PRODUCT-DETAILS

AF65-30-00-13

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

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 (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.
Display Name:	AF65-30-00-13

Ordering

Minimum Order Quantity:	1 piece

Customs Tariff Number:	85364900

Popular Downloads

EPLAN Data:	9AAC175974_EPLAN
Data Sheet, Technical Information:	1SBC100214C0202
Instructions and Manuals:	1SBC101036M6801
Instructions and Manuals (Part 2):	1SAC200017M0002
CAD Dimensional Drawing:	2CDC001079B0201

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 Θ = 40 °C 105 A
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 105 A (690 V) 60 °C 90 A (690 V) 70 °C 80 A
Rated Operational Current AC-3 (I_e):	(415 V) 60 °C 65 A (440 V) 60 °C 65 A (500 V) 60 °C 55 A (690 V) 60 °C 39 A (380 / 400 V) 60 °C 65 A (220 / 230 / 240 V) 60 °C 65 A
Rated Operational Current AC-3e (I_e):	(415 V) 60 °C 65 A (440 V) 60 °C 65 A (500 V) 60 °C 55 A (690 V) 60 °C 39 A (380 / 400 V) 60 °C 65 A (220 / 230 / 240 V) 60 °C 65 A

Rated Operational Current DC-1 (I_e):	(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_e):	(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_e):	(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 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 °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 Ie > 100 A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for Ie > 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 7 W at Rated Operating Conditions AC-3 per Pole 2.7 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

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
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 56 A (200 ... 208 V AC) Three Phase 62.1 A (220 ... 240 V AC) Three Phase 68 A (240 V AC) Single Phase 68 A (440 ... 480 V AC) Three Phase 65 A (550 ... 600 V AC) Three Phase 62 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):	9AKK108467A5658
REACH Declaration:	2CMT2021-006202
RoHS Declaration:	2CMT2021-006277
RoHS Information:	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
SCIP:	e9b43d1b-dd25-4049-9500-e96dae069812 France

Simplified SCIP:	4f8f9097-4d3f-40f2-ab71-de08f01520c1 Poland 3c9c39cd-1f36-40cb-bd2e-cbdb489ca0d3 Norway 7ee99c18-1a43-42d9-8de2-80aefe2bc295 Spain 5c5a0e9f-1f11-470e-a9eb-5d5eae2ce325 Germany 49cec99c-43cf-4caf-a582-f7fddb48fa78 Finland 242d911d-693f-4802-9162-38f75bfbf158 Italy 034afccd-5d3c-4f17-a5d4-41c3d33662aa Germany a7cbf824-baa3-405d-b1f0-9b43b9a5c174 Netherlands 9112a6a0-74e8-4e47-89ba-c82c10a2be98 Greece 7b2d5a1d-bfe8-4627-b7a9-4817986425e5 Denmark d83d4331-2a05-4711-a887-a739649a699a Germany 2c45b13f-ccd4-438b-893d-a1fd3a931798 Czechia 4935f90b-1a61-4100-9d9b-b7f0480976a4 Poland 2d663d0b-9e40-4dcd-b3b3-908840fa7414 Sweden 26f7d5b6-c240-4975-ad30-c60b9a55b4ec Poland cb6c25f4-3570-4f71-9b53-994499d0f1f5 France a031f8e6-578e-42c3-85bd-8ce5128a8b44 Portugal 22cf40dd-3fdc-46aa-aa67-9a7c3429b359 Hungary 5b11f3b5-236c-45a1-bf65-22616ac89baf Belgium c918f036-cd2d-40ce-9a0a-0d21cc7e8ede Bulgaria 48dcdcfb-6ae6-4ee9-8d97-071323301bbd Sweden 7f440d90-9fa6-45bc-8dd8-3fc8af21a148 Germany 3bada221-ca3f-45e1-be5a-cc897c807c4d Germany
Toxic Substances Control Act - TSCA:	2CMT2023-006525
WEEE B2C / B2B:	Business To Business
WEEE Category:	5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

ABB EcoSolutions:	Yes
ABB Site Meeting Group Waste To Landfill Target:	No non-hazardous waste is sent to a landfill
EcoSolutions Profile:	1SBC100156C0308
End Of Life Disassembling Instructions:	1SBC101081M6801
Environmental Product Declaration - EPD:	1SBD250584E1000
Improved Energy Efficiency for Customers:	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line
Recyclability Rate of the Product acc. to EN45555:	Design for Closing Resource Loops - Standard EN45555 - 91.9 %

Certificates and Declarations

A2L Certificate – UL:	9AKK108469A4890 9AKK108469A4892
ABS Certificate:	ABS_20-2060694-PDA
BV Certificate:	BV_2634H36994B2
CB Certificate:	SE-115941
CCC Certificate:	CCC_2024010304648524
Declaration of Conformity - CCC:	2020980304001256 2020980304001074
Declaration of Conformity - CE:	1SBD250000U1000
Declaration of Conformity - UKCA:	1SBD250031U1000

DNV Certificate:	DNV_TAE00001AF-4
KC Certificate:	KC_HW02016-15003C
LR Certificate:	LRS_LR23403517TA-02
RINA Certificate:	RINA_ELE084013XG
RMRS Certificate:	RMRS_1802705280
UL Certificate:	UL-US-L312527-1141-10303102-19 UL-CA-L312527-4141-10303102-19
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:	3471523132634

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):	3707048
E-Number (Sweden):	3210045

Accessories

Identifier	Description	Type	Qty	Unit Of Measure
1SBN010015R1001	CE5-01D0.1 Auxiliary Contact Block	CE5-01D0.1	1	piece
1SBN010015R1010	CE5-10D0.1 Auxiliary Contact Block	CE5-10D0.1	1	piece
1SBN010016R1001	CE5-01W0.1 Auxiliary Contact Block	CE5-01W0.1	1	piece
1SBN010016R1010	CE5-10W0.1 Auxiliary Contact Block	CE5-10W0.1	1	piece
1SBN010017R1001	CE5-01D2 Auxiliary Contact Block	CE5-01D2	1	piece
1SBN010017R1010	CE5-10D2 Auxiliary Contact Block	CE5-10D2	1	piece

1SBN010018R1001	CE5-01W2 Auxiliary Contact Block	CE5-01W2	1	piece
1SBN010018R1010	CE5-10W2 Auxiliary Contact Block	CE5-10W2	1	piece
1SBN010013R1010	CB5-10 Impulse Contact Block	CB5-10	1	piece
1SBN010013R1001	CB5-01 Impulse Contact Block	CB5-01	1	piece
1SBN010110R1010	CA4-10 Auxiliary Contact Block	CA4-10	1	piece
1SBN010110T1010	CA4-10-T Auxiliary Contact Block	CA4-10-T	1	piece
1SBN010110R1001	CA4-01 Auxiliary Contact Block	CA4-01	1	piece
1SBN010110T1001	CA4-01-T Auxiliary Contact Block	CA4-01-T	1	piece
1SBN010111R1010	CC4-10 Leading Auxiliary Contact Block	CC4-10	1	piece
1SBN010111R1001	CC4-01 Lagging Auxiliary Contact Block	CC4-01	1	piece
1SBN010120R1011	CAL4-11 Auxiliary Contact Block	CAL4-11	1	piece
1SBN010120T1011	CAL4-11-T Auxiliary Contact Block	CAL4-11-T	1	piece
1SBN010140R1022	CA4-22E Auxiliary Contact Block	CA4-22E	1	piece
1SBN010140R1031	CA4-31E Auxiliary Contact Block	CA4-31E	1	piece
1SBN010140R1040	CA4-40E Auxiliary Contact Block	CA4-40E	1	piece
1SBN010140R1004	CA4-04E Auxiliary Contact Block	CA4-04E	1	piece
1SBN010151R1011	CAT4-11E Auxiliary Contact / Coil Terminal Block	CAT4-11E	1	piece
1SBN070156T1000	LDC4 Additional Coil Terminal Block	LDC4	1	piece
1SBN020112R1000	TEF4-ON Frontal Electronic Timer	TEF4-ON	1	piece
1SBN020113R1000	TEF4S-ON Frontal Electronic Timer	TEF4S-ON	1	piece
1SBN010134R1011	CAL4-11K Auxiliary Contact Block	CAL4-11K	1	piece
1SBN020114R1000	TEF4-OFF Frontal Electronic Timer	TEF4-OFF	1	piece
1SBN020115R1000	TEF4S-OFF Frontal Electronic Timer	TEF4S-OFF	1	piece
1SBN033405T1000	VM96-4 Mechanical Interlock Unit	VM96-4	1	piece
1SBN110108T1000	BX4 Protective Cover	BX4	1	piece
1SBN040100R1011	WA4-11 24-60V50/60HZ-DC Mechanical Latching Unit	WA4-11	1	piece

1SBN083413R2000	BEY65-4 Connection Set for Star-Delta Starter	BEY65-4	1	piece
1SBN040100R1014	WA4-14 250-500V50/60HZ-DC Mechanical Latching Unit	WA4-14	1	piece
1SBN110122T1000	BDT4 Test Block	BDT4	1	piece
1SBN083411R1000	BER65-4 Connection Set for Reversing Contactors	BER65-4	1	piece
1SBN040100R1012	WA4-12 48-130V50/60HZ-DC Mechanical Latching Unit	WA4-12	1	piece
1SBN060100R1000	RA4 Interface Relay	RA4	1	piece
1SBN040100R1013	WA4-13 100-250V50/60HZ-DC Mechanical Latching Unit	WA4-13	1	piece
1SBN070159T1000	LDC4K Additional Coil Terminal Block	LDC4K	1	piece
1SBN083406R1000	BEA65-4 Connecting Link with Manual Motor Starter	BEA65-4	1	piece
1SBN010160R1001	CA4-01K Auxiliary Contact Block	CA4-01K	1	piece
1SBN010146R1022	CA4-22EK Auxiliary Contact Block	CA4-22EK	1	piece
1SBN010160R1010	CA4-10K Auxiliary Contact Block	CA4-10K	1	piece
1SBN010160T1001	CA4-01K-T Auxiliary Contact Block	CA4-01K-T	1	piece
1SBN010160T1010	CA4-10K-T Auxiliary Contact Block	CA4-10K-T	1	piece
1SBN010146R1031	CA4-31EK Auxiliary Contact Block	CA4-31EK	1	piece
1SBN010146R1040	CA4-40EK Auxiliary Contact Block	CA4-40EK	1	piece

Categories

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