

Representative Image

## Alternate Catalog No. AF80-30-00-11 <br> Catalog No. 1SBL397001R1100

Description: AF80-30-00-11 24-60V50/60HZ 20-60VDC Contactor

UPC No 3471523132917

Home > Contactors > UL Listed IEC Contactors > AF Contactors

AF80 contactors are used for controlling power circuits up to 690 VAC and 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. AF... contactors include an electronic coil interface accepting a wide control voltage Uc min. ... Uc max. Only four coils cover control voltages between $24 \ldots 500 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ or $20 \ldots 500 \mathrm{~V}$ 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 1 -stack 3 -pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 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.

## Descriptors

| Category | AF Contactors |
| :--- | :--- |
| Block Contactor Type | 3-Pole Contactor |

## Specifications

| Product Type | AF |
| :---: | :---: |
| General Use Rating UL/CSA | (600 V AC) 105 A |
| Object Classification Code | Q |
| Terminal Type | Screw Terminals |
| Rated Control Circuit Voltage | $50 \mathrm{~Hz} / 60 \mathrm{~Hz} 24 \ldots 60 \mathrm{~V}$ DC Operation 20 ... 60 V |
| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Climatic Withstand | Category B according to IEC 60947-1 Annex Q |
| Resistance to Vibrations acc. to IEC 60068-2-6 | $5 \ldots 300 \mathrm{~Hz} 3 \mathrm{~g}$ closed position / 3 g open position |
| Number of Auxiliary Contacts NO | 0 |
| RoHS Status | Following EU Directive 2011/65/EU |
| Reference Ambient Air Temperature | Close to Contactor for Storage - $60 \ldots+80^{\circ} \mathrm{C}$ Close to Contactor without Thermal O/L Relay $-40 \ldots+70^{\circ} \mathrm{C}$ Close to Contactor Fitted with Thermal O/L Relay -25 $\ldots+60^{\circ} \mathrm{C}$ |
| Rated Operational Voltage | Main Circuit 690 V |
| Resistance to Shock acc. to IEC 60068-2-27 | Closed, Shock Direction: A 25 K40 Closed, Shock Direction: B1 25 K40 Closed, Shock Direction: B2 15 K40 Closed, Shock Direction: C1 25 K40 Closed, Shock Direction: C2 25 K40 Open, Shock Direction: B1 5 K40 |
| Number of Auxiliary Contacts NC | 0 |
| Tightening Torque UL/CSA | Control Circuit 11 IA Main Circuit 53 IA |
| Maximum Operating Altitude Permissible | 3000 m |
| Rated Operational Current AC-1 | ( 690 V) $40^{\circ} \mathrm{C} 125 \mathrm{~A}$ <br> ( 690 V) $60^{\circ} \mathrm{C} 100 \mathrm{~A}$ <br> $\left(690\right.$ V) $70^{\circ} \mathrm{C} 85 \mathrm{~A}$ |

## Specifications

| Rated Operational Power AC-3 | (220 / 230 / 240 V) 22 KWT ( 380 / 400 V) 37 KWT ( 415 V ) 45 KWT (440 V) 45 KWT ( 500 V ) 45 KWT ( 690 V) 45 KWT ( 400 V ) 37 KWT |
| :---: | :---: |
| Horsepower Rating UL/CSA | ( 220 ... 240 V AC) Three Phase 30 hp ( 440 ... 480 V AC) Three Phase 60 hp ( 550 ... 600 V AC) Three Phase 75 hp ( 120 V AC) Single Phase 7-1/2 hp (200 ... 208 V AC) Three Phase 25 hp ( 240 V AC) Single Phase 15 hp |
| Conventional Free-air Thermal Current | acc. to IEC 60947-4-1, Open Contactors $\mathrm{q}=40^{\circ} \mathrm{C} 130 \mathrm{~A}$ |
| Rated Frequency | Main Circuit 50 Hz Main Circuit 60 Hz |
| Rated Short-time Withstand Current | at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 780 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 140 A <br> at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 300 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 450 A for 1 s - A |
| Rated Operational Current AC-3 | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 60^{\circ} \mathrm{C} 80 \mathrm{~A} \\ & (380 / 400 \mathrm{~V}) 60{ }^{\circ} \mathrm{C} 80 \mathrm{~A} \\ & (415 \mathrm{~V}) 60^{\circ} \mathrm{C} 80 \mathrm{~A} \\ & (440 \mathrm{~V}) 60^{\circ} \mathrm{C} 80 \mathrm{~A} \\ & (500 \mathrm{~V}) 60^{\circ} \mathrm{C} 65 \mathrm{~A} \\ & (690 \mathrm{~V}) 60^{\circ} \mathrm{C} 49 \mathrm{~A} \\ & (1000 \mathrm{~V})^{\circ} 60^{\circ} \mathrm{C} 25 \mathrm{~A} \end{aligned}$ |
| Maximum Electrical Switching Frequency | AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour |
| Rated Insulation Voltage | acc. to UL/CSA 600 V <br> acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V |
| Maximum Breaking Capacity | $\cos$ phi $=0.45(\cos$ phi $=0.35$ for le $>100 \mathrm{~A})$ at 440 V 1150 A $\cos$ phi $=0.45(\cos \mathrm{phi}=0.35$ for $\mathrm{le}>100 \mathrm{~A})$ at $690 \vee 750 \mathrm{~A}$ |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour |
| Operate Time | Between Coil De-energization and NC Contact Closing 19 ... 105 ms <br> Between Coil De-energization and NO Contact Opening 17 ... 100 ms <br> Between Coil Energization and NC Contact Opening 38 ... 95 ms Between Coil Energization and NO Contact Closing 42 ... 100 ms |
| Secondary Rated Impulse Withstand Voltage | 8 kV |
| Connecting Capacity Main Circuit | Rigid $1 \times 6 \ldots 70 \mathrm{~m}^{2} / 2 \times 6 \ldots 50 \mathrm{~m}^{2} /$ <br> Flexible with Ferrule $1 / 2 \times 6 \ldots 50 \mathrm{~m}^{2}$ <br> Flexible with Insulated Ferrule $1 / 2 \times 6 \ldots 50 \mathrm{~m}^{2}$ |
| Connecting Capacity Control Circuit | Flexible with Ferrule $1 / 2 \times 0.75 \ldots 2.5 \mathrm{~m}^{2}$ <br> Flexible with Insulated Ferrule $1 \times 0.75$... $2.5 \mathrm{~m}^{2} / 2 \times 0.75$... $1.5 \mathrm{~m}^{2}$ <br> Rigid $1 / 2 \times 1 \ldots 2.5 \mathrm{~m}^{2}$ |
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10 |
| Screw Terminal Type | Screw Terminals |
| Wire Stripping Length | Main Circuit 17 mm |

## Classifications

| ETIM 4 | EC000066 - Magnet contactor, AC-switching |
| :--- | :--- |
| ETIM 6.0 | EC000066 - Power contactor, AC switching |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 5.0 | EC000066 - Magnet contactor, AC-switching |

## Dimensions

Product Net Weight

## Dimensions

| Product Net Depth / Length | 116 mm |
| :--- | :--- |
| Product Net Width | 70 mm |
| Product Net Height | 125.5 mm |

## Package Information

| Package Level 1 Width | 150 mm |
| :--- | :--- |
| Package Level 1 Height | 103 mm |
| Package Level 1 Depth / Length | 150 mm |
| Package Level 1 EAN | 3471523132917 |
| Package Level 1 Units | box 1 piece |
| Package Level 2 Width | 250 mm |
| Package Level 2 Height | 300 mm |
| Package Level 1 Gross Weight | 1.34 kg |
| Package Level 2 Units | box 8 piece |
| Package Level 3 Units | 192 piece |
| Package Level 2 Depth / Length | 300 mm |
| Package Level 2 Gross Weight | 10.72 kg |

## Ordering

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

