PRODUCT-DETAILS

# AF80-40-00-14

## AF80-40-00-14 250-500V50/60HZ-DC Contactor



### General Information

| | |
|---|---|
| Extended Product Type | AF80-40-00-14 |
| Product ID | 1SBL397201R1400 |
| EAN | 3471523133747 |
| Catalog Description | AF80-40-00-14 250-500V50/60HZ-DC Contactor |
| Long Description | The AF80-40-00-14 is a 4 pole - 1000 V IEC or 600 UL contactor with screw terminals, controlling motors up to 37 kW / 400 V AC (AC-3) and switching power circuits up to 125 A (AC-1) or 105 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (250-500 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 | 1SBC101047M6801 |

### Dimensions

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|---|---|
| Product Net Width | 90 mm |
| Product Net Depth / Length | 116 mm |
| Product Net Height | 125.5 mm |
| Product Net Weight | 1.44 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 |
| 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 125 A |
| Rated Operational Current AC-1 ($I_e$) | (690 V) 40 °C 125<br>(690 V) 60 °C 105 A<br>(690 V) 70 °C 90 |
| Rated Operational Current AC-3 ($I_e$) | (415 V) 60 °C 80 A<br>(440 V) 60 °C 80 A<br>(500 V) 60 °C 65 A<br>(690 V) 60 °C 49 A<br>(1000 V) 60 °C 25 A<br>(380 / 400 V) 60 °C 80 A<br>(220 / 230 / 240 V) 60 °C 80 A |
| Rated Operational Power AC-3 ($P_e$) | (415 V) 45 kW<br>(440 V) 45 kW<br>(500 V) 45 kW<br>(690 V) 45 kW<br>(1000 V) 35 kW<br>(380 / 400 V) 37 kW<br>(220 / 230 / 240 V) 22 kW |
| Rated Short-time Withstand Current ($I_{cw}$) | 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<br>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) 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 250 ... 500 V<br>50 Hz / 60 Hz 250 ... 500 V<br>60 Hz 250 ... 500 V<br>DC Operation 250 ... 500 V |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 6 ... 50 mm²<br>Rigid 1x 6 ... 70 mm²<br>Rigid 2x 6 ... 50 mm² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²<br>Rigid 1/2x 1 ... 2.5 mm² |
| 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

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|---|---|
| General Use Rating UL/CSA | (600 V AC) 105 A |
| Horsepower Rating UL/CSA | (120 V AC) Single Phase 7-1/2 hp<br>(200 ... 208 V AC) Three Phase 25 hp<br>(220 ... 240 V AC) Three Phase 30 hp<br>(240 V AC) Single Phase 15 hp<br>(440 ... 480 V AC) Three Phase 60 hp<br>(550 ... 600 V AC) Three Phase 75 hp |

## Environmental

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|---|---|
| Ambient Air Temperature | Close to Contactor for Storage -60 ... +80 °C<br>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 3 g Closed position / 2 g Open position |
| 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 Conformity - CCC | 2020980304001255 |
| Declaration of Conformity - CE | 1SBD250001U1000 |
| DNV Certificate | DNV-GL_TAE00001AF-3 |
| DNV GL Certificate | DNV-GL_TAE00001AF-3 |
| EAC Certificate | EAC_RU_FRME77B03447 |
| GL Certificate | DNV-GL_TAE00001AF-3 |
| Instructions and Manuals | 1SBC101047M6801 |
| KC Certificate | KC_HW02016-15013C |
| LR Certificate | LRS_1300087E1 |
| RMRS Certificate | RMRS_1400682124 |
| RoHS Information | 1SBD250001U1000 |
| UL Certificate | UL_20141124-E312527-14-2 |
| UL Listing Card | UL_E312527 |

## Container Information

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|---|---|
| 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 | 1.57 kg |
| Package Level 1 EAN | 3471523133747 |
| 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 | 12.56 kg |
| Package Level 3 Units | 192 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 |
| E-Number (Finland) | 3707461 |
| E-Number (Sweden) | 3210316 |

## Categories

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

