

PRODUCT-DETAILS

AF16-22-00-11

AF16-22-00-11 24-60V50/60HZ 20-60VDC

Contactors



General Information

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|-----------------------|---|
| Extended Product Type | AF16-22-00-11 |
| Product ID | 1SBL177501R1100 |
| EAN | 3471523116313 |
| Catalog Description | AF16-22-00-11 24-60V50/60HZ 20-60VDC Contactor |
| Long Description | The AF16-22-00-11 is a 4 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 7.5 kW / 400 V AC (AC-3) and switching power circuits up to 30 A (AC-1) or 30 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

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

Popular Downloads

| | |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101027M6801 |
|--------------------------|-----------------|

Dimensions

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

Technical

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| Number of Main Contacts NO | 2 |
| Number of Main Contacts NC | 2 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Auxiliary Contacts NC | 0 |
| Standards | IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14 |
| Rated Operational Voltage | Main Circuit 690 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 35 A |
| Rated Operational Current AC-1 (I _e) | (690 V) 40 °C 30 A (690 V) 60 °C 30 A (690 V) 70 °C 26 A |
| Rated Operational Current AC-3 (I _e) | (415 V) 60 °C 18 A (440 V) 60 °C 18 A (500 V) 60 °C 15 A (690 V) 60 °C 10.5 A (380 / 400 V) 60 °C 18 A (220 / 230 / 240 V) 60 °C 18 A |
| Rated Operational Power AC-3 (P _e) | (400 V) 7.5 kW (415 V) 9 kW (440 V) 9 kW (500 V) 9 kW (690 V) 9 kW (380 / 400 V) 7.5 kW (220 / 230 / 240 V) 4 kW |
| Rated Short-time Withstand Current (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 1 s -empty- 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 |
| Maximum Electrical Switching Frequency | (AC-1) 600 cycles per hour |
| 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 |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour |
| Rated Control Circuit Voltage (U _c) | 50 Hz 24 ... 60 V 50 Hz / 60 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 V |
| Operate Time | Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 ms |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 0.75 ... 6 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 4 mm ² |

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| | Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 6 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 | Control Circuit 10 mm Main Circuit 10 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 IP20 |
| Terminal Type | Screw Terminals |

Technical UL/CSA

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| General Use Rating UL/CSA | (600 V AC) 30 A |
| Tightening Torque UL/CSA | Control Circuit 11 IA Main Circuit 13 IA |

Environmental

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| Ambient Air Temperature | Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... +70 °C |
| Climatic Withstand | Category B according to IEC 60947-1 Annex Q |
| Maximum Operating Altitude Permissible | 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: B1 25 K40 Open, Shock Direction: B1 5 K40 Shock Direction: A 30 K40 Shock Direction: B2 15 K40 Shock Direction: C1 25 K40 Shock Direction: C2 25 K40 |
| RoHS Status | Following EU Directive 2011/65/EU |

Certificates and Declarations (Document Number)

| | |
|------------------------------------|--|
| ABS Certificate | ABS_15-GE1349500-PDA_90682247 |
| CB Certificate | CB_SE-96551 |
| CCC Certificate | CCC_2010010304445624 |
| CQC Certificate | CQC2010010304445624 CQC2020010304298240 |
| Declaration of Conformity - CCC | 2020980304001253 2020980304001082 |
| Declaration of Conformity - CE | 1SBD250001U1000 |
| DNV Certificate | DNV-GL_TAE00001AF-3 |
| DNV GL Certificate | DNV-GL_TAE00001AF-3 |
| EAC Certificate | EAC_RU_FRME77B03447 |
| Environmental Information | 1SBD250147E1000 |
| GL Certificate | DNV-GL_TAE00001AF-3 |
| GOST Certificate | GOST_POCCFR.ME77.B07175.pdf |
| Instructions and Manuals | 1SBC101027M6801 |
| KC Certificate | KC_HW02016-15008C |
| LR Certificate | LRS_1300087E1 |
| RINA Certificate | RINA_ELE084013XG |
| RMRS Certificate | RMRS_1802705280 |
| RoHS Information | 1SBD250001U1000 |

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| UL Certificate | UL_20171228-E319322_3_1 |
| UL Listing Card | UL_E319322 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 87 mm |
| Package Level 1 Depth / Length | 79 mm |
| Package Level 1 Height | 47 mm |
| Package Level 1 Gross Weight | 0.27 kg |
| Package Level 1 EAN | 3471523116313 |
| Package Level 2 Units | box 27 piece |
| Package Level 2 Width | 250 mm |
| Package Level 2 Depth / Length | 300 mm |
| Package Level 2 Height | 315 mm |
| Package Level 2 Gross Weight | 14.58 kg |
| Package Level 3 Units | 1296 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 |
| E-Number (Finland) | 3705812 |
| E-Number (Sweden) | 3211467 |

Categories

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

