





## AF65-30-00-13

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### General Information

**Extended Product Type:**

AF65-30-00-13

**Product ID:**

1SBL387001R1300

**EAN:**

3471523132634

**Catalog Description:**

AF65-30-00-13 100-250V50/60HZ-DC Contactor

**Long Description:**

The AF65-30-00-13 is a 3 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 30 kW / 400 V AC (AC-3) or 50 hp / 480 V UL and switching power circuits up to 105 A (AC-1) or 90 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range... [Show More](#)



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## Ordering

### Minimum Order Quantity:

1 piece

### Customs Tariff Number:

85364900

## 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](#)

### 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

**Standards:**

IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-1, UL 60947-4-1, 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  $\Theta = 40\text{ }^{\circ}\text{C}$  105 A

**Rated Operational Current AC-1 ( $I_e$ ):**

(690 V) 40  $^{\circ}\text{C}$  105 A

(690 V) 60  $^{\circ}\text{C}$  90 A

(690 V) 70  $^{\circ}\text{C}$  80 A

**Rated Operational Current AC-3 ( $I_e$ ):**

(415 V) 60  $^{\circ}\text{C}$  65 A

(440 V) 60  $^{\circ}\text{C}$  65 A

(500 V) 60  $^{\circ}\text{C}$  55 A

(690 V) 60  $^{\circ}\text{C}$  39 A

(380 / 400 V) 60  $^{\circ}\text{C}$  65 A

(220 / 230 / 240 V) 60  $^{\circ}\text{C}$  65 A

**Rated Operational Current AC-3e ( $I_e$ ):**

(415 V) 60  $^{\circ}\text{C}$  65 A

(440 V) 60  $^{\circ}\text{C}$  65 A

(500 V) 60  $^{\circ}\text{C}$  55 A

(690 V) 60  $^{\circ}\text{C}$  39 A

(380 / 400 V) 60  $^{\circ}\text{C}$  65 A

(220 / 230 / 240 V) 60  $^{\circ}\text{C}$  65 A

**Rated Operational Power AC-3 ( $P_e$ ):**

(400 V) 30 kW

(415 V) 37 kW

(440 V) 37 kW

(500 V) 37 kW

(690 V) 37 kW

(380 / 400 V) 30 kW

(220 / 230 / 240 V) 18.5 kW

**Rated Operational Power AC-3e ( $P_e$ ):**

(415 V) 37 kW

(440 V) 37 kW

(500 V) 37 kW

(690 V) 37 kW

(380 / 400 V) 30 kW

(220 / 230 / 240 V) 18.5 kW

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

at 40  $^{\circ}\text{C}$  Ambient Temp, in Free Air, from a Cold State 10 s 600 A

at 40  $^{\circ}\text{C}$  Ambient Temp, in Free Air, from a Cold State 15 min 110 A

at 40  $^{\circ}\text{C}$  Ambient Temp, in Free Air, from a Cold State 1 min 250 A

at 40  $^{\circ}\text{C}$  Ambient Temp, in Free Air, from a Cold State 1 s 1000 A

at 40  $^{\circ}\text{C}$  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  $I_e > 100\text{ A}$ ) at 440 V 950 A

$\cos \phi = 0.45$  ( $\cos \phi = 0.35$  for  $I_e > 100\text{ A}$ ) at 690 V 600 A

**Maximum Electrical Switching Frequency:**

(AC-1) 600 cycles per hour

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

(AC-3) 1200 cycles per hour

**Rated Operational Current DC-1 (I<sub>o</sub>):**

- (110 V) 2 Poles in Series, 40 °C 105 A
- (110 V) 2 Poles in Series, 60 °C 90 A
- (110 V) 2 Poles in Series, 70 °C 80 A
- (110 V) 3 Poles in Series, 40 °C 105 A
- (110 V) 3 Poles in Series, 60 °C 90 A
- (110 V) 3 Poles in Series, 70 °C 80 A
- (220 V) 3 Poles in Series, 40 °C 105 A
- (220 V) 3 Poles in Series, 60 °C 90 A
- (220 V) 3 Poles in Series, 70 °C 80 A
- (72 V) 1-Pole, 40 °C 105 A
- (72 V) 1-Pole, 60 °C 90 A
- (72 V) 1-Pole, 70 °C 80 A
- (72 V) 2 Poles in Series, 40 °C 105 A
- (72 V) 2 Poles in Series, 60 °C 90 A
- (72 V) 2 Poles in Series, 70 °C 80 A
- (72 V) 3 Poles in Series, 40 °C 105 A
- (72 V) 3 Poles in Series, 60 °C 90 A
- (72 V) 3 Poles in Series, 70 °C 80 A

**Rated Operational Current DC-3 (I<sub>o</sub>):**

- (110 V) 2 Poles in Series, 40 °C 105 A
- (110 V) 2 Poles in Series, 60 °C 90 A
- (110 V) 2 Poles in Series, 70 °C 80 A
- (110 V) 3 Poles in Series, 40 °C 105 A
- (110 V) 3 Poles in Series, 60 °C 90 A
- (110 V) 3 Poles in Series, 70 °C 80 A
- (220 V) 3 Poles in Series, 40 °C 105 A
- (220 V) 3 Poles in Series, 60 °C 90 A
- (220 V) 3 Poles in Series, 70 °C 80 A
- (72 V) 1-Pole, 40 °C 105 A
- (72 V) 1-Pole, 60 °C 90 A
- (72 V) 1-Pole, 70 °C 80 A
- (72 V) 2 Poles in Series, 40 °C 105 A
- (72 V) 2 Poles in Series, 60 °C 90 A
- (72 V) 2 Poles in Series, 70 °C 80 A
- (72 V) 3 Poles in Series, 40 °C 105 A
- (72 V) 3 Poles in Series, 60 °C 90 A
- (72 V) 3 Poles in Series, 70 °C 80 A

**Rated Operational Current DC-5 (I<sub>o</sub>):**

- (110 V) 2 Poles in Series, 40 °C 105 A
- (110 V) 2 Poles in Series, 60 °C 90 A
- (110 V) 2 Poles in Series, 70 °C 80 A
- (110 V) 3 Poles in Series, 40 °C 105 A
- (110 V) 3 Poles in Series, 60 °C 90 A
- (110 V) 3 Poles in Series, 70 °C 80 A
- (220 V) 3 Poles in Series, 40 °C 105 A
- (220 V) 3 Poles in Series, 60 °C 90 A
- (220 V) 3 Poles in Series, 70 °C 80 A
- (72 V) 1-Pole, 40 °C 105 A
- (72 V) 1-Pole, 60 °C 90 A
- (72 V) 1-Pole, 70 °C 80 A
- (72 V) 2 Poles in Series, 40 °C 105 A
- (72 V) 2 Poles in Series, 60 °C 90 A
- (72 V) 2 Poles in Series, 70 °C 80 A
- (72 V) 3 Poles in Series, 40 °C 105 A
- (72 V) 3 Poles in Series, 60 °C 90 A
- (72 V) 3 Poles in Series, 70 °C 80 A

**Rated Insulation Voltage (U<sub>i</sub>):**

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

**Rated Impulse Withstand Voltage (U<sub>imp</sub>):**

6 kV

**Maximum Mechanical Switching Frequency:**

3600 cycles per hour

**Rated Control Circuit Voltage (U<sub>c</sub>):**

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

**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 mm<sup>2</sup>

Flexible with Insulated Ferrule 1/2x 4 ... 35 mm<sup>2</sup>

Rigid Stranded 1/2x 6 ... 35 mm<sup>2</sup>

**Connecting Capacity Control Circuit:**

Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm<sup>2</sup>

Rigid Solid 1/2x 1 ... 2.5 mm<sup>2</sup>

Rigid Stranded 1/2x 1 ... 2.5 mm<sup>2</sup>

**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

**Terminal Type:**

Screw Terminals

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**Technical UL/CSA****Maximum Operating Voltage UL/CSA:**

Main Circuit 600 V

**General Use Rating UL/CSA:**

(600 V AC) 90 A

**Horsepower Rating UL/CSA:**

(120 V AC) Single Phase 5 hp

(200 ... 208 V AC) Three Phase 20 hp

(220 ... 240 V AC) Three Phase 25 hp

(240 V AC) Single Phase 15 hp

(440 ... 480 V AC) Three Phase 50 hp

(550 ... 600 V AC) Three Phase 60 hp

**Connecting Capacity Main Circuit UL/CSA:**

Rigid Stranded 1/2x 10-2 AWG

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**Connecting Capacity Control Circuit UL/CSA:**

Rigid Solid 1/2x 18-14 AWG

Rigid Stranded 1/2x 18-14 AWG

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**Tightening Torque UL/CSA:**

Control Circuit 11 in-lb

Main Circuit 35 in-lb

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**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

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**Climatic Withstand:**

Category B according to IEC 60947-1 Annex Q

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**Maximum Operating Altitude Permissible:**

Without Derating 3000 m

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**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

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**Resistance to Vibrations:**

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

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**Material Compliance****Conflict Minerals Reporting Template (CMRT):**

[CMRT - Conflict Minerals Reporting Template](#)

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**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](#)

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**RoHS Information:**

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

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**RoHS Status:**

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

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**Toxic Substances Control Act - TSCA:**

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

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**WEEE B2C / B2B:**

Business To Business

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**WEEE Category:**

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

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**ABB EcoSolutions****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\(B\) \(FR\)](#)

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**End of Life Instructions:**



## Certificates and Declarations

### 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](#)

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### BV Certificate:

[BV\\_2634H36994B1](#)

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### CB Certificate:

[CB Certificate AF\(S\)40\(B\), \(S\)AF52\(B\), AF\(S\)65\(B\) 3 and 4-pole contactors](#)

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### CCC Certificate:

[CQC Certificate, Contactor, AF\\*40-30-\\*\\*-\\*\\*, AF40-40-\\*\\*-\\*\\*, AF40-22-\\*\\*-\\*\\*, AF\\*52-30-\\*\\*-\\*\\*, AF52-40-\\*\\*-\\*\\*, AF\\*65-30-\\*\\*-\\*\\*, Made in France](#)

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### CQC Certificate:

[CQC Certificate, Contactor, AF\\*40-30-\\*\\*-\\*\\*, AF40-40-\\*\\*-\\*\\*, AF40-22-\\*\\*-\\*\\*, AF\\*52-30-\\*\\*-\\*\\*, AF52-40-\\*\\*-\\*\\*, AF\\*65-30-\\*\\*-\\*\\*, Made in France](#)  
[CQC Certificate, Contactor, AF40, AF52, AF65, AFC40, AFC52, AFC65, Made in China](#)

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### 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 France](#)

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[CCC Declaration of Conformity, Contactor, AF\(C\)40, AF52\(C\), AF65\(C\), AFC78 Made in China](#)

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### Declaration of Conformity - CE:

[EU Declaration of Conformity AF09... AF96-30-..., AF09...38\(Z\)-30..K 3-pole Contactors](#)

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### Declaration of Conformity - UKCA:

[UK Declaration of Conformity AF09... AF96-30-..., AF09...38\(Z\)-30..K 3-pole Contactors](#)

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### DNV Certificate:

[DNV Certificate AF\(S\)09...96 3-pole & AF09...80 4-pole contactors with screw, spring, push-in terminals](#)

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### KC Certificate:

[KC Certificate AF65 3-pole Contactors](#)

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### LR Certificate:

[LRS Certificate AF\(S\)09...\(K\)... AF96 3 and 4-pole contactors and CA\(L\)4...\(K\), CAT4, CC4 auxiliary contact blocks](#)

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### RINA Certificate:

[Rina Certificate for AF09...AF96 contactors, NF contactor relays and accessories, screw and spring terminals](#)

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### 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](#)

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### UL Certificate:

[UL-US-L312527-1141-10303102-9](#)

[UL-CA-L312527-4141-10303102-9](#)

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### UL Listing Card:

[UL\\_E312527](#)

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## Container Information

### Package Level 1 Units:

box 1 piece

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### Package Level 1 Width:

150 mm

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### Package Level 1 Depth / Length:

150 mm

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### Package Level 1 Height:

97 mm

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### Package Level 1 Gross Weight:

1.05 kg
<b>Package Level 1 EAN:</b> 3471523132634
<b>Package Level 2 Units:</b> box 10 piece
<b>Package Level 2 Width:</b> 250 mm
<b>Package Level 2 Depth / Length:</b> 300 mm
<b>Package Level 2 Height:</b> 300 mm
<b>Package Level 2 Gross Weight:</b> 10.5 kg
<b>Package Level 3 Units:</b> 240 piece

## Classifications

<b>Object Classification Code:</b> Q
<b>ETIM 7:</b> EC000066 - Power contactor, AC switching
<b>ETIM 8:</b> EC000066 - Power contactor, AC switching
<b>ETIM 9:</b> EC000066 - Power contactor, AC switching
<b>eClass:</b> V11.0 : 27371003
<b>UNSPSC:</b> 39121529
<b>IDEA Granular Category Code (IGCC):</b> 4758 >> Iec Contactors
<b>E-Number (Finland):</b> 3707048
<b>E-Number (Sweden):</b> 3210045