



PRODUCT-DETAILS

AX09-30-01-81

AX09-30-01-81 24V 50/60Hz Contactor



General Information	
Extended Product Type	AX09-30-01-81
Product ID	1SBL901074R8101
EAN	3471522392817
Catalog Description	AX09-30-01-81 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	
Data Sheet, Technical Information	1SBC100187L0203

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 Θ = 40 °C 24 A acc. to IEC 60947-5-1, Θ = 40 °C 16 A
Rated Operational Current AC-1 (I _e)	(220 / 240 V) 55 °C 22 A (690 V) 40 °C 22 A (690 V) 70 °C 18 A
Rated Operational Current AC-3 (I _e)	(415 V) 55 °C 9 A (440 V) 55 °C 9 A (500 V) 55 °C 9 A (690 V) 55 °C 7 A (380 / 400 V) 55 °C 9 A (220 / 230 / 240 V) 55 °C 9 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) 4 kW (440 V) 4 kW (500 V) 5.5 kW (690 V) 5.5 kW (380 / 400 V) 4 kW (220 / 230 / 240 V) 2.2 kW
Rated Short-time Withstand Current Low Voltage (I _{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 100 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 50 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 250 A

	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 60 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) 21 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1/2 hp (200 ... 208 V AC) Three Phase 2 hp (220 ... 240 V AC) Three Phase 2 hp (240 V AC) Single Phase 1.5 hp (440 ... 480 V AC) Three Phase 5 hp (550 ... 600 V AC) Three Phase 7.5 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 9.8 A (200 ... 208 V AC) Three Phase 7.8 A (220 ... 240 V AC) Three Phase 6.8 A (240 V AC) Single Phase 10 A (440 ... 480 V AC) Three Phase 7.6 A (550 ... 600 V AC) Three Phase 9 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	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible	Without Derating 3000 m

Material Compliance		
Conflict Minerals Reporting Template (CMRT)		9AKK108467A5658
REACH Declaration		2CMT2021-006202
RoHS Information		2CMT2021-006277
RoHS Status	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		
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		3471522392817
Package Level 2 Units		30 piece
Package Level 2 Width		240 mm
Package Level 2 Depth / Length		295 mm
Package Level 2 Height		145 mm
Package Level 2 Gross Weight		10.2 kg

Classifications		
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)

3707299

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AX Contactors → AX09

