



 PRODUCT-DETAILS

AFC40-30-11-81

AFC40-30-11-81 24V 50/60Hz Contactor



General Information

Extended Product Type	AFC40-30-11-81
Product ID	1SBL341001R8111
EAN	3471523018761
Catalog Description	AFC40-30-11-81 24V 50/60Hz Contactor

Long Description	<p>The AFC40-30-11-81 is a 3-pole - 690 V IEC or 600 V UL contactor with 1 N.O + 1 N.C built-in auxiliary contact and Screw terminals, mainly controlling power circuits up to 18.5 kW / 400 V AC (AC-3) or 30 hp / 480 V AC UL and 70 A (AC-1) or 60 A UL general use. Within the AF platform, AFC contactors offer an optimized operating time for AC controlled applications with electromagnetic coil (control voltage : 24 V AC 50 Hz / 24 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.</p>
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Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100219C0201
Instructions and Manuals	1SBC101036M6801
Instructions and Manuals (Part 2)	1SAC200017M0002
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	67 mm
Product Net Depth / Length	119.5 mm
Product Net Height	111 mm
Product Net Weight	1.02 kg

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
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
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ }^{\circ}\text{C}$ 105 A acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 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 AC-15 (I_e)	(500 V) NC 2
Rated Operational Current DC-13 (I_e)	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W

Rated Operational Power AC-3 (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 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 Operational Power AC-6b (P _e)	(400 / 415 V) 40 °C, 50 / 60 Hz 26 kvar (400 / 415 V) 70 °C, 50 / 60 Hz 20 kvar (400 / 415 V) 55 °C, 50 / 60 Hz 26 kvar (440 V) 40 °C, 50 / 60 Hz 28.5 kvar (440 V) 55 °C, 50 / 60 Hz 65 kvar (440 V) 70 °C, 50 / 60 Hz 22 kvar (500 / 550 V), 40 °C, 50 / 60 Hz 35 kvar (500 / 550 V) 55 °C, 50 / 60 Hz 35 kvar (500 / 550 V) 70 °C, 50 / 60 Hz 25 kvar (690 V) 40 °C, 50 / 60 Hz 46 kvar (690 V) 55 °C, 50 / 60 Hz 46 kvar (690 V) 70 °C, 50 / 60 Hz 34.5 kvar
Rated Short-time Withstand Current Low Voltage (I _{cw})	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 for 0.1 s 140 A for 1 s 100 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 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U _{imp})	Auxiliary Circuit 6 kV
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 1200 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U _c)	50 Hz 24 V 60 Hz 24 V
Coil Consumption	Average Holding Value 50 / 60 Hz 20 V·A Average Pull-in Value 50 Hz 150 V·A Average Pull-in Value 60 Hz 151 V·A
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 6 ... 19 ms Between Coil De-energization and NO Contact Opening 4 ... 14 ms Between Coil Energization and NC Contact Opening 3 ... 16 ms Between Coil Energization and NO Contact Closing 7 ... 21 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 ² Flexible with Insulated Ferrule 1/2x 4 ... 35 mm ² Rigid 1/2x 6 ... 35 mm ²
Connecting Capacity Auxiliary 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 1/2x 1 ... 2.5 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 Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 1 ... 2.5 mm ²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 16 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 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	Auxiliary Circuit 1.2 N·m 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 Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 11 in·lb 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 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

Pollution Degree	3
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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	9AKK108469A4888 9AKK108469A4889
BV Certificate	BV_2634H36994A
CB Certificate	SE-114796
CCC Certificate	2020980304001074
CCS Certificate	GZ23PTB00147
CQC Certificate	CQC2012010304589737
Declaration of Conformity - CE	1SBD250024U1000
Declaration of Conformity - UKCA	1SBD250045U1000
DNV Certificate	9AKK108470A6934
RINA Certificate	9AKK108470A5006
UL Certificate	UL-CA-2337651-0 UL-US-2343489-0

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	146.5 mm
Package Level 1 Depth / Length	96.5 mm
Package Level 1 Height	146.5 mm
Package Level 1 Gross Weight	1.14 kg
Package Level 1 EAN	3471523018761

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

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF40

