



English



AF40-30-00-13

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General Information

Extended Product Type:

AF40-30-00-13

Product ID:

1SBL347001R1300

EAN:

3471523132030

Catalog Description:

AF40-30-00-13 100-250V50/60HZ-DC Contactor

Long Description:

The AF40-30-00-13 is a 3 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 18.5 kW / 400 V AC (AC-3) or 30 hp / 480 V UL and switching power circuits up to 70 A (AC-1) or 60 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage rang... [Show more](#)

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Ordering

Minimum Order Quantity:

1 piece

Popular Downloads

Data Sheet, Technical Information:

[1SBC100214C0202 - Main catalog Motor protection and control Manual motor starters, contactors and overload relays \(PDF\) - Edition 2024](#)

Instructions and Manuals:

[Installation instructions AF\(C\)40\(B\)...96\(B\)-30 Contactors, CA4, CAL4, CAT4, CC4, LDC4 Accessories](#)

Instructions and Manuals (Part 2):

[Contactors and Overload relays guide](#)

CAD Dimensional Drawing:

[Information - 2D and 3D files for CAD systems](#)

Dimensions

Product Net Width:

55 mm

Product Net Depth / Length:

111 mm

Product Net Height:

125.5 mm

Product Net Weight:

0.95 kg

Technical

Number of Main Contacts NO:

3

Number of Main Contacts NC:

0

Number of Auxiliary Contacts NO:

0

Number of Auxiliary Contacts NC:

0

Number of Poles:

3P

Standards:

IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60335-2-40 LZGH2 A2L, UL 60947-1, UL 60947-4-1, CSA C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 60947-1:22, CSA C22.2 No. 60947-4-1:22

Rated Operational Voltage:

Main Circuit 690 V

Rated Frequency (f):

Control Circuit 50 / 60 Hz

Main Circuit 50 / 60 Hz

Conventional Free-air Thermal Current (I_{th}):acc. to IEC 60947-4-1, Open Contactors $\Theta = 40^\circ\text{C}$ 105 A**Rated Operational Current AC-1 (I_e):**

(690 V) 40 °C 70 A

(690 V) 60 °C 60 A

(690 V) 70 °C 50 A

Rated Operational Current AC-3 (I_e):

(415 V) 60 °C 40 A

(440 V) 60 °C 40 A

(500 V) 60 °C 35 A

(690 V) 60 °C 25 A

(380 / 400 V) 60 °C 40 A

(220 / 230 / 240 V) 60 °C 40 A

Rated Operational Current AC-3e (I_e):

(415 V) 60 °C 40 A

(440 V) 60 °C 40 A

(500 V) 60 °C 35 A

(690 V) 60 °C 25 A

(380 / 400 V) 60 °C 40 A

(220 / 230 / 240 V) 60 °C 40 A

Rated Operational Current DC-1 (I_e):

(110 V) 2 Poles in Series, 40 °C 70 A

(110 V) 2 Poles in Series, 60 °C 60 A

(110 V) 2 Poles in Series, 70 °C 50 A

(110 V) 3 Poles in Series, 40 °C 70 A

(110 V) 3 Poles in Series, 60 °C 60 A

(110 V) 3 Poles in Series, 70 °C 50 A

(220 V) 3 Poles in Series, 40 °C 70 A

(220 V) 3 Poles in Series, 60 °C 60 A

(220 V) 3 Poles in Series, 70 °C 50 A

(72 V) 1-Pole, 40 °C 70 A

(72 V) 1-Pole, 60 °C 60 A

(72 V) 1-Pole, 70 °C 50 A

(72 V) 2 Poles in Series, 40 °C 70 A

(72 V) 2 Poles in Series, 60 °C 60 A

(72 V) 2 Poles in Series, 70 °C 50 A

(72 V) 3 Poles in Series, 40 °C 70 A

(72 V) 3 Poles in Series, 60 °C 60 A

(72 V) 3 Poles in Series, 70 °C 50 A

Rated Operational Current DC-3 (I_e):

(110 V) 2 Poles in Series, 40 °C 70 A

(110 V) 2 Poles in Series, 60 °C 60 A

(110 V) 2 Poles in Series, 70 °C 50 A

(110 V) 3 Poles in Series, 40 °C 70 A

(110 V) 3 Poles in Series, 60 °C 60 A

(110 V) 3 Poles in Series, 70 °C 50 A

(220 V) 3 Poles in Series, 40 °C 70 A
(220 V) 3 Poles in Series, 60 °C 60 A
(220 V) 3 Poles in Series, 70 °C 50 A
(72 V) 1-Pole, 40 °C 70 A
(72 V) 1-Pole, 60 °C 60 A
(72 V) 1-Pole, 70 °C 50 A
(72 V) 2 Poles in Series, 40 °C 70 A
(72 V) 2 Poles in Series, 60 °C 60 A
(72 V) 2 Poles in Series, 70 °C 50 A
(72 V) 3 Poles in Series, 40 °C 70 A
(72 V) 3 Poles in Series, 60 °C 60 A
(72 V) 3 Poles in Series, 70 °C 50 A

Rated Operational Current DC-5 (I_o):

(110 V) 2 Poles in Series, 40 °C 70 A
(110 V) 2 Poles in Series, 60 °C 60 A
(110 V) 2 Poles in Series, 70 °C 50 A
(110 V) 3 Poles in Series, 40 °C 70 A
(110 V) 3 Poles in Series, 60 °C 60 A
(110 V) 3 Poles in Series, 70 °C 50 A
(220 V) 3 Poles in Series, 40 °C 70 A
(220 V) 3 Poles in Series, 60 °C 60 A
(220 V) 3 Poles in Series, 70 °C 50 A
(72 V) 1-Pole, 40 °C 70 A
(72 V) 1-Pole, 60 °C 60 A
(72 V) 1-Pole, 70 °C 50 A
(72 V) 2 Poles in Series, 40 °C 70 A
(72 V) 2 Poles in Series, 60 °C 60 A
(72 V) 2 Poles in Series, 70 °C 50 A
(72 V) 3 Poles in Series, 40 °C 70 A
(72 V) 3 Poles in Series, 60 °C 60 A
(72 V) 3 Poles in Series, 70 °C 50 A

Rated Operational Power AC-3 (P_o):

(400 V) 18.5 kW
(415 V) 22 kW
(440 V) 22 kW
(500 V) 22 kW
(690 V) 22 kW
(380 / 400 V) 18.5 kW
(220 / 230 / 240 V) 11 kW

Rated Operational Power AC-3e (P_e):

(415 V) 22 kW
(440 V) 22 kW
(500 V) 22 kW
(690 V) 22 kW
(380 / 400 V) 18.5 kW
(220 / 230 / 240 V) 11 kW

Rated Short-time Withstand Current Low Voltage (I_{cw}):

at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A
at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A

Maximum Breaking Capacity:

cos phi=0.45 (cos phi=0.35 for I_e > 100 A) at 440 V 950 A
cos phi=0.45 (cos phi=0.35 for I_e > 100 A) at 690 V 600 A

Rated Insulation Voltage (U_i):

acc. to IEC 60947-4-1 690 V
acc. to UL/CSA 600 V

Rated Impulse Withstand Voltage (U_{imp}):

6 kV

Maximum Electrical Switching Frequency:

(AC-1) 600 cycles per hour

(AC-2 / AC-4) 150 cycles per hour

(AC-3) 1200 cycles per hour

Maximum Mechanical Switching Frequency:

3600 cycles per hour

Rated Control Circuit Voltage (U_c):

50 Hz 100 ... 250 V

60 Hz 100 ... 250 V

DC Operation 100 ... 250 V

Coil Consumption:

Average Holding Value 50 / 60 Hz 4 V·A

Average Holding Value 50 Hz 4 V·A

Average Holding Value 60 Hz 4 V·A

Average Holding Value DC 2 W

Average Holding Value, from Warm State 2 W

Power Loss:

at Rated Operating Conditions AC-1 per Pole 3 W

at Rated Operating Conditions AC-3 per Pole 1 W

Operate Time:

Between Coil De-energization and NC Contact Closing 19 ... 105 ms

Between Coil De-energization and NO Contact Opening 17 ... 100 ms

Between Coil Energization and NC Contact Opening 38 ... 95 ms

Between Coil Energization and NO Contact Closing 42 ... 100 ms

Mounting on DIN Rail:

TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715

TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715

Mounting by Screws (not supplied):

2 x M4 or 2 x M6 screws placed diagonally

Connecting Capacity Main Circuit:

Flexible with Ferrule 1/2x 4 ... 35 mm²

Flexible with Insulated Ferrule 1/2x 4 ... 35 mm²

Rigid Stranded 1/2x 6 ... 35 mm²

Connecting Capacity Control Circuit:

Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²

Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²

Rigid Solid 1/2x 1 ... 2.5 mm²

Rigid Stranded 1/2x 1 ... 2.5 mm²

Wire Stripping Length:

Control Circuit 10 mm

Main Circuit 16 mm

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 IP10

Recommended Screw Driver:

Pozidriv PZ

Tightening Torque:

Control Circuit 1.2 N·m

Main Circuit 4 N·m

Terminal Type:

Screw Terminals

Product Name:

Block Contactor

Technical UL/CSA

NEMA Size:

2

Continuous Current Rating NEMA:

45 A

Horsepower Rating NEMA:

(115 V AC) Single Phase 3 Hp
 (200 V AC) Three Phase 10 Hp
 (230 V AC) Single Phase 7-1/2 Hp
 (230 V AC) Three Phase 15 Hp
 (460 V AC) Three Phase 25 Hp
 (575 V AC) Three Phase 25 Hp

Maximum Operating Voltage UL/CSA:

Main Circuit 600 V

General Use Rating UL/CSA:

(600 V AC) 60 A

Horsepower Rating UL/CSA:

(120 V AC) Single Phase 3 hp
 (200 ... 208 V AC) Three Phase 10 hp
 (220 ... 240 V AC) Three Phase 15 hp
 (240 V AC) Single Phase 7-1/2 hp
 (440 ... 480 V AC) Three Phase 30 hp
 (550 ... 600 V AC) Three Phase 40 hp

Connecting Capacity Main Circuit UL/CSA:

Rigid Stranded 1/2x 10-2 AWG

Connecting Capacity Control Circuit UL/CSA:

Rigid Solid 1/2x 18-14 AWG
 Rigid Stranded 1/2x 18-14 AWG

Tightening Torque UL/CSA:

Control Circuit 11 in-lb
 Main Circuit 35 in-lb

Full Load Amps Motor Use:

(120 V AC) Single Phase 34 A
 (200 ... 208 V AC) Three Phase 32.2 A
 (220 ... 240 V AC) Three Phase 42 A
 (240 V AC) Single Phase 40 A
 (440 ... 480 V AC) Three Phase 41 A
 (550 ... 600 V AC) Three Phase 40 A

Environmental

Ambient Air Temperature:

Close to Contactor Fitted with Thermal O/L Relay -40 ... 70 °C
 Close to Contactor without Thermal O/L Relay -40 ... 70 °C
 Close to Contactor for Storage -60 ... +80 °C

Climatic Withstand:

Category B according to IEC 60947-1 Annex Q

Maximum Operating Altitude Permissible:

Without Derating 3000 m

Resistance to Shock acc. to IEC 60068-2-27:

Closed, Shock Direction: A 25 g
 Closed, Shock Direction: B1 25 g
 Closed, Shock Direction: B2 15 g
 Closed, Shock Direction: C1 25 g

Closed, Shock Direction: C2 25 g
Open, Shock Direction: B1 5 g

Resistance to Vibrations:

3g Closed Position & 3g Open Position 5 ... 300 Hz

Pollution Degree:

3

Material Compliance

Conflict Minerals Reporting Template (CMRT):

[CMRT - Conflict Minerals Reporting Template](#)

REACH Declaration:

[REACH - Letter of Confirmation for block contactors, contactor relays, installation contactors, mini contactors, mini contactor relays, thermal overload relays, electronic overload relays and related accessories](#)

RoHS Information:

[RoHS II declaration for block contactors, installation contactors, mini contactors, mini contactor relays, thermal overload relays, electronic overload relays and related accessories](#)

RoHS Status:

Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

SCIP:

32002722-9adc-4d60-b9d4-fa0b8941454b France

Simplified SCIP:

0363edf7-0705-44a2-a8db-ee90992e79a1 Sweden
d347bfae-af24-49a5-9ac4-d3c66bd7a51e France
b04fda13-35c3-4bf8-b80f-ef0c636f4283 Poland
92761cb3-4806-43ed-bb04-43f235c34c1b Sweden
c40e5db5-f20b-4c32-a229-6cf5aea0dd62 Germany
643255ac-732c-4217-a174-297f27f05bb4 Germany
5138f2a4-8987-4bcf-978f-852d159d58f4 Bulgaria
264668cf-87a9-4865-9054-46f8a01e0c49 Belgium
99d618a8-d94a-40d6-9d4c-1abd02a9b378 Portugal
d68760d3-4322-4e34-9b65-2bbe53486d0c Hungary
116de3e1-3a7a-44ea-b3da-51694ac449e4 Norway
12ccfd45-e1f4-4361-b19b-67e01f179859 Poland
ed30a39e-b3e4-4980-929c-5c63a3dda5cd Spain
9ab5e309-fcae-4c72-94ea-43020b9a4974 Germany
bc54b264-f551-4b51-9205-c62bbdc47bd2 Greece
7081aa9a-8f64-4f20-8608-b8877e1bffb4 Netherlands
9c345ac9-8727-40cb-b336-e32b39d4b635 Italy
860630b9-3860-4680-915e-c63ecc0003ab Finland
4af1b451-efda-4f5d-9103-35dda7c1d117 Germany
707f923c-0f2d-43e4-b4a0-c4f1abb2eb8b Denmark
b54a6a98-667d-4aa8-ab40-b64fb4f13047 Poland
d71e326b-49ee-4ffc-9f13-f66fcf2c0520 Czech Republic
3f1087ca-7321-4583-a272-14b4362f7319 Germany

Toxic Substances Control Act - TSCA:

[Toxic Substances Control Act \(TSCA\) declaration for Contactors](#)

WEEE B2C / B2B:

Business To Business

WEEE Category:

5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

ABB EcoSolutions:

Yes

End Of Life Disassembling Instructions:End of life instruction AF(S)40/52/65/80/96(B)(RT) Contactors**Environmental Product Declaration - EPD:**Environmental Product Declaration AF40, AF52, AF65 (CN)Environmental Product Declaration AF(S)40(B), AF(S)52(B), AF(S)65(B)(FR)**Sustainable Material Content in Packaging (wt. %):**

FSC Recycled Paper - 94.6 %

Sustainable Material Content in Product (wt. %):

Recycled Metal - 28.2 %

Certificates and Declarations**A2L Certificate – UL:**UL-US Certificate of Compliance AF40 ... AF96 3-pole contactors - UL 60335-2-40 Household and Similar Electrical Appliances - Safety - Part 2 40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and DehumidifiersUL-CA Certificate of Compliance AF40 ... AF96 3-pole contactors - CSA C22.2 No. 60335-2-40 Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers**ABS Certificate:**ABS Certificate, AF(S)09 to AF(S)96 contactors, NF contactor relays and CA4, CC4, CAL4, CAT4 auxiliary contact blocks, TEF4 electronic timers**BV Certificate:**BV_2634H36994B1**CB Certificate:**CB Certificate AF(S)40(B), (S)AF52(B), AF(S)65(B) 3 and 4-pole contactors**CCC Certificate:**CQC Certificate, Contactor, AF*40-30-**-**, AF40-40-**-**, AF40-22-**-**, AF*52-30-**-**, AF52-40-**-**, AF*65-30-**-**, Made in France**CQC Certificate:**CQC Certificate, Contactor, AF*40-30-**-**, AF40-40-**-**, AF40-22-**-**, AF*52-30-**-**, AF52-40-**-**, AF*65-30-**-**, Made in FranceCQC Certificate, Contactor, AF40, AF52, AF65, AFC40, AFC52, AFC65, Made in China**Declaration of Conformity - CCC:**CCC Declaration of Conformity, Contactor, AF*40-30-**-**, AF40-40-**-**, AF40-22-**-**, AF*52-30-**-**, AF52-40-**-**, AF*65-30-**-**, Made in FranceCCC Declaration of Conformity, Contactor, AF(C)40, AF52(C), AF65(C), AFC78 Made in China**Declaration of Conformity - CE:**EU Declaration of Conformity AF09... AF96-30-..., AF09...38(Z)-30..K 3-pole Contactors**Declaration of Conformity - UKCA:**UK Declaration of Conformity AF09... AF96-30-..., AF09...38(Z)-30..K 3-pole Contactors**DNV Certificate:**DNV Certificate AF(S)09...96 3-pole & AF09...80 4-pole contactors with screw, spring, push-in terminals**KC Certificate:**KC Certificate AF40 3-pole Contactors**LR Certificate:**LRS Certificate AF(S)09...(K)... AF96 3 and 4-pole contactors and CA(L)4...(K), CAT4, CC4 auxiliary contact blocks**RINA Certificate:**Rina Certificate for AF09...AF96 contactors, NF contactor relays and accessories, screw and spring terminals**RMRS Certificate:**RMRS Certificate AF(S)09(S)...AF(S)38 3-pole and 4-pole, AF(S)40..96 3-pole contactors with screw, push-in and spring terminals**UL Certificate:**UL-US-L312527-1141-10303102-9UL-CA-L312527-4141-10303102-9**UL Listing Card:**UL_E312527

Container Information

Package Level 1 Units:

box 1 piece

Package Level 1 Width:

150 mm

Package Level 1 Depth / Length:

150 mm

Package Level 1 Height:

97 mm

Package Level 1 Gross Weight:

1.05 kg

Package Level 1 EAN:

3471523132030

Package Level 2 Units:

box 10 piece

Package Level 2 Width:

250 mm

Package Level 2 Depth / Length:

300 mm

Package Level 2 Height:

300 mm

Package Level 2 Gross Weight:

10.5 kg

Package Level 3 Units:

240 piece

External Classifications and Standards

Object Classification Code:

Q

ETIM 7:

EC000066 - Power contactor, AC switching

ETIM 8:

EC000066 - Power contactor, AC switching

ETIM 9:

EC000066 - Power contactor, AC switching

eClass:

V11.0 : 27371003

UNSPSC:

39121529

IDEA Granular Category Code (IGCC):

4758 >> Iec Contactors

E-Number (Finland):

3706599

E-Number (Sweden):

3210033

