

## General Information

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|-------------------------------|---|
| <b>Extended Product Type:</b> | AF96-30-00-13   |
| <b>Product ID:</b>            | 1SBL407001R1300   |
| <b>EAN:</b>                   | 3471523133235   |
| <b>Catalog Description:</b>   | AF96-30-00-13 100-250V50/60HZ-DC Contactor  |
| <b>Long Description:</b>      | AF96 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 $U_c$ min. ... $U_c$ 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. |

## Categories

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

## Ordering

|                                |               |
|--------------------------------|---------------|
| <b>EAN:</b>                    | 3471523133235 |
| <b>Minimum Order Quantity:</b> | 1 piece       |
| <b>Customs Tariff Number:</b>  | 85369085      |

## Dimensions

|                            |          |
|----------------------------|----------|
| <b>Product Net Width:</b>  | 70 mm    |
| <b>Product Net Depth:</b>  | 116 mm   |
| <b>Product Net Height:</b> | 125.5 mm |
| <b>Product Net Weight:</b> | 1.170 kg |

## Container Information

|                                      |               |
|--------------------------------------|---------------|
| <b>Package Level 1 Units:</b>        | 1 piece       |
| <b>Package Level 1 Width:</b>        | 150 mm        |
| <b>Package Level 1 Length:</b>       | 150 mm        |
| <b>Package Level 1 Height:</b>       | 103 mm        |
| <b>Package Level 1 Gross Weight:</b> | 1.29 kg       |
| <b>Package Level 1 EAN:</b>          | 3471523133235 |
| <b>Package Level 2 Units:</b>        | 10 piece      |
| <b>Package Level 2 Width:</b>        | 300 mm        |
| <b>Package Level 2 Length:</b>       | 320 mm        |
| <b>Package Level 2 Height:</b>       | 500 mm        |
| <b>Package Level 3 Units:</b>        | 1296 piece    |

## Technical

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|---|---|
| <b>Number of Main Contacts NO:</b>                                  | 3   |
| <b>Number of Main Contacts NC:</b>                                  | 0   |
| <b>Number of Auxiliary Contacts NO:</b>                             | 0   |
| <b>Number of Auxiliary Contacts NC:</b>                             | 0   |
| <b>Rated Operational Voltage:</b>                                   | Main Circuit 690 V  |
| <b>Rated Frequency (f):</b>   | Main Circuit 50 / 60 Hz   |
| <b>Conventional Free-air Thermal Current (<math>I_{th}</math>):</b> | acc. to IEC 60947-4-1, Open Contactors $q = 40$ °C 130 A  |
| <b>Rated Operational Current AC-1 (<math>I_e</math>):</b>           | (690 V) 40 °C 130 A<br>(690 V) 60 °C 105 A<br>(690 V) 70 °C 90 A  |
| <b>Rated Operational Current AC-3 (<math>I_e</math>):</b>           | (220 / 230 / 240 V) 60 °C 96 A<br>(380 / 400 V) 60 °C 96 A<br>(415 V) 60 °C 96 A<br>(440 V) 60 °C 96 A<br>(500 V) 60 °C 80 A<br>(690 V) 60 °C 57 A<br>(1000 V) 60 °C 30 A |
| <b>Rated Operational Power AC-3 (<math>P_e</math>):</b>             | (220 / 230 / 240 V) 25 kW   |

|  |   |
|--|---|
|  | (380 / 400 V) 45 kW<br>(415 V) 55 kW<br>(440 V) 55 kW<br>(500 V) 55 kW<br>(690 V) 55 kW   |
| <b>Rated Short-time Withstand Current (<math>I_{cw}</math>):</b> | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 780 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A |
| <b>Maximum Breaking Capacity:</b>                                | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 1150 A<br>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 750 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>Rated Insulation Voltage (<math>U_i</math>):</b>              | acc. to UL/CSA 600 V<br>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V   |
| <b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>   | 8 kV  |
| <b>Maximum Mechanical Switching Frequency:</b>                   | 3600 cycles per hour  |
| <b>Rated Control Circuit Voltage (<math>U_c</math>):</b>         | 50 Hz 100 ... 250 V<br>60 Hz 100 ... 250 V<br>DC Operation 100 ... 250 V  |
| <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>Connecting Capacity-Main Circuit:</b>                         | Flexible with Insulated Ferrule 1/2x 6...50 mm <sup>2</sup><br>Flexible with Ferrule 1/2x 6...50 mm <sup>2</sup><br>Rigid 1x 6...70 mm <sup>2</sup><br>Rigid 2x 6...50 mm <sup>2</sup>  |
| <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>Wire Stripping Length:</b>                                    | Main Circuit 17 mm  |
| <b>Degree of Protection:</b>                                     | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10  |
| <b>Terminal Type:</b>  | Screw Terminals   |

## Environmental

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| <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>Maximum Operating Altitude Permissible:</b>         | 3000 m   |
| <b>Resistance to Shock acc. to IEC 60068-2-27:</b>     | 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 |
| <b>Resistance to Vibrations acc. to IEC 60068-2-6:</b> | 5...300 Hz 3 g closed position / 3 g open position   |

## Technical UL/CSA

|                                  |   |
|----------------------------------|---|
| <b>Horsepower Rating UL/CSA:</b> | (120 V AC) Single Phase 7-1/2 Hp<br>(240 V AC) Single Phase 20 Hp<br>(200 ... 208 V AC) Three Phase 30 Hp<br>(220 ... 240 V AC) Three Phase 30 Hp<br>(440 ... 480 V AC) Three Phase 60 Hp<br>(550 ... 600 V AC) Three Phase 75 Hp |
| <b>Tightening Torque UL/CSA:</b> | Control Circuit 11 in·lb<br>Main Circuit 53 in·lb   |

## Certificates and Declarations (Document Number)

|  |                               |
|--|-------------------------------|
| <b>ABS Certificate:</b>                | ABS_15-GE1349500-PDA_90682247 |
| <b>BV Certificate:</b>                 | BV_2634H36994A                |
| <b>CB Certificate:</b>                 | CB_SE_77417                   |
| <b>CCC Certificate:</b>                | CCC_2013010304646569          |
| <b>cUL Certificate:</b>                | UL_20130926-E312527_14_1      |
| <b>Declaration of Conformity - CE:</b> | 1SBD250176C3000               |
| <b>DNV Certificate:</b>                | DNV-GL_E13871                 |

|                          |                         |
|--------------------------|-------------------------|
| <b>EAC Certificate:</b>  | EAC_RU C-FR ME77 B01010 |
| <b>GL Certificate:</b>   | DNV-GL_E13871           |
| <b>LR Certificate:</b>   | LRS_1300087E1           |
| <b>RINA Certificate:</b> | RINA_ELE084013XG        |
| <b>RMRS Certificate:</b> | RMRS_1400682124         |
| <b>RoHS Information:</b> | 1SBD251021E1000         |

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### Classifications

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| <b>E-nummer:</b> | 3210057                                   |
| <b>ETIM 5:</b>   | EC000066 - Magnet contactor, AC-switching |
| <b>UNSPSC:</b>   | 39121529                                  |

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