

## General Information

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| <b>Extended Product Type:</b> | AF52-30-00-12   |
| <b>Product ID:</b>            | 1SBL367001R1200   |
| <b>EAN:</b>                   | 3471523132320   |
| <b>Catalog Description:</b>   | AF52-30-00-12 48-130V50/60HZ-DC Contactor   |
| <b>Long Description:</b>      | AF52 contactors are used for controlling power circuits up to 690 V AC and 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. AF... contactors include an electronic coil interface accepting a wide control voltage $U_c \text{ min} \dots U_c \text{ max}$ . Only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC. AF contactors can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. AF contactors have built-in surge protection and do not require additional surge suppressors. The AF... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, front and side-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 or DC operated - Accessories: a wide range of accessories is available. |

## Additional Information

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| <b>ABB Industrial IT Suite:</b>                                | Control IT   |
| <b>ABS Certificate:</b>  | ABS_15-GE1349500-PDA_90682247  |
| <b>Ambient Air Temperature:</b>                                | Close to Contactor for Storage -60...+80 °C<br>Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C<br>Close to Contactor without Thermal O/L Relay -40 ... +70 °C  |
| <b>BV Certificate:</b>   | BV_2634H36994A   |
| <b>Block Contactor Type:</b>                                   | 3-Pole Contactor   |
| <b>CB Certificate:</b>   | CB_SE_77418  |
| <b>CCC Certificate:</b>  | CCC_2012010304589737   |
| <b>Climatic Withstand:</b>                                     | Category B according to IEC 60947-1 Annex Q  |
| <b>Coil Voltage Code:</b>                                      | 12   |
| <b>Connecting Capacity Control Circuit:</b>                    | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>  |
| <b>Connecting Capacity Main Circuit:</b>                       | Flexible with Insulated Ferrule 1/2x 4...35 mm <sup>2</sup><br>Flexible with Ferrule 1/2x 4...35 mm <sup>2</sup><br>Rigid 1/2x 6...35 mm <sup>2</sup>  |
| <b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b> | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A   |
| <b>Country of Origin:</b>                                      | France (FR)  |
| <b>Customs Tariff Number:</b>                                  | 85364900   |
| <b>Data Sheet, Technical Information:</b>                      | 1SBC100173C0201  |
| <b>Declaration of Conformity - CE:</b>                         | 1SBD250000U1000  |
| <b>Degree of Protection:</b>                                   | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10   |
| <b>E-number:</b>   | 3210038  |
| <b>EAC Certificate:</b>  | EAC_RU C-FR ME77 B01010  |
| <b>EAN:</b>  | 3471523132320  |
| <b>EPLAN Catalog Tree:</b>                                     | Electrical engineering / Relays, contactors / Contactors   |
| <b>EPLAN Function Definition:</b>                              | Coil / Coil, 2 connection points / Coil for power contactor A1_A2<br>NO contact / NO contact, 2 connection points / Power NO contact 1_2<br>NO contact / NO contact, 2 connection points / Power NO contact 3_4<br>NO contact / NO contact, 2 connection points / Power NO contact 5_6 |

NO contact / NO contact, 2 connection points / Power NO contact 5\_b

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| <b>EPLAN Macro:</b>                            | 9AKK106930A0708   |
| <b>ETIM 4:</b>                                 | EC000066 - Magnet contactor, AC-switching   |
| <b>ETIM 5:</b>                                 | EC000066 - Magnet contactor, AC-switching   |
| <b>ETIM 6:</b>                                 | EC000066 - Power contactor, AC switching  |
| <b>Environmental Information:</b>              | 1SBD250168E1000   |
| <b>Full Load Amps Motor Use:</b>               | (120 V AC) Single Phase 34 A<br>(240 V AC) Single Phase 50 A<br>(200 ... 208 V AC) Three Phase 48.3 A<br>(220 ... 240 V AC) Three Phase 54 A<br>(440 ... 480 V AC) Three Phase 52 A<br>(550 ... 600 V AC) Three Phase 52 A  |
| <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<br>(240 V AC) Single Phase 10 Hp<br>(200 ... 208 V AC) Three Phase 15 Hp<br>(220 ... 240 V AC) Three Phase 20 Hp<br>(440 ... 480 V AC) Three Phase 40 Hp<br>(550 ... 600 V AC) Three Phase 50 Hp   |
| <b>IIT Publishing Status:</b>                  | Level 0 - Information enabled   |
| <b>Industrial IT Certification Level:</b>      | 0   |
| <b>Instructions and Manuals:</b>               | 1SBC101036M6801   |
| <b>Invoice Description:</b>                    | AF52-30-00-12 48-130V50/60HZ-DC Contactor   |
| <b>LR Certificate:</b>                         | LRS_1300087E1   |
| <b>Low Coil Consumption:</b>                   | No  |
| <b>Maximum Breaking Capacity:</b>              | cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 950 A<br>cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 600 A  |
| <b>Maximum Electrical Switching Frequency:</b> | AC-1 600 cycles per hour<br>AC-2 / AC-4 150 cycles per hour<br>AC-3 1200 cycles per hour  |
| <b>Maximum Mechanical Switching Frequency:</b> | 3600 cycles per hour  |
| <b>Maximum Operating Altitude Permissible:</b> | 3000 m  |
| <b>Minimum Order Quantity:</b>                 | 1 piece   |
| <b>Mounted Auxiliary Contacts:</b>             | 0 NO, 0 NC  |
| <b>Mounted Auxiliary Contacts 1st Stack:</b>   | 0 NO, 0 NC  |
| <b>Mounted Auxiliary Contacts 2nd Stack:</b>   | 0 NO, 0 NC  |
| <b>Mounting Position:</b>                      | Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF40 ... AF96   |
| <b>Mounting Positions:</b>                     | 1SBC500297F0000   |
| <b>Number of Auxiliary Contacts NC:</b>        | 0   |
| <b>Number of Auxiliary Contacts NO:</b>        | 0   |
| <b>Number of Main Contacts NC:</b>             | 0   |
| <b>Number of Main Contacts NO:</b>             | 3   |
| <b>Object Classification Code:</b>             | Q   |
| <b>Operate Time:</b>                           | Between Coil De-energization and NC Contact Closing 19 ... 105 ms<br>Between Coil De-energization and NO Contact Opening 17 ... 100 ms<br>Between Coil Energization and NC Contact Opening 38 ... 95 ms<br>Between Coil Energization and NO Contact Closing 42 ... 100 ms |
| <b>Order Multiple:</b>                         | 1 piece   |
| <b>Package Level 1 EAN:</b>                    | 3471523132320   |
| <b>Package Level 1 Gross Weight:</b>           | 1.07 kg   |
| <b>Package Level 1 Height:</b>                 | 97 mm   |
| <b>Package Level 1 Length:</b>                 | 150 mm  |

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| Package Level 1 Length:                                | 150 mm  |
| Package Level 1 Units:                                 | 1 piece   |
| Package Level 1 Width:                                 | 150 mm  |
| Package Level 2 Height:                                | 300 mm  |
| Package Level 2 Length:                                | 300 mm  |
| Package Level 2 Units:                                 | 10 piece  |
| Package Level 2 Width:                                 | 250 mm  |
| Package Level 3 Units:                                 | 240 piece   |
| Packing Type:  | Box   |
| Power Loss:  | at Rated Operating Conditions AC-1 per Pole 6.3 W<br>at Rated Operating Conditions AC-3 per Pole 1.7 W  |
| Product Main Type:                                     | AF52  |
| Product Name:  | Block Contactor   |
| Product Net Depth:                                     | 111 mm  |
| Product Net Height:                                    | 125.5 mm  |
| Product Net Weight:                                    | 0.970 kg  |
| Product Net Width:                                     | 55 mm   |
| Product Packing Type:                                  | Box   |
| RINA Certificate:                                      | RINA_ELE084013XG  |
| RMRS Certificate:                                      | RMRS_1400682124   |
| Rated Control Circuit Voltage (U <sub>c</sub> ):       | 50 Hz 48 ... 130 V<br>60 Hz 48 ... 130 V<br>DC Operation 48 ... 130 V   |
| Rated Frequency (f):                                   | Main Circuit 50 / 60 Hz   |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ):   | 6 kV  |
| Rated Insulation Voltage (U <sub>i</sub> ):            | acc. to UL/CSA 600 V<br>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V  |
| Rated Operational Current AC-1 (I <sub>e</sub> ):      | (690 V) 40 °C 100 A<br>(690 V) 60 °C 80 A<br>(690 V) 70 °C 70 A   |
| Rated Operational Current AC-3 (I <sub>e</sub> ):      | (220 / 230 / 240 V) 60 °C 53 A<br>(380 / 400 V) 60 °C 53 A<br>(415 V) 60 °C 53 A<br>(440 V) 60 °C 53 A<br>(500 V) 60 °C 45 A<br>(690 V) 60 °C 35 A  |
| Rated Operational Power AC-3 (P <sub>e</sub> ):        | (220 / 230 / 240 V) 15 kW<br>(380 / 400 V) 22 kW<br>(400 V) 22 kW<br>(415 V) 30 kW<br>(440 V) 30 kW<br>(500 V) 30 kW<br>(690 V) 30 kW   |
| Rated Operational Voltage:                             | Main Circuit 690 V  |
| Rated Short-time Withstand Current (I <sub>cw</sub> ): | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A |
| Resistance to Shock acc. to IEC 60068-2-27:            | Closed, Shock Direction: A 25 g<br>Closed, Shock Direction: B1 25 g<br>Closed, Shock Direction: B2 15 g<br>Closed, Shock Direction: C1 25 g<br>Closed, Shock Direction: C2 25 g<br>Open, Shock Direction: B1 5 g  |
| Resistance to Vibrations acc. to IEC                   | 5 ... 300 Hz 3 g closed position / 3 g open position  |

60068-2-6:

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| <b>RoHS Information:</b>         | 1SBD251021E1000                                   |
| <b>Selling Unit of Measure:</b>  | piece   |
| <b>Short Description:</b>        | AF52-30-00-12 48-130V50/60HZ-DC Contactor         |
| <b>Terminal Type:</b>            | Screw Terminals                                   |
| <b>Tightening Torque:</b>        | Control Circuit 1.2 N·m<br>Main Circuit 4 N·m     |
| <b>Tightening Torque UL/CSA:</b> | Control Circuit 11 in·lb<br>Main Circuit 35 in·lb |
| <b>UL Certificate:</b>           | UL_20130926-E312527_14_1                          |
| <b>UL Listing Card:</b>          | UL_E312527  |
| <b>UNSPSC:</b>                   | 39121529  |
| <b>Wire Stripping Length:</b>    | Main Circuit 16 mm                                |
| <b>DNV GL Certificate:</b>       | DNV-GL_E13871                                     |

