RoHS Status:

Degree of Protection:

Following EU Directive 2002/95/EC August 18, 2005 and amendment

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 without mermal 3/2 Neray (
Close to Contactor for Storage -40...+70 °C

Technical UL/CSA

General Use Rating UL/CSA: (600 V AC) 400 A

Horsepower Rating UL/CSA: (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

Maximum Operating Voltage

UL/CSA:

Main Circuit 600 V

Certificates and Declarations (Document Number)

 Instructions and Manuals:
 1SFC100008M0201

 CB Certificate:
 SE-73043M1

 Data Sheet, Technical Information:
 1SFC101070D0201

 Declaration of Conformity - CE:
 2CMT004749

 RINA Certificate:
 ELE060313XG/002

 RoHS Information:
 1SFC101055D0202

Classifications

 E-nummer:
 3210163

 ETIM 4:
 EC000066 - Magnet contactor, AC-switching

 ETIM 5:
 EC000066 - Magnet contactor, AC-switching

 UNSPSC:
 39121529

 Object Classification Code:
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