



PRODUCT-DETAILS

AX32-30-01-80

AX32-30-01-80 220-230V50Hz/230-240V60Hz  
Contactor



| General Information   |                                                                                                                                                                                                                                                                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | AX32-30-01-80                                                                                                                                                                                                                                                                                                                            |
| Product ID            | 1SBL281074R8001                                                                                                                                                                                                                                                                                                                          |
| EAN                   | 3471522400802                                                                                                                                                                                                                                                                                                                            |
| Catalog Description   | AX32-30-01-80 220-230V50Hz/230-240V60Hz Contactor                                                                                                                                                                                                                                                                                        |
| Long Description      | AX32, AX40 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            | 9AAC177928_EPLAN |
| Data Sheet, Technical | 1SBC100187L0203  |

Information

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 9AKK107492A7057 |
| CAD Dimensional Drawing  | 2CDC001079B0201 |

**Dimensions**

|                            |          |
|----------------------------|----------|
| Product Net Width          | 54 mm    |
| Product Net Depth / Length | 90 mm    |
| Product Net Height         | 108.3 mm |
| Product Net Weight         | 0.667 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<br>Main Circuit 690 V                                                                                                                                                              |
| Rated Frequency (f)                                         | Auxiliary Circuit 50 / 60 Hz<br>Main Circuit 50 / 60 Hz                                                                                                                                                    |
| Conventional Free-air Thermal Current ( $I_{th}$ )          | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40^\circ\text{C}$ 65 A<br>acc. to IEC 60947-5-1, $\Theta = 40^\circ\text{C}$ 16 A                                                                         |
| Rated Operational Current AC-1 ( $I_e$ )                    | (220 / 240 V) 55 °C 55 A<br>(690 V) 40 °C 55 A<br>(690 V) 70 °C 39 A                                                                                                                                       |
| Rated Operational Current AC-3 ( $I_e$ )                    | (415 V) 55 °C 32 A<br>(440 V) 55 °C 32 A<br>(500 V) 55 °C 28 A<br>(690 V) 55 °C 21 A<br>(380 / 400 V) 55 °C 32 A<br>(220 / 230 / 240 V) 55 °C 32 A                                                         |
| Rated Operational Current AC-15 ( $I_e$ )                   | (500 V) NC 2<br>(500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(380 / 400 V) 3 A<br>(400 / 440 V) 2 A                                                                              |
| Rated Operational Current DC-13 ( $I_e$ )                   | (24 V) 6 A / 144 W<br>(110 V) 0.55 A / 60 W<br>(125 V) 1.1 A / 138 W<br>(220 V) 0.55 A / 121 W<br>(250 V) 0.55 A / 138 W<br>(400 V) 2.8 A / 134 W<br>(500 V) 2 A / 144 W                                   |
| Rated Operational Power AC-3 ( $P_e$ )                      | (415 V) 15 kW<br>(440 V) 18.5 kW<br>(500 V) 18.5 kW<br>(690 V) 18.5 kW<br>(380 / 400 V) 15 kW<br>(220 / 230 / 240 V) 9 kW                                                                                  |
| Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 400 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 65 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A |

|                                        |                                                                                                                                                                                                                                                                    |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 600 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A<br>for 0.1 s 140 A<br>for 1 s 100 A                                                                                            |
| Maximum Breaking Capacity              | cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 820 A<br>cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 340 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<br>(AC-15) 1200 cycles per hour<br>(AC-3) 1200 cycles per hour<br>(DC-13) 900 cycles per hour                                                                                                                                           |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour                                                                                                                                                                                                                                               |
| Rated Control Circuit Voltage (Uc)     | 50 Hz 220 ... 230 V<br>60 Hz 230 ... 240 V                                                                                                                                                                                                                         |
| Power Loss                             | at Rated Operating Conditions AC-1 per Pole 2.5 W<br>at Rated Operating Conditions AC-3 per Pole 0.9 W                                                                                                                                                             |
| Operate Time                           | Between Coil De-energization and NC Contact Closing 7 ... 14 ms<br>Between Coil De-energization and NO Contact Opening 4 ... 11 ms<br>Between Coil Energization and NC Contact Opening 6 ... 18 ms<br>Between Coil Energization and NO Contact Closing 8 ... 21 ms |
| Degree of Protection                   | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20                                                                  |
| Tightening Torque                      | Auxiliary Circuit 1 N·m<br>Control Circuit 1 N·m<br>Main Circuit 2.3 N·m                                                                                                                                                                                           |
| Terminal Type                          | Screw Terminals                                                                                                                                                                                                                                                    |
| Product Name                           | Block Contactor                                                                                                                                                                                                                                                    |

Technical UL/CSA

|                           |                                                                                                                                                                                                                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Use Rating UL/CSA | (600 V AC) 50 A                                                                                                                                                                                                                |
| Horsepower Rating UL/CSA  | (120 V AC) Single Phase 3 hp<br>(200 ... 208 V AC) Three Phase 10 hp<br>(220 ... 240 V AC) Three Phase 10 hp<br>(240 V AC) Single Phase 7.5 hp<br>(440 ... 480 V AC) Three Phase 25 hp<br>(550 ... 600 V AC) Three Phase 30 hp |
| Tightening Torque UL/CSA  | Auxiliary Circuit 9 in·lb<br>Control Circuit 9 in·lb<br>Main Circuit 20 in·lb                                                                                                                                                  |
| Full Load Amps Motor Use  | (120 V AC) Single Phase 34 A<br>(200 ... 208 V AC) Three Phase 32.2 A<br>(220 ... 240 V AC) Three Phase 28 A<br>(240 V AC) Single Phase 40 A<br>(440 ... 480 V AC) Three Phase 34 A<br>(550 ... 600 V AC) Three Phase 32 A     |

Environmental

|                         |                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C<br>Close to Contactor without Thermal O/L Relay -40 ... 70 °C<br>Close to Contactor for Storage -60 ... +80 °C<br>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                             | 0928f2c8-6aba-4a4c-8378-475fb749795e Norway<br>21effb75-2b72-4017-b183-d840d33bce4b Italy<br>223e09ea-f3f6-4abd-8b39-949619763958 Denmark<br>25240271-85f9-47cb-9916-fb97955484bc Czech Republic<br>45d6e0eb-1bef-46ab-905a-863ca21720c1 Finland<br>4d8dcbdb0-9907-4301-9e79-4a5c5b22f948 Germany<br>6a3fde57-65df-49fd-81b8-b49c6dff882d Greece<br>7b0f53da-0cb3-44e9-996c-6ce9935851d8 Spain<br>8ac41c2a-1f9d-47eb-8fd4-e2384a99b80c Estonia<br>a61ca2ec-261b-41c3-9b05-df38d99feebb Hungary<br>ae019942-1026-4c48-b954-4e1dc4f02864 Poland<br>b4a15775-8dc5-4c16-a465-dce50e9c89dc Croatia<br>be03b987-757c-4a6a-8dd3-fff034d1b1ff Germany<br>c0e91020-71e2-4c40-9141-7d853f00cf13 Portugal<br>dec57449-3458-4f0d-b43c-1969bf684eda Sweden<br>df85056f-3229-4977-96c0-87e2c5fe1a19 Poland<br>df8bb581-6a7f-4128-a9d0-8f305d7c0c23 Sweden<br>e22e0b88-e0aa-4ceb-8db9-11af0d27f418 Belgium<br>e5a9ed9e-0097-497c-b96f-82ee6e4df51b France<br>f2b48363-32cc-4bfc-8446-4083de0bab82 France<br>fdce61c2-da45-4004-930b-164ab21c5a2a Netherlands |
| 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 |
|-----------------------------------------|-----------------------|

Certificates and Declarations

|                                 |                          |
|---------------------------------|--------------------------|
| CB Certificate                  | 9AKK107492A7073          |
| CCC Certificate                 | 9AKK107492A7090          |
| CCS Certificate                 | GZ23PTB00147             |
| CQC Certificate                 | CQC2013010304647116      |
| Declaration of Conformity - CCC | 2020980304001065         |
| Declaration of Conformity - CE  | 1SBD250011U1000          |
| UL Certificate                  | UL_20140702-E312527-10-6 |

Container Information

|                         |             |
|-------------------------|-------------|
| Package Level 1 Units   | box 1 piece |
| Package Level 1 Width   | 65 mm       |
| Package Level 1 Depth / | 101 mm      |

|                              |               |
|------------------------------|---------------|
| Length                       |               |
| Package Level 1 Height       | 115 mm        |
| Package Level 1 Gross Weight | 0.71 kg       |
| Package Level 1 EAN          | 3471522400802 |

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)                 | 3707338                                  |   |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AX Contactors → AX32

