

PRODUCT-DETAILS

AF96-30-00-12

AF96-30-00-12 48-130V50/60HZ-DC

Contactors



General Information

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| Extended Product Type | AF96-30-00-12 |
| Product ID | 1SBL407001R1200 |
| EAN | 3471523133228 |
| Catalog Description | AF96-30-00-12 48-130V50/60HZ-DC Contactor |

Long Description

The AF96-30-00-12 is a 3 pole - 1000 V IEC or 600 UL contactor with screw terminals, controlling motors up to 45 kW / 400 V AC (AC-3) or 60 hp / 480 V UL and switching power circuits up to 130 A (AC-1) or 115 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (48-130 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.

Ordering

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|------------------------|----------|
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85364900 |

Popular Downloads

| | |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101036M6801 |
|--------------------------|-----------------|

Dimensions

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| Product Net Width | 70 mm |
| Product Net Depth / Length | 116 mm |
| Product Net Height | 125.5 mm |
| Product Net Weight | 1.22 kg |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Auxiliary Contacts NC | 0 |
| Rated Operational Voltage | Main Circuit 1000 V |
| Rated Frequency (f) | Main Circuit 50 / 60 Hz |
| Conventional Free-air Thermal Current (I_{th}) | acc. to IEC 60947-4-1, Open Contactors $q = 40$ °C 130 A |
| Rated Operational Current AC-1 (I_e) | (690 V) 40 °C 130 (690 V) 60 °C 105 A (690 V) 70 °C 90 |
| Rated Operational Current AC-3 (I_e) | (415 V) 60 °C 105 A (440 V) 60 °C 105 A (500 V) 60 °C 80 A (690 V) 60 °C 57 A (1000 V) 55 °C 30 A (1000 V) 60 °C 30 A (380 / 400 V) 60 °C 105 A (220 / 230 / 240 V) 60 °C 105 A |
| Rated Operational Power AC-3 (P_e) | (400 V) 55 kW (415 V) 55 kW (440 V) 55 kW (500 V) 55 kW (690 V) 55 kW (1000 V) 40 kW (380 / 400 V) 55 kW (220 / 230 / 240 V) 30 kW |
| Rated Short-time Withstand Current Low Voltage (I_{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 840 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A for 1 s -empty- A |
| Maximum Breaking Capacity | $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 1150 A $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 750 A |
| Maximum Electrical Switching Frequency | (AC-1) 600 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour |
| Rated Insulation Voltage (U_i) | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V |
| Rated Impulse Withstand Voltage (U_{imp}) | 8 kV |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour |
| Rated Control Circuit Voltage (U_c) | 50 Hz 48 ... 130 V 50 Hz / 60 Hz 48 ... 130 V 60 Hz 48 ... 130 V DC Operation 48 ... 130 V |
| Operate Time | Between Coil De-energization and NC Contact Closing 19 ... 105 ms Between Coil De-energization and NO Contact Opening 17 ... 100 ms Between Coil Energization and NC Contact Opening 38 ... 95 ms |

Between Coil Energization and NO Contact Closing 42 ... 100 ms

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| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 6 ... 50 mm ² Flexible with Insulated Ferrule 1/2x 6 ... 50 mm ² Rigid 1x 6 ... 70 mm ² Rigid 2x 6 ... 50 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 1 ... 2.5 mm ² |
| Wire Stripping Length | Main Circuit 17 mm |
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10 |
| Terminal Type | Screw Terminals |

Technical UL/CSA

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|------------------------------|---|
| General Use Rating UL/CSA | (600 V AC) 115 A |
| Horsepower Rating UL/CSA | (120 V AC) Single Phase 7-1/2 hp (200 ... 208 V AC) Three Phase 30 hp (200 V AC) Three Phase 30 hp (208 V AC) Three Phase 30 hp (220 ... 240 V AC) Three Phase 40 hp (240 V AC) Single Phase 40 hp (440 ... 480 V AC) Three Phase 75 hp (550 ... 600 V AC) Three Phase 75 hp |
| Tightening Torque UL/CSA | Control Circuit 11 in-lb Main Circuit 53 in-lb |

Environmental

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| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay -40 ... 70 °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 Vibrations acc. to IEC 60068-2-6 | 5 ... 300 Hz 3 g closed position / 3 g open position |
| Resistance to Shock acc. to IEC 60068-2-27 | Closed, Shock Direction: A 25 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: B1 5 g |
| RoHS Status | Following EU Directive 2011/65/EU |

Certificates and Declarations (Document Number)

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|------------------------------------|-------------------------------|
| ABS Certificate | ABS_15-GE1349500-PDA_90682247 |
| BV Certificate | BV_2634H36994A |
| CB Certificate | CB_SE-96557M2 |
| CCC Certificate | CCC_2013010304646569 |
| CQC Certificate | CQC2013010304646569 |
| Declaration of Conformity - CCC | 2020980304001255 |
| Declaration of Conformity - CE | 1SBD250000U1000 |
| DNV Certificate | DNV-GL_TAE00001AF-3 |
| DNV GL Certificate | DNV-GL_TAE00001AF-3 |
| EAC Certificate | EAC_RU_FRME77B03447 |
| Environmental Information | 1SBD250168E1000 |

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| GL Certificate | DNV-GL_TAE00001AF-3 |
| Instructions and Manuals | 1SBC101036M6801 |
| KC Certificate | KC_HW02016-15011C |
| LR Certificate | LRS_1300087E1 |
| RINA Certificate | RINA_ELE084013XG |
| RMRS Certificate | RMRS_1802705280 |
| RoHS Information | 1SBD250000U1000 |
| UL Certificate | UL_20130926-E312527_14_1 |
| UL Listing Card | UL_E312527 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 150 mm |
| Package Level 1 Depth / Length | 150 mm |
| Package Level 1 Height | 103 mm |
| Package Level 1 Gross Weight | 1.34 kg |
| Package Level 1 EAN | 3471523133228 |
| Package Level 2 Units | box 8 piece |
| Package Level 2 Width | 250 mm |
| Package Level 2 Depth / Length | 300 mm |
| Package Level 2 Height | 300 mm |
| Package Level 2 Gross Weight | 10.72 kg |
| Package Level 3 Units | 192 piece |

Classifications

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| Object Classification Code | Q |
| ETIM 4 | EC000066 - Magnet contactor, AC-switching |
| ETIM 5 | EC000066 - Magnet contactor, AC-switching |
| ETIM 6 | EC000066 - Power contactor, AC switching |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| E-Number (Finland) | 3707136 |
| E-Number (Sweden) | 3210056 |

Categories

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

