

## Alternate Catalog No. AF305-30-22-13 Catalog No. 1SFL587002R1322

**Description:** AF305-30-22-13 Contactor

**UPC No** 7320500481783

**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 100-250 V, 50/60 Hz and DC



360°

Representative Image

### Descriptors

Category	AF Contactors
Block Contactor Type	3-Pole Contactor

### Specifications

Product Type	AF
General Use Rating UL/CSA	(600 V AC) 400 A
Object Classification Code	Q
Terminal Type	Main Circuit: Bars
Rated Control Circuit Voltage	50 Hz /60 Hz DC Operation 100 ... 250 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 Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... +50 °C 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 375 A (1000 V) 55 °C 325 A (1000 V) 70 °C 260 A (690 V) 40 °C 500 A (690 V) 55 °C 400 A (690 V) 70 °C 325 A
Rated Operational Power AC-3	(1000 V) 185 KWT (220 / 230 / 240 V) 90 KWT (380 / 400 V) 160 KWT (415 V) 160 KWT (440 V) 160 KWT (500 V) 200 KWT (690 V) 250 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 100 hp (208 V AC) Three Phase 100 hp (220 ... 240 V AC) Three Phase 125 hp (440 ... 480 V AC) Three Phase 250 hp (550 ... 600 V AC) Three Phase 300 hp
Conventional Free-air Thermal Current	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 500 A
Rated Frequency	Main Circuit 50Hz Main Circuit 60 Hz
Rated Short-time Withstand Current	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 2440 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 996 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 3050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 1409 A
Rated Operational Current AC-3	(1000 V) 55 °C 131 A (220 / 230 / 240 V) 55 °C 305 A (380 / 400 V) 55 °C 305 A (415 V) 55 °C 305 A (440 V) 55 °C 305 A (500 V) 55 °C 290 A (690 V) 55 °C 290 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 500 A (220 V) 2 Poles in Series, 40 °C 500 A (220 V) 3 Poles in Series, 40 °C 500 A
Maximum Electrical Switching Frequency	AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 300 cycles per hour
Rated Operational Current DC-5	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
Short-Circuit Protective Devices	gG Type Fuses 500 A
Rated Insulation Voltage	acc. to UL/CSA 600 V 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 4600 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 3800 A
Mechanical Durability	5 million
Rated Operational Current DC-3	(110 V) 2 Poles in Series, 40 °C 400 A (220 V) 3 Poles in Series, 40 °C 400 A
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at $\theta \leq 70^\circ$ C)
Maximum Mechanical Switching Frequency	300 cycles per hour
Operate Time	Between Coil De-energization and NO Contact Opening 37 ... 47 ms 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 70 ... 185 m <sup>2</sup> Rigid Al-Cable 1 x 185 ... 240 m <sup>2</sup> Rigid Cu-Cable 2 x 70 ... 185 m <sup>2</sup>
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 17.5 V - A Holding at Max. Rated Control Circuit Voltage 60 Hz 17.5 V - A Holding at Max. Rated Control Circuit Voltage DC 4.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 385 V - A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 385 V - A Pull-in at Max. Rated Control Circuit Voltage DC 410 W
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
Connecting Capacity Auxiliary Circuit	Flexible 2x0.75 ... 2.5 m <sup>2</sup> Solid 1 x 1 ... 4 m <sup>2</sup> 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

## Classifications

ETIM 5.0

EC000066 - Magnet contactor, AC-switching

## Dimensions

Product Net Weight	3.9 kg
Product Net Depth / Length	180 mm
Product Net Width	140 mm
Product Net Height	225 mm

## Package Information

Package Level 1 Width	263 mm
Package Level 1 Height	289 mm
Package Level 1 Depth / Length	203 mm
Package Level 1 EAN	7320500481783
Package Level 1 Units	box 1 piece
Package Level 1 Gross Weight	4.6 kg

## Ordering

Minimum Order Quantity	1
Customs Tariff Number	85364900