

PRODUCT-DETAILS

AF12N0-30-01-13

AF12N0-30-01-13 100-250V50/60HZ-DC Contactor



General Information

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| Extended Product Type | AF12N0-30-01-13 |
| Product ID | 1SBL157001N1301 |
| EAN | 3471523016552 |
| Catalog Description | AF12N0-30-01-13 100-250V50/60HZ-DC Contactor |
| Long Description | <p>The AF12N0-30-01-13 is a 3 pole - 600 V UL, NEMA size N0 contactor with 1 built-in auxiliary contact and Screw, switching power circuits up to 28 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.</p> |

Technical

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| Standards | IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14 |
| Product Name | Block Contactor |
| Rated Operational Voltage | Auxiliary Circuit 690 V Main Circuit 690 V |
| Rated Insulation Voltage (U _i) | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V |
| Rated Impulse Withstand Voltage (U _{imp}) | 6 kV |
| Rated Control Circuit Voltage (U _c) | 50 Hz 100 ... 250 V 50 Hz / 60 Hz 100 ... 250 V |

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| | 60 Hz 100 ... 250 V DC Operation 100 ... 250 V |
| Rated Operational Current AC-15 (I_e) | (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 A |
| Maximum Breaking Capacity | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 106 A |
| Rated Short-time Withstand Current Low Voltage (I_{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 0.1 s 140 A for 1 s 100 A |
| Rated Frequency (f) | Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz |
| Power Loss | at Rated Operating Conditions AC-1 per Pole 1 W at Rated Operating Conditions AC-3 per Pole 0.2 W |
| Number of Main Contacts NC | 0 |
| Number of Main Contacts NO | 3 |
| Number of Auxiliary Contacts NC | 1 |
| Number of Auxiliary Contacts NO | 0 |
| Low Coil Consumption | No |
| Tightening Torque | Auxiliary Circuit 1.2 N·m Control Circuit 1.2 N·m Main Circuit 1.5 N·m |
| Mounted Auxiliary Contacts | 0 NO, 1 NC |
| Mounting Position | Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF09 ... AF38 |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 0.75 ... 6 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 4 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 6 mm ² |
| Wire Stripping Length | Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 10 mm |
| Terminal Type | Screw Terminals |

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 |
| 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 |
| Maximum Operating Altitude Permissible | Without Derating 3000 m |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5 ... 300 Hz 4 g closed position / 2 g open position |
| Resistance to Shock acc. to IEC 60068-2-27 | Closed, Shock Direction: A 30 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: B2 15 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g Open, Shock Direction: A 30 g Open, Shock Direction: B1 5 g Open, Shock Direction: B2 15 g Open, Shock Direction: C1 25 g Open, Shock Direction: C2 25 g |

RoHS Status

Following EU Directive 2011/65/EU

Technical UL/CSA

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|------------------------------|---|
| General Use Rating UL/CSA | (600 V AC) 28 A |
| Horsepower Rating UL/CSA | (120 V AC) Single Phase 1 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 7-1/2 hp (550 ... 600 V AC) Three Phase 10 hp |
| Tightening Torque UL/CSA | Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb Main Circuit 13 in-lb |

Dimensions

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| Product Net Width | 45 mm |
| Product Net Height | 86 mm |
| Product Net Depth / Length | 77 mm |
| Product Net Weight | 0.27 kg |

Container Information

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| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 87 mm |
| Package Level 1 Height | 47 mm |
| Package Level 1 Depth / Length | 79 mm |
| Package Level 1 Gross Weight | 0.27 kg |
| Package Level 1 EAN | 3471523016552 |
| Package Level 3 Units | 1296 piece |

Ordering

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|-------------------------|--------------------|
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85364900 |
| Country of Origin | United States (US) |
| Selling Unit of Measure | piece |

Certificates and Declarations (Document Number)

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|------------------------------------|--|
| CB Certificate | CB_SE-96551M1 |
| CQC Certificate | CQC2010010304445624 CQC2020010304298240 |
| cUL Certificate | UL_20180227_E312527_7_1 |
| Declaration of Conformity - CCC | 2020980304001253 2020980304001082 |
| Declaration of Conformity - CE | 1SBD250027U1000 |
| Instructions and Manuals | 1SBC101027M6801 |
| RoHS Information | 1SBD250027U1000 |
| UL Certificate | UL_20140305-E312527_7_1 |
| UL Listing Card | E312527 |

Popular Downloads

| | |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101027M6801 |
| Mounting Positions | 1SBC500297F0000 |
| UL Listing Card | E312527 |
| EPLAN Graphical Macro | 9AKK106930A0693 |
| EPLAN Macro | 9AKK106930A0692 |

Classifications

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| ETIM 6 | EC000066 - Power contactor, AC switching |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 8 | EC000066 - Power contactor, AC switching |
| WEEE Category | Product Not in WEEE Scope |
| CN8 | 8536 49 00 |
| UNSPSC | 39121529 |
| eClass | V11.0 : 27371003 |
| Object Classification Code | Q |

Categories

Low Voltage Products and Systems → Control Products → Contactors → NEMA Contactors

