

Representative Image

# Alternate Catalog No. AF146-30-22-12
# Catalog No. 1SFL467001R1222

**Description: AF146-30-22-12 Contactor**

**UPC No 7320500476277**

**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, 50/60 Hz and DC

## Descriptors

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

## Specifications

| | |
|---|---|
| Product Type | AF |
| General Use Rating UL/CSA | (600 V AC) 200 A |
| Object Classification Code | Q |
| Terminal Type | Double Clamp |
| 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 | 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 |
| Number of Auxiliary Contacts NC | 2 |
| Maximum Operating Altitude Permissible | 3000 m |
| Rated Operational Current AC-1 | (1000 V) 40 °C 225 A<br>(1000 V) 55 °C 200 A<br>(1000 V) 70 °C 175 A<br>(690 V) 40 °C 225 A<br>(690 V) 55 °C 200 A<br>(690 V) 70 °C 175 A |
| Rated Operational Power AC-3 | (1000 V) 75 KWT<br>(220 / 230 / 240 V) 45 KWT<br>(380 / 400 V) 75 KWT<br>(415 V) 75 KWT<br>(440 V) 90 KWT<br>(500 V) 90 KWT<br>(690 V) 90 KWT |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x Ie AC-3 |

by ABB

## Specifications

| | |
|---|---|
| Horsepower Rating UL/CSA | (200 V AC) Three Phase 40 hp<br>(208 V AC) Three Phase 40 hp<br>(220 ... 240 V AC) Three Phase 50 hp<br>(440 ... 480 V AC) Three Phase 100 hp<br>(550 ... 600 V AC) Three Phase 125 hp |
| Conventional Free-air Thermal Current | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 225 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 1168 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 200 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 477 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1460 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 674 A |
| Rated Operational Current AC-3 | (1000 V) 55 °C 60 A<br>(220 / 230 / 240 V) 55 °C 146 A<br>(380 / 400 V) 55 °C 146 A<br>(415 V) 55 °C 146 A<br>(440 V) 55 °C 146 A<br>(500 V) 55 °C 93 A<br>(690 V) 55 °C 93 A |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1 | 10 x Ie AC-3 |
| Maximum Electrical Switching Frequency | AC-1 300 cycles per hour<br>AC-2 / AC-4 150 cycles per hour<br>AC-3 300 cycles per hour |
| Short-Circuit Protective Devices | gG Type Fuses 315 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 3000 A<br>cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 1500 A |
| Mechanical Durability | 5 million |
| 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 NO Contact Opening 37 ... 47 ms<br>Between Coil Energization and NO Contact Closing 25 ... 55 ms |
| Secondary Rated Impulse Withstand Voltage | Main Circuit 8 kV |
| Connecting Capacity Main Circuit | Flexible 2 x 10 ... 70 m²<br>Rigid Cu-Cable 2 x 10 ... 95 m² |
| Coil Consumption | Holding at Max. Rated Control Circuit Voltage 50 Hz 4 V - A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 4 V - A<br>Holding at Max. Rated Control Circuit Voltage DC 2.5 W<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 170 V - A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 170 V - A<br>Pull-in at Max. Rated Control Circuit Voltage DC 130 W |
| 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 m²<br>Solid 1 x 1 ... 4 m²<br>Stranded 2 x 1 .... 4 m² |
| Screw Terminal Type | Double Clamp |

## 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 | 1.55kg |
| Product Net Depth / Length | 126 mm |

## Dimensions

| | |
|---|---|
| Product Net Width | 90 mm |
| Product Net Height | 150 mm |

## Package Information

| | |
|---|---|
| Package Level 1 Width | 207 mm |
| Package Level 1 Height | 150 mm |
| Package Level 1 Depth / Length | 216 mm |
| Package Level 1 EAN | 7320500476277 |
| Package Level 1 Units | box 1 piece |
| Package Level 1 Gross Weight | 1.75 kg |

## Ordering

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