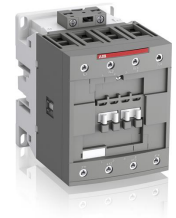


# AF80-40-00-12



AF80-40-00-12 48-130V50/60HZ-DC Contactor

## General Information

|                       |   |
|-----------------------|---|
| Extended Product Type | AF80-40-00-12   |
| Product ID            | 1SBL397201R1200   |
| EAN                   | 3471523133723   |
| Catalog Description   | AF80-40-00-12 48-130V50/60HZ-DC Contactor   |
| Long Description      | AF80 4-pole contactors are used for controlling power circuits up to 690 V AC and 440 V DC. They are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces...). AF... contactors include an electronic coil interface accepting a wide control voltage $U_c \text{ min.} \dots U_c \text{ max.}$ 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 4-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 4 N.O. 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. |

## Ordering

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

## Popular Downloads

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101047M6801 |
|--------------------------|-----------------|

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 90 mm    |
| Product Net Depth / Length | 116 mm   |
| Product Net Height         | 125.5 mm |
| Product Net Weight         | 1.49 kg  |

## Technical

|                                 |                    |
|---------------------------------|--------------------|
| 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 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 $q = 40\text{ °C}$ 125 A  |
| Rated Operational Current AC-1 ( $I_e$ )           | (690 V) 40 °C 125 A<br>(690 V) 60 °C 105 A<br>(690 V) 70 °C 90 A   |
| Rated Operational Current AC-3 ( $I_e$ )           | (220 / 230 / 240 V) 60 °C 80 A<br>(380 / 400 V) 60 °C 80 A<br>(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   |
| Rated Operational Power AC-3 ( $P_e$ )             | (220 / 230 / 240 V) 22 kW<br>(380 / 400 V) 37 kW<br>(415 V) 45 kW<br>(440 V) 45 kW<br>(500 V) 45 kW<br>(690 V) 45 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 UL/CSA 600 V<br>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 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 48 ... 130 V<br>60 Hz 48 ... 130 V<br>DC Operation 48 ... 130 V  |
| Connecting Capacity Main Circuit                   | 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>  |
| Connecting Capacity Control Circuit                | Flexible with Ferrule 1/2x 0.75 ... 2.5 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  |

## Environmental

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

## Technical UL/CSA

|                           |   |
|---------------------------|---|
| General Use Rating UL/CSA | (600 V AC) 105 A  |
| Horsepower Rating UL/CSA  | (120 V AC) Single Phase 7-1/2 Hp<br>(240 V AC) Single Phase 15 Hp<br>(200 ... 208 V AC) Three Phase 25 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 |

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## Certificates and Declarations (Document Number)

|                                |                               |
|--------------------------------|-------------------------------|
| ABS Certificate                | ABS_15-GE1349500-PDA_90682247 |
| CB Certificate                 | CB_SE-77417M1                 |
| CCC Certificate                | CCC_2013010304646569          |
| Declaration of Conformity - CE | 1SBD250001U1000               |
| DNV Certificate                | DNV-GL_TAE00001AF-1           |
| DNV GL Certificate             | DNV-GL_TAE00001AF-1           |
| Instructions and Manuals       | 1SBC101047M6801               |
| KC Certificate                 | KC_HW02016-15013A             |
| LR Certificate                 | LRS_1300087E1                 |
| RMRS Certificate               | RMRS_1400682124               |
| UL Certificate                 | UL_20141124-E312527-14-2      |
| UL Listing Card                | UL_E312527                    |

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## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 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   | 1.62 kg       |
| Package Level 1 EAN            | 3471523133723 |
| Package Level 2 Units          | 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   | 12.96 kg      |
| Package Level 3 Units          | 192 piece     |

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## Classifications

|                            |   |
|----------------------------|---|
| Object Classification Code | Q   |
| E-nummer                   | 3210314                                   |
| 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  |
| UNSPSC                     | 39121529                                  |

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## Categories

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

