AF116-30-11-13 100-250V 50/60Hz / DC



General Information

AF116-30-11-13 100-250V 50/60Hz / DC **Extended Product Type:**

Product ID: 1SFI 427001R1311 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

Categories

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

Ordering

Minimum Order Quantity: 1 piece **Customs Tariff Number:** 85364900 EAN: 7320500476376

Dimensions

Product Net Depth: 126.0 mm **Product Net Height:** 150.0 mm **Product Net Weight:** 1.644 kg **Product Net Width:** 90.0 mm

Container Information

Package Level 1 Width: 194 mm Package Level 1 Length: 115 mm Package Level 1 Height: 169 mm Package Level 1 Gross Weight: 1.57 kg Package Level 1 EAN: 7320500476376 1 piece Package Level 1 Units:

Technical

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

Rated Operational Voltage: Main Circuit 690 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 160 A

Rated Operational Current AC-1 (Ie): (690 V) 55 °C 145 A

(690 V) 40 °C 160 A (690 V) 70 °C 130 A

Rated Operational Current AC-3 (Ie):

(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 (Pe): (500 V) 75 kW

(220 / 230 / 240 V) 30 kW

(690 V) 55 kW (380 / 400 V) 55 kW (440 V) 75 kW (415 V) 55 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 250 A

(I_{cw}):

Rated Short-time Withstand Current 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

cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 2000 A Maximum Breaking Capacity:

cos phi=0.45 (cos phi=0.35 for le > 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 (Ie): (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 (Ie): (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 (Ie): (110 V) 2 Poles in Series, 40 °C 145 A

(220 V) 3 Poles in Series, 40 °C 145 A

Rated Insulation Voltage (Ui): 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

300 cycles per hour

Frequency:
Coil Operating Limits:

(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at $\theta \le 70$ °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 Energization and NO Contact Closing 25...55 ms Between Coil De-energization and NO Contact Opening 37...47 ms

Connecting Capacity Main Circuit:

Flexible 2x10...70 mm² Rigid Cu-Cable 2x10...95 mm²

Connecting Capacity Auxiliary

Circuit:

Solid 2x1...4 mm²

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

Stranded 2x1...4 mm² Flexible 2x0.75...2.5 mm²

Flexible with Ferrule 2x0.75...2.5 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: Double Clamp

Number of Main Contacts NO:

Environmental

Maximum Operating Altitude

Permissible:

3000 m

RoHS Status:

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 $^{\circ}$ C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40...+70 $^{\circ}$ C

Close to Contactor for Storage -40...+70 °C

Technical UL/CSA

General Use Rating UL/CSA: (600 V AC) 160 A

Horsepower Rating UL/CSA: (208)

(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

Maximum Operating Voltage

UL/CSA:

Main Circuit 600 V

Certificates and Declarations (Document Number)

Instructions and Manuals: 1SFC100003M0201

 CB Certificate:
 SE-70479

 CCC Certificate:
 CQC_2013010304604055

 Data Sheet, Technical Information:
 1SFC101070D0201

 Declaration of Conformity - CE:
 2CMT004242

 RINA Certificate:
 ELE060313XG/002

 RoHS Information:
 1SFC101055D0202

Classifications

E-nummer:3210068ETIM 4:EC000066 - Magnet contactor, AC-switchingETIM 5:EC000066 - Magnet contactor, AC-switching

UNSPSC: 39121529

Object Classification Code: Q

