



PRODUCT-DETAILS

AS16-30-10-20M

AS16-30-10-20M 24V50/60HZ Contactor



| General Information | |
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| Extended Product Type | AS16-30-10-20M |
| Product ID | 1SBL121001M2010 |
| EAN | 3471523048201 |
| Catalog Description | AS16-30-10-20M 24V50/60HZ Contactor |
| Long Description | AS16 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC or 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. The AS... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, 1 built-in auxiliary contact, front-mounted add-on auxiliary contact blocks (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1. N.C. mirror contacts compliant with Annex F of IEC 60947-4-1) - Control circuit: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available. |

| Ordering | |
|------------------------|----------|
| Minimum Order Quantity | 40 piece |
| Customs Tariff Number | 85364900 |

Popular Downloads

| | |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals | 1SBC101020M9701 |

Dimensions

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| Product Net Width | 45 mm |
| Product Net Depth / Length | 72.5 mm |
| Product Net Height | 68 mm |
| Product Net Weight | 0.22 kg |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 1 |
| Number of Auxiliary Contacts NC | 0 |
| Standards | IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14 |
| 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 $\Theta = 40\text{ °C}$ 25 A acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 10 A |
| Rated Operational Current AC-1 (I _e) | (690 V) 40 °C 24 A (690 V) 60 °C 20 A (690 V) 70 °C 16 A |
| Rated Operational Current AC-3 (I _e) | (415 V) 60 °C 15.5 A (440 V) 60 °C 13.6 A (500 V) 60 °C 12.5 A (690 V) 60 °C 9 A (380 / 400 V) 60 °C 15.5 A (220 / 230 / 240 V) 60 °C 15.7 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 (400 / 440 V) 3 A |
| 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 |
| Rated Operational Power AC-3 (P _e) | (400 V) 7.5 kW (415 V) 7.5 kW (440 V) 7.5 kW (500 V) 7.5 kW (690 V) 7.5 kW (220 / 230 / 240 V) 4 kW |
| Rated Short-time | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 124 A |

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| Withstand Current Low Voltage (I_{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 24 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 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 75 A for 0.1 s 140 A for 1 s 100 A |
| Maximum Breaking Capacity | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 155 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 90 A |
| Rated Insulation Voltage (U_i) | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V acc. to IEC 60947-5-1 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) 300 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 |
| Power Loss | at Rated Operating Conditions AC-1 per Pole 1.2 W at Rated Operating Conditions AC-3 per Pole 0.5 W |
| Operate Time | Between Coil De-energization and NC Contact Closing 7 ... 22 ms Between Coil De-energization and NO Contact Opening 5 ... 19 ms Between Coil Energization and NC Contact Opening 6 ... 18 ms Between Coil Energization and NO Contact Closing 9 ... 24 ms |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 0.75 ... 4 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 0.75 ... 2.5 mm ² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 0.75 ... 2.5 mm ² |
| Wire Stripping Length | Auxiliary Circuit 9 mm Control Circuit 9 mm Main Circuit 9 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 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

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|---------------------------|--|
| General Use Rating UL/CSA | (600 V AC) 20 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 5 hp (240 V AC) Single Phase 2 hp (440 ... 480 V AC) Three Phase 10 hp (550 ... 600 V AC) Three Phase 10 hp |
| Tightening Torque | Auxiliary Circuit 9 in·lb |

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| UL/CSA | 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 15.2 A (240 V AC) Single Phase 12 A (440 ... 480 V AC) Three Phase 14 A (550 ... 600 V AC) Three Phase 11 A |

Environmental

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| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C 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: B1 10 g Closed, Shock Direction: C1 20 g Closed, Shock Direction: C2 20 g Open, Shock Direction: B1 5 g Open, Shock Direction: C1 9 g Open, Shock Direction: C2 14 g Shock Direction: A 20 g Shock Direction: B2 15 g |
| Resistance to Vibrations | 3g Closed Position & 2g Open Position 5 ... 300 Hz |

Material Compliance

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| 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

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|----------------------------------|---------------------------|
| CB Certificate | CB_CN13475-M1 |
| CCC Certificate | CCC_2007010309251577 |
| CQC Certificate | CQC2007010309251577 |
| Declaration of Conformity - CCC | 2020980304001224 |
| Declaration of Conformity - CE | 1SBD250014U1000 |
| Declaration of Conformity - UKCA | 1SBD250049U1000 |
| GOST Certificate | GOST_POCCCNME77B07822.pdf |
| UL Certificate | UL_20120917_E312527_1_1 |
| UL Listing Card | UL_E312527 |

Container Information

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| Package Level 1 Units | box 40 piece |
| Package Level 1 Width | 293 mm |
| Package Level 1 Depth / Length | 167 mm |
| Package Level 1 Height | 250 mm |
| Package Level 1 Gross Weight | 8.8 kg |
| Package Level 1 EAN | 3471523048201 |
| Package Level 2 Units | 40 piece |
| Package Level 2 Width | 293 mm |
| Package Level 2 Depth / Length | 167 mm |
| Package Level 2 Height | 250 mm |
| Package Level 2 Gross Weight | 8.8 kg |
| Package Level 3 Units | 960 piece |

Classifications

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| 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 |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AS Contactors → AS16

