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	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 additionnal accessories.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

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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 Θ = 40 °C 105 A acc. to IEC 60947-5-1, Θ = 40 °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

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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 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 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 mm² Flexible with Insulated Ferrule 1/2x 4 ... 35 mm² Rigid 1/2x 6 ... 3 5 mm²
Connecting Capacity Auxiliary 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 1/2x 1 ... 2.5 mm²

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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 Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 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 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

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	Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g Open, Shock Direction: B1 5 g
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	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

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UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4758 >> Iec Contactors

Categories

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



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