



PRODUCT-DETAILS

AX12-30-01-81

AX12-30-01-81 24V 50/60Hz Contactor



General Information	
Extended Product Type	AX12-30-01-81
Product ID	1SBL911074R8101
EAN	3471522394811
Catalog Description	AX12-30-01-81 24V 50/60Hz Contactor
Long Description	AX09...AX25 contactors are mainly used for controlling 3-phase motors and power circuits up to 690 V AC. These contactors are of the block type design with: – 3 main poles and 1 built-in auxiliary contact – control circuit: AC operated – add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
EPLAN Data	9AAC177925_EPLAN
Data Sheet, Technical	1SBC100187L0203

Information

Instructions and Manuals	9AKK107492A7057
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	44 mm
Product Net Depth / Length	74 mm
Product Net Height	74 mm
Product Net Weight	0.326 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	1
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 26 A acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 16 A
Rated Operational Current AC-1 (I_e)	(220 / 240 V) 55 °C 22 A (690 V) 40 °C 25 A (690 V) 70 °C 18 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 12 A (440 V) 55 °C 9 A (500 V) 55 °C 9 A (690 V) 55 °C 7 A (380 / 400 V) 55 °C 12 A (220 / 230 / 240 V) 55 °C 12 A
Rated Operational Current AC-15 (I_e)	(500 V) NC 2 (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A (400 / 440 V) 2 A
Rated Operational Current DC-13 (I_e)	(24 V) 6 A / 144 W (110 V) 1.1 A / 121 W (125 V) 1.1 A / 138 W (220 V) 0.55 A / 121 W (250 V) 0.55 A / 138 W (400 V) 2.8 A / 134 W (500 V) 2 A / 144 W
Rated Operational Power AC-3 (P_e)	(415 V) 5.5 kW (440 V) 4 kW (500 V) 5.5 kW (690 V) 5.5 kW (380 / 400 V) 5.5 kW (220 / 230 / 240 V) 3 kW
Rated Short-time Withstand Current Low Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 120 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 26 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 55 A

	at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 280 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 70 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 250 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 90 A
Rated Insulation Voltage (Ui)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (Uimp)	Auxiliary Circuit 6 kV
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 1200 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 (Uc)	50 Hz 24 V 60 Hz 24 V
Power Loss	at Rated Operating Conditions AC-1 per Pole 0.8 W at Rated Operating Conditions AC-3 per Pole 0.1 W
Operate Time	Between Coil De-energization and NC Contact Closing 9 ... 16 ms Between Coil De-energization and NO Contact Opening 4 ... 11 ms Between Coil Energization and NC Contact Opening 7 ... 21 ms Between Coil Energization and NO Contact Closing 10 ... 26 ms
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 IP20
Tightening Torque	Auxiliary Circuit 1 N·m Control Circuit 1 N·m Main Circuit 1 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 25 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 3/4 hp (200 ... 208 V AC) Three Phase 3 hp (220 ... 240 V AC) Three Phase 3 hp (240 V AC) Single Phase 2 hp (440 ... 480 V AC) Three Phase 7.5 hp (550 ... 600 V AC) Three Phase 10 hp
Tightening Torque UL/CSA	Auxiliary Circuit 9 in·lb Control Circuit 9 in·lb Main Circuit 9 in·lb
Full Load Amps Motor Use	(120 V AC) Single Phase 13.8 A (200 ... 208 V AC) Three Phase 11 A (220 ... 240 V AC) Three Phase 9.6 A (240 V AC) Single Phase 12 A (440 ... 480 V AC) Three Phase 11 A (550 ... 600 V AC) Three Phase 11 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 70 °C
Climatic Withstand	according to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 Specification II
Maximum Operating	Without Derating 3000 m

Altitude Permissible

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
Simplified SCIP	185b8cc4-3a03-4795-b6f1-53c8a57060be Portugal 59eea28e-2fbf-4081-a2fe-affb1ebb19f1 Denmark 62a08d48-37d4-4905-b632-a0d2d1160e27 Spain 6688527b-b9f7-4bef-8180-691d0ee75c3a Croatia 69acf3f5-025c-4fec-b57b-6f261f02ae11 Italy 6cfa41f6-5259-44be-9d55-a1a5913f7d0e Norway 6fa08d5d-bd34-4457-8cbd-535256507bee Belgium 83dd5400-ac65-45ee-934d-0fed95d259cd Hungary 884ef686-dc6e-49e6-8349-908132e7e4b6 France adcfb4cb-57d8-4214-b2f9-a5cb1de7d403 Estonia c8bc8359-f9c6-4849-802a-c31df2edda49 Netherlands d19b228e-03fb-453e-b4f2-eea3af1c31ac Germany e3cb1741-12cd-4900-9f64-5e8a5351dded Finland e6c3129a-6eba-496b-aa25-d96f7d0da5c9 Czech Republic f0d5f6d2-7bb6-47ff-9fd8-e6e9fd37116d Greece f7a3ae24-54ac-4160-9e6d-ae1db5759830 Poland f9fc70a0-ae95-44d6-be60-b9623863e3f6 Sweden
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

Environmental Product Declaration - EPD	No Declaration Needed
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Certificates and Declarations

CB Certificate	9AKK107492A7072
CCC Certificate	9AKK107492A7089
CCS Certificate	GZ23PTB00147
CQC Certificate	CQC2013010304646608
Declaration of Conformity - CCC	2020980304001066
Declaration of Conformity - CE	1SBD250011U1000
UL Certificate	UL_20140702-E312527-10-5

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	48 mm
Package Level 1 Depth / Length	78 mm
Package Level 1 Height	79 mm
Package Level 1 Gross Weight	0.34 kg

Package Level 1 EAN

3471522394811

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	
E-Number (Finland)	3707310	

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AX Contactors → AX12

