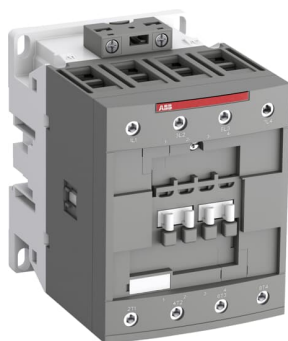


## PRODUCT-DETAILS

# AF80-40-11-11

## AF80-40-11-11 24-60V50/60HZ 20-60VDC Contactor



### General Information

|                       |                                                |
|-----------------------|------------------------------------------------|
| Extended Product Type | AF80-40-11-11                                  |
| Product ID            | 1SBL397201R1111                                |
| EAN                   | 3471523135611                                  |
| Catalog Description   | AF80-40-11-11 24-60V50/60HZ 20-60VDC Contactor |

#### Long Description

The AF80-40-11-11 is a 4 pole - 1000 V IEC or 600 UL contactor with pre-mounted auxiliary contacts and 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 (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 | 1SBC101047M6801 |
|--------------------------|-----------------|

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 102 mm   |
| Product Net Depth / Length | 116 mm   |
| Product Net Height         | 125.5 mm |
| Product Net Weight         | 1.53 kg  |

## Technical

|                                                             |                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts NO                                  | 4                                                                                                                                                                                                                                                                                                                                                                        |
| Number of Main Contacts NC                                  | 0                                                                                                                                                                                                                                                                                                                                                                        |
| Number of Auxiliary Contacts NO                             | 1                                                                                                                                                                                                                                                                                                                                                                        |
| Number of Auxiliary Contacts NC                             | 1                                                                                                                                                                                                                                                                                                                                                                        |
| Rated Operational Voltage                                   | Auxiliary Circuit 690 V<br>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 A<br>(690 V) 60 °C 105 A<br>(690 V) 70 °C 90 A                                                                                                                                                                                                                                                                                                         |
| 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 Operational Current AC-15 ( $I_e$ )                   | (500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(400 / 440 V) 3 A                                                                                                                                                                                                                                                                                 |
| Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ ) | 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 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                                                                                                                                                                                                                                                                                                                                               |
| 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>60 Hz 24 ... 60 V<br>DC Operation 20 ... 60 V                                                                                                                                                                                                                                                                                                       |
| Mounting on DIN Rail                                        | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715                                                                                                                                                                                                                                                                                                                     |

|                                     |                                                                                                                                                                                                   |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting by Screws (not supplied)   | 2 x M4 or 2 x M6 screws placed diagonally                                                                                                                                                         |
| 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 Auxiliary Terminals IP20<br>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 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

|                                                |                                                                                                         |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 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         | Without Derating 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_20-2060694-PDA   |
| 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      |
| Declaration of Conformity - UKCA | 1SBD250032U1000      |
| EAC Certificate                  | EAC_RU_FRME77B03447  |
| Instructions and Manuals         | 1SBC101047M6801      |
| RoHS Information                 | 1SBD250001U1000      |
| UL Listing Card                  | UL_E312527           |

## Container Information

|                                |             |
|--------------------------------|-------------|
| Package Level 1 Units          | box 1 piece |
| Package Level 1 Width          | 144 mm      |
| Package Level 1 Depth / Length | 147 mm      |

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Height         | 109 mm        |
| Package Level 1 Gross Weight   | 1.69 kg       |
| Package Level 1 EAN            | 3471523135611 |
| 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   | 13.52 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  |
| ETIM 8                     | EC000066 - Power contactor, AC switching  |
| eClass                     | V11.0 : 27371003                          |
| UNSPSC                     | 39121529                                  |

**Categories**

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

