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 PRODUCT-DETAILS

## AX50-30-11-81

### AX50-30-11-81 24V 50/60Hz Contactor




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#### General Information

<b>Extended Product Type:</b>	AX50-30-11-81
<b>Product ID:</b>	1SBL351074R8111
<b>EAN:</b>	3471522404817
<b>Catalog Description:</b>	AX50-30-11-81 24V 50/60Hz Contactor
<b>Long Description:</b>	AX50...AX80 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 – control circuit: AC operated – add-on auxiliary contact blocks (optional) for side mounting and a wide range of accessories.
<b>Display Name:</b>	AX50-30-11-81

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#### Ordering

<b>Minimum Order Quantity:</b>	1 piece
<b>Customs Tariff Number:</b>	85364900

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#### Popular Downloads

<b>EPLAN Data:</b>	9AAC177930_EPLAN
<b>Data Sheet, Technical Information:</b>	1SBC100187L0203
<b>Instructions and Manuals:</b>	9AKK107492A7059
<b>CAD Dimensional Drawing:</b>	2CDC001079B0201

## Dimensions

<b>Product Net Width:</b>	82 mm
<b>Product Net Depth / Length:</b>	110 mm
<b>Product Net Height:</b>	108 mm
<b>Product Net Weight:</b>	1.05 kg

## Technical

<b>Number of Main Contacts NO:</b>	3
<b>Number of Main Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Auxiliary Contacts NC:</b>	1
<b>Rated Operational Voltage:</b>	Auxiliary Circuit 690 V Main Circuit 690 V
<b>Rated Frequency (f):</b>	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
<b>Conventional Free-air Thermal Current (<math>I_{th}</math> acc. to IEC 60947-4-1, Open Contactors <math>\Theta = 40\text{ °C}</math> 100 A):</b>	
<b>Rated Operational Current AC-1 (<math>I_e</math>):</b>	(220 / 240 V) 55 °C 85 A (690 V) 40 °C 100 A (690 V) 70 °C 70 A
<b>Rated Operational Current AC-3 (<math>I_e</math>):</b>	(415 V) 55 °C 50 A (440 V) 55 °C 45 A (500 V) 55 °C 45 A (690 V) 55 °C 35 A (380 / 400 V) 55 °C 50 A (220 / 230 / 240 V) 55 °C 53 A
<b>Rated Operational Power AC-3 (<math>P_e</math>):</b>	(415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW
<b>Rated Short-time Withstand Current Low Voltage (<math>I_{cw}</math>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A 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 370 A
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for $I_e > 100\text{ A}$ ) at 440 V 1300 A cos phi=0.45 (cos phi=0.35 for $I_e > 100\text{ A}$ ) at 690 V 630 A
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	Auxiliary Circuit 6 kV
<b>Maximum Electrical Switching Frequency:</b>	(AC-1) 600 cycles per hour (AC-3) 600 cycles per hour

<b>Maximum Mechanical Switching Frequency:</b>	3600 cycles per hour
<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	50 Hz 24 V 60 Hz 24 V
<b>Power Loss:</b>	at Rated Operating Conditions AC-1 per Pole 5 W at Rated Operating Conditions AC-3 per Pole 1.3 W
<b>Operate Time:</b>	Between Coil De-energization and NC Contact Closing 7 ... 14 ms Between Coil De-energization and NO Contact Opening 4 ... 11 ms Between Coil Energization and NC Contact Opening 7 ... 22 ms Between Coil Energization and NO Contact Closing 8 ... 27 ms
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
<b>Tightening Torque:</b>	Control Circuit 1 N·m Main Circuit 4 N·m
<b>Terminal Type:</b>	Screw Terminals
<b>Product Name:</b>	Block Contactor

## Technical UL/CSA

<b>General Use Rating UL/CSA:</b>	(600 V AC) 80 A
<b>Horsepower Rating UL/CSA:</b>	(120 V AC) Single Phase 3 hp (200 ... 208 V AC) Three Phase 15 hp (220 ... 240 V AC) Three Phase 20 hp (240 V AC) Single Phase 10 hp (440 ... 480 V AC) Three Phase 40 hp (550 ... 600 V AC) Three Phase 50 hp
<b>Tightening Torque UL/CSA:</b>	Auxiliary Circuit 9 in-lb Control Circuit 9 in-lb Main Circuit 35 in-lb
<b>Full Load Amps Motor Use:</b>	(120 V AC) Single Phase 34 A (200 ... 208 V AC) Three Phase 48.3 A (220 ... 240 V AC) Three Phase 54 A (240 V AC) Single Phase 50 A (440 ... 480 V AC) Three Phase 52 A (550 ... 600 V AC) Three Phase 52 A

## Environmental

<b>Ambient Air Temperature:</b>	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
<b>Climatic Withstand:</b>	according to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 Specification II
<b>Maximum Operating Altitude Permissible:</b>	Without Derating 3000 m

## Material Compliance

<b>Conflict Minerals Reporting Template (CMRT):</b>	9AKK108467A5658
<b>REACH Declaration:</b>	2CMT2021-006202
<b>RoHS Declaration:</b>	2CMT2021-006277

<b>RoHS Information:</b>	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
<b>Toxic Substances Control Act - TSCA:</b>	2CMT2023-006525
<b>WEEE B2C / B2B:</b>	Business To Business
<b>WEEE Category:</b>	5. Small Equipment (No External Dimension More Than 50 cm)

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## ABB EcoSolutions

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**Environmental Product Declaration - EPD:** No Declaration Needed

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## Certificates and Declarations

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<b>CB Certificate:</b>	9AKK107492A7074
<b>CCC Certificate:</b>	9AKK107492A7091
<b>CCS Certificate:</b>	GZ23PTB00147
<b>CQC Certificate:</b>	CQC2013010304646607
<b>Declaration of Conformity - CCC:</b>	2020980304001064
<b>Declaration of Conformity - CE:</b>	1SBD250011U1000
<b>UL Certificate:</b>	UL_20140702-E312527-10-7

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## Container Information

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<b>Package Level 1 Units:</b>	box 1 piece
<b>Package Level 1 Width:</b>	102 mm
<b>Package Level 1 Depth / Length:</b>	143 mm
<b>Package Level 1 Height:</b>	152 mm
<b>Package Level 1 Gross Weight:</b>	1.16 kg
<b>Package Level 1 EAN:</b>	3471522404817

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## External Classifications and Standards

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<b>Object Classification Code:</b>	Q
<b>ETIM 7:</b>	EC000066 - Power contactor, AC switching
<b>ETIM 8:</b>	EC000066 - Power contactor, AC switching
<b>ETIM 9:</b>	EC000066 - Power contactor, AC switching
<b>eClass:</b>	V11.0 : 27371003
<b>UNSPSC:</b>	39121529
<b>IDEA Granular Category Code (IGCC):</b>	4755 >> Contactors

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## Accessories

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Identifier	Description	Type	Qty	Unit Of Measure
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1SBN010015R1001	CE5-01D0.1 Auxiliary Contact Block	CE5-01D0.1	1	piece
1SBN010015R1010	CE5-10D0.1 Auxiliary Contact Block	CE5-10D0.1	1	piece
1SBN010016R1001	CE5-01W0.1 Auxiliary Contact Block	CE5-01W0.1	1	piece
1SBN010016R1010	CE5-10W0.1 Auxiliary Contact Block	CE5-10W0.1	1	piece
1SBN010017R1001	CE5-01D2 Auxiliary Contact Block	CE5-01D2	1	piece
1SBN010017R1010	CE5-10D2 Auxiliary Contact Block	CE5-10D2	1	piece
1SBN010018R1001	CE5-01W2 Auxiliary Contact Block	CE5-01W2	1	piece
1SBN010018R1010	CE5-10W2 Auxiliary Contact Block	CE5-10W2	1	piece

## Categories

Products > Low Voltage Products and Systems > Control Products > Contactors > Block Contactors > AX Contactors > AX50

