

PRODUCT-DETAILS

AF38ZB-40-00-23

AF38ZB-40-00-23 100-250V50/60HZ-DC

Contactors



General Information

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| Extended Product Type | AF38ZB-40-00-23 |
| Product ID | 1SBL296261R2300 |
| EAN | 3471523124738 |
| Catalog Description | AF38ZB-40-00-23 100-250V50/60HZ-DC Contactor |
| Long Description | The AF38ZB-40-00-23 is a 4 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 11 kW / 400 V AC (AC-3) and switching power circuits up to 55 A (AC-1) or 55 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 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 | 1SBC101037M6801 |
|--------------------------|-----------------|

Dimensions

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| Product Net Width | 45 mm |
| Product Net Depth / Length | 101 mm |
| Product Net Height | 86 mm |
| Product Net Weight | 0.41 kg |

Technical

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| Number of Main Contacts NO | 4 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Auxiliary Contacts NC | 0 |
| Standards | IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1, IEC 60077-1 (applicable parts), IEC 60077-2 (applicable parts), EN 50155 (applicable parts), TR CU 001/2011, IEC 61373, For compliance confirmation on applicable parts based on your application and combination, please consult your ABB sales representatives. |
| 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 55 A |
| Rated Operational Current AC-1 (I _e) | (690 V) 40 °C 55 (690 V) 60 °C 45 A (690 V) 70 °C 37 |
| Rated Operational Current AC-3 (I _e) | (415 V) 60 °C 21.2 A (440 V) 60 °C 20 A (500 V) 60 °C 17.6 A (690 V) 60 °C 10.5 A (380 / 400 V) 60 °C 22 A (220 / 230 / 240 V) 60 °C 23.2 A |
| Rated Operational Power AC-3 (P _e) | (400 V) 11 kW (415 V) 11 kW (440 V) 11 kW (500 V) 11 kW (690 V) 9 kW (220 / 230 / 240 V) 5.5 kW |
| Rated Short-time Withstand Current Low Voltage (I _{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 55 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 450 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A for 1 s -empty- 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 |
| Rated Impulse Withstand Voltage (U _{imp}) | 6 kV |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour |
| Rated Control Circuit Voltage (U _c) | 50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 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 1.5 ... 16 mm ² Flexible with Insulated Ferrule 1x 1.5 ... 16 mm ² Flexible with Insulated Ferrule 2x 1.5 ... 16 mm ² Rigid 1/2x 1.5 ... 16 mm ² |

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| 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 12 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) 55 A |
|------------------------------|-----------------|

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 | Without Derating 3000 m |
| RoHS Status | Following EU Directive 2011/65/EU |

Certificates and Declarations (Document Number)

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|------------------------------------|-----------------------------|
| CB Certificate | CB_SE-96553 |
| CCC Certificate | CCC_2010010304445623 |
| CQC Certificate | CQC2010010304445623 |
| Declaration of Conformity - CCC | 2020980304001254 |
| Declaration of Conformity - CE | 1SBD250001U1000 |
| EAC Certificate | EAC_RU C-FR ME77 B03597 |
| Environmental Information | 1SBD250167E1000 |
| GOST Certificate | GOST_POCCFR.ME77.B07175.pdf |
| Instructions and Manuals | 1SBC101037M6801 |
| KC Certificate | KC_HW02016-15002C |
| RoHS Information | 1SBD250001U1000 |
| UL Certificate | UL_20120918-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 | 103 mm |
| Package Level 1 Height | 47 mm |
| Package Level 1 Gross Weight | 0.41 kg |
| Package Level 1 EAN | 3471523124738 |
| Package Level 2 Units | box 18 piece |
| Package Level 2 Width | 250 mm |
| Package Level 2 Depth / Length | 300 mm |

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|------------------------------|-----------|
| Package Level 2 Height | 315 mm |
| Package Level 2 Gross Weight | 14.76 kg |
| Package Level 3 Units | 864 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 |

Categories

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

