

**Alternate Catalog No. AF460-30-22-71**  
**Catalog No. 1SFL597001R7122**

**Description: AF460-30-22 250-500V 50/60Hz / 250-500V DC Contactor**

**UPC No 7320500310618**

**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 250-500 V, AC/DC



**Descriptors**

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

**Specifications**

|  |   |
|--|---|
| Product Type                               | AF  |
| General Use Rating UL/CSA                  | (600 V AC) 650 A  |
| Object Classification Code                 | Q   |
| Terminal Type                              | Main Circuit: Bars  |
| Rated Control Circuit Voltage              | 50 Hz /60 Hz DC Operation 250 ... 500 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            | 2   |
| 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            | 2   |
| Maximum Operating Altitude Permissible     | 3000 m  |
| Rated Operational Current AC-1             | (1000 V) 40 °C 700 A<br>(1000 V) 55 °C 600 A<br>(1000 V) 70 °C 480 A<br>(690 V) 40 °C 700 A<br>(690 V) 55 °C 600 A<br>(690 V) 70 °C 480 A   |

## Specifications

|  |  |
|--|--|
| Rated Operational Power AC-3                       | (1000 V) 280 KWT<br>(220 / 230 / 240 V) 132 KWT<br>(380 / 400 V) 250 KWT<br>(415 V) 250 KWT<br>(440 V) 250 KWT<br>(500 V) 315 KWT<br>(690 V) 355 KWT   |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x I <sub>e</sub> AC-3  |
| Horsepower Rating UL/CSA                           | (200 V AC) Three Phase 150 hp<br>(208 V AC) Three Phase 150 hp<br>(220 ... 240 V AC) Three Phase 200 hp<br>(440 ... 480 V AC) Three Phase 400 hp<br>(550 ... 600 V AC) Three Phase 500 hp  |
| Conventional Free-air Thermal Current              | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 700 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 4400 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 840 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 2500 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 4600 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 3100 A                                     |
| Rated Operational Current AC-3                     | (1000 V) 55 °C 200 A<br>(220 / 230 / 240 V) 55 °C 460 A<br>(380 / 400 V) 55 °C 460 A<br>(415 V) 55 °C 460 A<br>(440 V) 55 °C 460 A<br>(500 V) 55 °C 460 A<br>(690 V) 55 °C 400 A   |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1   | 10 x I <sub>e</sub> AC-3   |
| Rated Operational Current DC-1                     | (110 V) 1-Pole, 40 °C 700 A<br>(110 V) 2 Poles in Series, 40 °C 700 A<br>(220 V) 3 Poles in Series, 40 °C 700 A<br>(600 V) 3 Poles in Series, 40 °C 700 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 700 A<br>(110 V) 2 Poles in Series, 40 °C 700 A<br>(220 V) 3 Poles in Series, 40 °C 700 A<br>(600 V) 3 Poles in Series, 40 °C 700 A  |
| Short-Circuit Protective Devices                   | gG Type Fuses 800 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 I <sub>e</sub> > 100 A) at 440 V 5000 A<br>cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 4500 A   |
| Mechanical Durability                              | 5 million  |
| Rated Operational Current DC-3                     | (110 V) 1-Pole, 40 °C 700 A<br>(110 V) 2 Poles in Series, 40 °C 700 A<br>(220 V) 3 Poles in Series, 40 °C 700 A<br>(600 V) 3 Poles in Series, 40 °C 700 A  |
| Coil Operating Limits                              | (acc. to IEC 60947-4-1) 0.85 x U <sub>c</sub> Min. ... 1.1 x U <sub>c</sub> Max. (at θ ≤ 70 °C)  |
| Maximum Mechanical Switching Frequency             | 300 cycles per hour  |
| Operate Time                                       | Between Coil De-energization and NC Contact Closing 45 ... 55 ms<br>Between Coil De-energization and NO Contact Opening 48 ... 58 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 47 mm<br>Rigid Al-Cable 2x240 m <sup>2</sup><br>Rigid Cu-Cable 240 m <sup>2</sup>  |
| 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 7.5 V - A<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 950 V - A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 950 V - A<br>Pull-in at Max. Rated Control Circuit Voltage DC 885 V - A |

## Specifications

|                                       |  |
|---------------------------------------|--|
| 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 1x0.75 ... 2.5 m <sup>2</sup><br>Solid 1 x 1 ... 4 m <sup>2</sup><br>Stranded 1 x 1 .... 4 m <sup>2</sup>           |
| Screw Terminal Type                   | Main Circuit: Bars   |

## Classifications

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

|                            |         |
|----------------------------|---------|
| Product Net Weight         | 10.6 kg |
| Product Net Depth / Length | 216 mm  |
| Product Net Width          | 186 mm  |
| Product Net Height         | 278 mm  |

## Package Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Width          | 280 mm        |
| Package Level 1 Height         | 310 mm        |
| Package Level 1 Depth / Length | 375 mm        |
| Package Level 1 EAN            | 7320500310618 |
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Gross Weight   | 12 kg         |

## Ordering

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