

Representative Image

# Alternate Catalog No. AF580-30-11-69
# Catalog No. 1SFL617001R6911

**Description: AF580-30-11 48-130V 50/60Hz / 48-130V DC Contactor**

**UPC No 7320500220375**

**Home > Contactors & Starters > UL Listed IEC Contactors > AF Contactors**

A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 48-130 V, AC/DC

## Descriptors

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

## Specifications

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|---|---|
| Product Type | AF |
| General Use Rating UL/CSA | (600 V AC) 750 A |
| Object Classification Code | Q |
| Terminal Type | Main Circuit: Bars |
| Rated Control Circuit Voltage | 50 Hz /60 Hz DC Operation 48 ... 130 V |
| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V |
| Number of Auxiliary Contacts NO | 1 |
| RoHS Status | Following EU Directive 2011/65/EU |
| Reference Ambient Air Temperature | Close to Contactor for Storage -40 ... +70 °C<br>Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... +50 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +70 °C |
| Rated Operational Voltage | Main Circuit 1000 V |
| Resistance to Shock acc. to IEC 60068-2-27 | Shock Direction: A 5 K40<br>Shock Direction: B1 5 K40<br>Shock Direction: B2 5 K40<br>Shock Direction: C1 5 K40<br>Shock Direction: C2 5 K40 |
| Number of Auxiliary Contacts NC | 1 |
| Maximum Operating Altitude Permissible | 3000 m |
| Rated Operational Current AC-1 | (1000 V) 40 °C 800 A<br>(1000 V) 55 °C 700 A<br>(1000 V) 70 °C 580 A<br>(690 V) 40 °C 800 A<br>(690 V) 55 °C 700 A<br>(690 V) 70 °C 580 A |

## Specifications

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|---|---|
| Rated Operational Power AC-3 | (1000 V) 355 KWT<br>(220 / 230 / 240 V) 160 KWT<br>(380 / 400 V) 315 KWT<br>(415 V) 355 KWT<br>(440 V) 355 KWT<br>(500 V) 400 KWT<br>(690 V) 500 KWT |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x Ie AC-3 |
| Horsepower Rating UL/CSA | (200 V AC) Three Phase 200 hp<br>(208 V AC) Three Phase 200 hp<br>(220 ... 240 V AC) Three Phase 250 hp<br>(440 ... 480 V AC) Three Phase 500 hp<br>(550 ... 600 V AC) Three Phase 600 hp |
| Conventional Free-air Thermal Current | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 800 A |
| Rated Frequency | Main Circuit 50Hz<br>Main Circuit 60 Hz |
| Rated Short-time Withstand Current | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 6400 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1300 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3500 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 7000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 4500 A |
| Rated Operational Current AC-3 | (1000 V) 55 °C 250 A<br>(220 / 230 / 240 V) 55 °C 580 A<br>(380 / 400 V) 55 °C 580 A<br>(415 V) 55 °C 580 A<br>(440 V) 55 °C 580 A<br>(500 V) 55 °C 580 A<br>(690 V) 55 °C 500 A |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1 | 10 x Ie AC-3 |
| Rated Operational Current DC-1 | (110 V) 1-Pole, 40 °C 800 A<br>(110 V) 2 Poles in Series, 40 °C 800 A<br>(220 V) 3 Poles in Series, 40 °C 800 A<br>(600 V) 3 Poles in Series, 40 °C 800 A<br>(850 V) 3 Poles in Series, 40 °C 800 A |
| Maximum Electrical Switching Frequency | AC-1 300 cycles per hour<br>AC-2 / AC-4 60 cycles per hour<br>AC-3 300 cycles per hour |
| Rated Operational Current DC-5 | (110 V) 1-Pole, 40 °C 800 A<br>(110 V) 2 Poles in Series, 40 °C 800 A<br>(220 V) 3 Poles in Series, 40 °C 800 A<br>(600 V) 3 Poles in Series, 40 °C 800 A<br>(850 V) 3 Poles in Series, 40 °C 800 A |
| Short-Circuit Protective Devices | gG Type Fuses 1000 A |
| 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 Ie > 100 A) at 440 V 6000 A<br>cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 5000 A |
| Mechanical Durability | 3 million |
| Rated Operational Current DC-3 | (110 V) 1-Pole, 40 °C 800 A<br>(110 V) 2 Poles in Series, 40 °C 800 A<br>(220 V) 3 Poles in Series, 40 °C 800 A<br>(600 V) 3 Poles in Series, 40 °C 800 A<br>(850 V) 3 Poles in Series, 40 °C 800 A |
| Coil Operating Limits | (acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at θ ≤ 70 °C) |
| Maximum Mechanical Switching Frequency | 300 cycles per hour |
| Operate Time | Between Coil De-energization and NC Contact Closing 50 ... 70 ms<br>Between Coil De-energization and NO Contact Opening 53 ... 73 ms<br>Between Coil Energization and NC Contact Opening 45 ... 115 ms<br>Between Coil Energization and NO Contact Closing 50 ... 120 ms |
| Secondary Rated Impulse Withstand Voltage | Main Circuit 8 kV |
| Connecting Capacity Main Circuit | Bar 52 mm<br>Rigid Al-Cable 300 m²<br>Rigid Cu-Cable 300 m² |

## Specifications

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|---|---|
| Coil Consumption | Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V - A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V - A<br>Holding at Max. Rated Control Circuit Voltage DC 5 V - A<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 1100 V - A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 1100 V - A<br>Pull-in at Max. Rated Control Circuit Voltage DC 1020 V - A |
| 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 IP00 |
| Connecting Capacity Auxiliary Circuit | Flexible with Insulated Ferrule 1 x 0.75 ... 2.5 m²<br>Flexible 2x0.75 ... 2.5 m²<br>Solid 1 x 1 ... 4 m²<br>Stranded 2 x 1 .... 4 m² |
| Screw Terminal Type | Main Circuit: Bars |

## Classifications

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|---|---|
| ETIM 4 | EC000066 - Magnet contactor, AC-switching |
| ETIM 6.0 | EC000066 - Power contactor, AC switching |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| IDEA Granular Category Code (IGCC) | 4755 >> Contactors |
| ETIM 5.0 | EC000066 - Magnet contactor, AC-switching |

## Dimensions

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| Product Net Weight | 13.6kg |
| Product Net Depth / Length | 242 mm |
| Product Net Width | 210 mm |
| Product Net Height | 283 mm |

## Package Information

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| Package Level 1 Width | 280 mm |
| Package Level 1 Height | 310 mm |
| Package Level 1 Depth / Length | 375 mm |
| Package Level 1 EAN | 7320500220375 |
| Package Level 1 Units | box 1 piece |
| Package Level 1 Gross Weight | 15 kg |

## Ordering

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