



 PRODUCT-DETAILS

AFC38-30-00-80

AFC38-30-00-80 220-230V50Hz 230-240V60Hz Contactor



General Information

Extended Product Type:	AFC38-30-00-80
Product ID:	1SBL291001R8000
EAN:	3471523015043
Catalog Description:	AFC38-30-00-80 220-230V50Hz 230-240V60Hz Contactor
Long Description:	The AFC38-30-00-80 is a 3-pole - 690 V IEC or 600 V UL contactor with screw terminals, mainly controlling power circuits up to 18.5 kW / 400 V AC (AC-3) or 25 hp / 480 V AC UL and 50 A (AC-1) or 50 A UL general use. Within the AF platform, AFC contactors offer an optimized operating time for AC controlled applications with electromagnetic coil (control voltage : 220 ... 230 V AC 50 Hz / 230 ... 240 V AC 60 Hz). AFC contactors have a block type design and can be easily extended with add-on auxiliary contact blocks and a wide range of additional accessories.
Display Name:	AFC38-30-00-80

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

Data Sheet, Technical Information:	1SBC100219C0201
Instructions and Manuals:	1SBC101027M6801
Instructions and Manuals (Part 2):	1SAC200017M0002
CAD Dimensional Drawing:	2CDC001079B0201

Dimensions

Product Net Width:	45 mm
Product Net Depth / Length:	86 mm
Product Net Height:	86 mm
Product Net Weight:	0.351 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 60947-4-1, CSA C22.2 No. 60947-4-1, UL 60335-2-40 LZGH2 A2L
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 $\Theta = 40\text{ °C}$ 50 A acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 16 A
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (I_e):	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Rated Operational Current AC-3e (I_e):	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A

Rated Operational Current DC-1 (I_e):

- (110 V) 2 Poles in Series, 40 °C 50 A
- (110 V) 2 Poles in Series, 60 °C 42 A
- (110 V) 2 Poles in Series, 70 °C 37 A
- (110 V) 3 Poles in Series, 40 °C 50 A
- (110 V) 3 Poles in Series, 60 °C 42 A
- (110 V) 3 Poles in Series, 70 °C 37 A
- (220 V) 3 Poles in Series, 40 °C 50 A
- (220 V) 3 Poles in Series, 60 °C 42 A
- (220 V) 3 Poles in Series, 70 °C 37 A
- (72 V) 1-Pole, 40 °C 50 A
- (72 V) 1-Pole, 60 °C 42 A
- (72 V) 1-Pole, 70 °C 37 A
- (72 V) 2 Poles in Series, 40 °C 50 A
- (72 V) 2 Poles in Series, 60 °C 42 A
- (72 V) 2 Poles in Series, 70 °C 37 A
- (72 V) 3 Poles in Series, 40 °C 50 A
- (72 V) 3 Poles in Series, 60 °C 42 A
- (72 V) 3 Poles in Series, 70 °C 37 A

Rated Operational Current DC-3 (I_e):

- (110 V) 2 Poles in Series, 40 °C 50 A
- (110 V) 2 Poles in Series, 60 °C 42 A
- (110 V) 2 Poles in Series, 70 °C 37 A
- (110 V) 3 Poles in Series, 40 °C 50 A
- (110 V) 3 Poles in Series, 60 °C 42 A
- (110 V) 3 Poles in Series, 70 °C 37 A
- (220 V) 3 Poles in Series, 40 °C 50 A
- (220 V) 3 Poles in Series, 60 °C 42 A
- (220 V) 3 Poles in Series, 70 °C 37 A
- (72 V) 1-Pole, 40 °C 50 A
- (72 V) 1-Pole, 60 °C 42 A
- (72 V) 1-Pole, 70 °C 37 A
- (72 V) 2 Poles in Series, 40 °C 50 A
- (72 V) 2 Poles in Series, 60 °C 42 A
- (72 V) 2 Poles in Series, 70 °C 37 A
- (72 V) 3 Poles in Series, 40 °C 50 A
- (72 V) 3 Poles in Series, 60 °C 42 A
- (72 V) 3 Poles in Series, 70 °C 37 A

Rated Operational Current DC-5 (I_e):

- (110 V) 2 Poles in Series, 40 °C 50 A
- (110 V) 2 Poles in Series, 60 °C 42 A
- (110 V) 2 Poles in Series, 70 °C 37 A
- (110 V) 3 Poles in Series, 40 °C 50 A
- (110 V) 3 Poles in Series, 60 °C 42 A
- (110 V) 3 Poles in Series, 70 °C 37 A
- (220 V) 3 Poles in Series, 40 °C 25 A
- (220 V) 3 Poles in Series, 60 °C 25 A
- (220 V) 3 Poles in Series, 70 °C 25 A
- (72 V) 1-Pole, 40 °C 25 A
- (72 V) 1-Pole, 60 °C 25 A
- (72 V) 1-Pole, 70 °C 25 A
- (72 V) 2 Poles in Series, 40 °C 50 A
- (72 V) 2 Poles in Series, 60 °C 42 A
- (72 V) 2 Poles in Series, 70 °C 37 A
- (72 V) 3 Poles in Series, 40 °C 50 A
- (72 V) 3 Poles in Series, 60 °C 42 A
- (72 V) 3 Poles in Series, 70 °C 37 A

Rated Operational Power AC-3 (P_e):

- (415 V) 18.5 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) 18.5 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-6b (P_e):	(400 / 415 V) 40 °C, 50 / 60 Hz 24 kvar (400 / 415 V) 70 °C, 50 / 60 Hz 20 kvar (400 / 415 V) 55 °C, 50 / 60 Hz 24 kvar (440 V) 40 °C, 50 / 60 Hz 26 kvar (440 V) 55 °C, 50 / 60 Hz 24 kvar (440 V) 70 °C, 50 / 60 Hz 20 kvar (500 / 550 V), 40 °C, 50 / 60 Hz 33 kvar (500 / 550 V) 55 °C, 50 / 60 Hz 33 kvar (500 / 550 V) 70 °C, 50 / 60 Hz 23 kvar (690 V) 40 °C, 50 / 60 Hz 43 kvar (690 V) 55 °C, 50 / 60 Hz 43 kvar (690 V) 70 °C, 50 / 60 Hz 32 kvar
Rated Short-time Withstand Current Low Voltage (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 50 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 700 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 500 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 200 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-15) 0 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 0 cycles per hour
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U_c):	50 Hz 220 ... 230 V 60 Hz 230 ... 240 V
Coil Consumption:	Average Holding Value 50 / 60 Hz 8 V·A Average Holding Value, from Warm State 2.3 W Average Pull-in Value 50 Hz 70 V·A Average Pull-in Value 60 Hz 66 V·A
Power Loss:	at Rated Operating Conditions AC-1 per Pole 2.4 W at Rated Operating Conditions AC-3 per Pole 1.3 W
Operate Time:	Between Coil De-energization and NC Contact Closing 9 ... 20 ms Between Coil De-energization and NO Contact Opening 4 ... 18 ms Between Coil Energization and NC Contact Opening 7 ... 21 ms Between Coil Energization and NO Contact Closing 10 ... 26 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 Screws Placed Diagonally
Connecting Capacity Main Circuit:	Flexible with Ferrule 1/2x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 2x 1.5 ... 4 mm ² Rigid Solid 1/2x 2.5 ... 4 mm ² Rigid Stranded 1/2x 2.5 ... 10 mm ²
Connecting Capacity Control Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Wire Stripping Length:	Control Circuit 10 mm Main Circuit 14 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 IP20
Recommended Screw Driver:	Pozidriv PZ

Tightening Torque: Control Circuit 1.2 N-m
Main Circuit 2.5 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) 50 A

Horsepower Rating UL/CSA: (120 V AC) Single Phase 2 hp
(200 ... 208 V AC) Three Phase 10 hp
(220 ... 240 V AC) Three Phase 10 hp
(240 V AC) Single Phase 5 hp
(440 ... 480 V AC) Three Phase 25 hp
(550 ... 600 V AC) Three Phase 30 hp

Connecting Capacity Main Circuit UL/CSA: Rigid Solid 1/2x 14-10 AWG
Rigid Stranded 1/2x 14-8 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 22 in-lb

Full Load Amps Motor Use: (120 V AC) Single Phase 24 A
(200 ... 208 V AC) Three Phase 32.2 A
(220 ... 240 V AC) Three Phase 28 A
(240 V AC) Single Phase 28 A
(440 ... 480 V AC) Three Phase 34 A
(550 ... 600 V AC) Three Phase 32 A

Environmental

Ambient Air Temperature: Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C
Close to Contactor without Thermal O/L Relay -40 ... 70 °C
Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 60 °C
Close to Contactor without Thermal O/L Relay (Uc) -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: B1 25 g
Open, Shock Direction: B1 5 g
Shock Direction: A 30 g
Shock Direction: B2 15 g
Shock Direction: C1 25 g
Shock Direction: C2 25 g

Resistance to Vibrations: 4g Closed Position & 2g 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
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)

Certificates and Declarations

A2L Certificate – UL:	9AKK108469A4886 9AKK108469A4887
BV Certificate:	BV_2634H24898C1
CB Certificate:	CB_SE-113158
CCS Certificate:	GZ23PTB00147
CQC Certificate:	CQC2010010304445623
Declaration of Conformity - CCC:	2020980304001254
Declaration of Conformity - CE:	1SBD250024U1000
Declaration of Conformity - UKCA:	1SBD250045U1000
DNV Certificate:	9AKK108470A6934
KC Certificate:	9AKK108471A9569
RINA Certificate:	9AKK108470A5006
UL Certificate:	E312527-20231026

Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	87 mm
Package Level 1 Depth / Length:	87 mm
Package Level 1 Height:	47 mm
Package Level 1 Gross Weight:	0.374 kg
Package Level 1 EAN:	3471523015043

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):	4755 >> Contactors

Accessories

Identifier	Description	Type	Qty	Unit Of Measure
1SBN112303T1000	BP38-4 Mounting Piece	BP38-4	1	piece
1SBN110108T1000	BX4 Protective Cover	BX4	1	piece
1SBN110109W1000	BX4-CA Protective Cover	BX4-CA	1	piece
1SBN010110R1001	CA4-01 Auxiliary Contact Block	CA4-01	1	piece
1SBN010160R1001	CA4-01K Auxiliary Contact Block	CA4-01K	1	piece
1SBN010160T1001	CA4-01K-T Auxiliary Contact Block	CA4-01K-T	1	piece
1SBN010110T1001	CA4-01-T Auxiliary Contact Block	CA4-01-T	1	piece
1SBN010110R1010	CA4-10 Auxiliary Contact Block	CA4-10	1	piece
1SBN010160R1010	CA4-10K Auxiliary Contact Block	CA4-10K	1	piece
1SBN010160T1010	CA4-10K-T Auxiliary Contact Block	CA4-10K-T	1	piece
1SBN010110T1010	CA4-10-T Auxiliary Contact Block	CA4-10-T	1	piece
1SBN010120R1011	CAL4-11 Auxiliary Contact Block	CAL4-11	1	piece
1SBN010134R1011	CAL4-11K Auxiliary Contact Block	CAL4-11K	1	piece
1SBN010120T1011	CAL4-11-T Auxiliary Contact Block	CAL4-11-T	1	piece
1SBN010151R1011	CAT4-11E Auxiliary Contact / Coil Terminal Block	CAT4-11E	1	piece
1SBN010111R1001	CC4-01 Lagging Auxiliary Contact Block	CC4-01	1	piece
1SBN010111R1010	CC4-10 Leading Auxiliary Contact Block	CC4-10	1	piece
1SBN010015R1001	CE5-01D0.1 Auxiliary Contact Block	CE5-01D0.1	1	piece
1SBN010017R1001	CE5-01D2 Auxiliary Contact Block	CE5-01D2	1	piece
1SBN010016R1001	CE5-01W0.1 Auxiliary Contact Block	CE5-01W0.1	1	piece
1SBN010018R1001	CE5-01W2 Auxiliary Contact Block	CE5-01W2	1	piece
1SBN010015R1010	CE5-10D0.1 Auxiliary Contact Block	CE5-10D0.1	1	piece
1SBN010017R1010	CE5-10D2 Auxiliary Contact Block	CE5-10D2	1	piece
1SBN010016R1010	CE5-10W0.1 Auxiliary Contact Block	CE5-10W0.1	1	piece
1SBN010018R1010	CE5-10W2 Auxiliary Contact Block	CE5-10W2	1	piece
1SBN050400R1001	RC4-1/130 Surge Suppressor	RC4-1/130	1	piece
1SBN050400R1002	RC4-1/260 Surge Suppressor	RC4-1/260	1	piece
1SBN050400R1000	RC4-1/50 Surge Suppressor	RC4-1/50	1	piece
1SBN050410R1001	RV4-1/130 Surge Suppressor	RV4-1/130	1	piece
1SBN050410R1002	RV4-1/260 Surge Suppressor	RV4-1/260	1	piece
1SBN050410R1000	RV4-1/50 Surge Suppressor	RV4-1/50	1	piece
1SBN020114R1000	TEF4-OFF Frontal Electronic Timer	TEF4-OFF	1	piece
1SBN020112R1000	TEF4-ON Frontal Electronic Timer	TEF4-ON	1	piece
1SBN020115R1000	TEF4S-OFF Frontal Electronic Timer	TEF4S-OFF	1	piece
1SBN020113R1000	TEF4S-ON Frontal Electronic Timer	TEF4S-ON	1	piece

Categories

Products > Low Voltage Products and Systems > Control Products > Contactors > Block Contactors > AF Contactors > AF38

