

PRODUCT-DETAILS

# AF96-30-00-11

## AF96-30-00-11 24-60V50/60HZ 20-60VDC Contactor



### General Information

|                       |  |
|-----------------------|--|
| Extended Product Type | AF96-30-00-11                                  |
| Product ID            | 1SBL407001R1100                                |
| EAN                   | 3471523133211                                  |
| Catalog Description   | AF96-30-00-11 24-60V50/60HZ 20-60VDC Contactor |

Long Description

The AF96-30-00-11 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 (24-60 V 50/60 Hz and 20-60 V 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

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

### Popular Downloads

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

## Dimensions

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

## Technical

|   |  |
|---|--|
| 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<br>(690 V) 60 °C 105 A<br>(690 V) 70 °C 90   |
| Rated Operational Current AC-3 ( $I_e$ )                    | (415 V) 60 °C 105 A<br>(440 V) 60 °C 105 A<br>(500 V) 60 °C 80 A<br>(690 V) 60 °C 57 A<br>(1000 V) 55 °C 30 A<br>(1000 V) 60 °C 30 A<br>(380 / 400 V) 60 °C 105 A<br>(220 / 230 / 240 V) 60 °C 105 A   |
| Rated Operational Power AC-3 ( $P_e$ )                      | (400 V) 55 kW<br>(415 V) 55 kW<br>(440 V) 55 kW<br>(500 V) 55 kW<br>(690 V) 55 kW<br>(1000 V) 40 kW<br>(380 / 400 V) 55 kW<br>(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<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<br>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<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 750 A  |
| Maximum Electrical Switching Frequency                      | (AC-1) 600 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(AC-3) 1200 cycles per hour   |
| Rated Insulation Voltage ( $U_i$ )                          | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>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 24 ... 60 V<br>50 Hz / 60 Hz 24 ... 60 V<br>60 Hz 24 ... 60 V<br>DC Operation 20 ... 60 V  |
| Operate Time  | 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  |

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

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

## Technical UL/CSA

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

## Environmental

|   |  |
|---|--|
| Ambient Air<br>Temperature                        | Close to Contactor Fitted with Thermal O/L Relay -40 ... 70 °C<br>Close to Contactor without Thermal O/L Relay -40 ... 70 °C<br>Close to Contactor for Storage -60 ... +80 °C                                    |
| Climatic Withstand                                | Category B according to IEC 60947-1 Annex Q  |
| Maximum Operating<br>Altitude Permissible         | Without Derating 3000 m  |
| Resistance to Vibrations<br>acc. to IEC 60068-2-6 | 5 ... 300 Hz 3 g closed position / 3 g open position   |
| Resistance to Shock acc.<br>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 |
| RoHS Status                                       | Following EU Directive 2011/65/EU  |

## Certificates and Declarations (Document Number)

|                                    |                               |
|------------------------------------|-------------------------------|
| 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<br>Conformity - CCC | 2020980304001255              |
| Declaration of<br>Conformity - CE  | 1SBD250000U1000               |
| DNV Certificate                    | DNV-GL_TAE00001AF-3           |
| DNV GL Certificate                 | DNV-GL_TAE00001AF-3           |
| EAC Certificate                    | EAC_RU_FRME77B03447           |
| Environmental<br>Information       | 1SBD250168E1000               |

|                          |                          |
|--------------------------|--------------------------|
| 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

|                                |               |
|--------------------------------|---------------|
| 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            | 3471523133211 |
| 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

|                            |   |
|----------------------------|---|
| 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)         | 3707135                                   |
| E-Number (Sweden)          | 3210055                                   |

## Categories

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

