



Representative Image

## Alternate Catalog No. AF190-30-22-12 Catalog No. 1SFL487002R1222

**Description:** AF190-30-22-12 Contactor

**UPC No** 7320500480472

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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) 250 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	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 250 A (1000 V) 55 °C 225 A (1000 V) 70 °C 185 A (690 V) 40 °C 275 A (690 V) 55 °C 250 A (690 V) 70 °C 200 A
Rated Operational Power AC-3	(1000 V) 110 KWT (220 / 230 / 240 V) 55 KWT (380 / 400 V) 90 KWT (415 V) 90 KWT (440 V) 110 KWT (500 V) 90 KWT (690 V) 132 KWT
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x Ie AC-3

## Specifications

Horsepower Rating UL/CSA	(200 V AC) Three Phase 50 hp (208 V AC) Three Phase 50 hp (220 ... 240 V AC) Three Phase 60 hp (440 ... 480 V AC) Three Phase 125 hp (550 ... 600 V AC) Three Phase 150 hp
Conventional Free-air Thermal Current	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 275 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 1520 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 275 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 621 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1900 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 878 A
Rated Operational Current AC-3	(1000 V) 55 °C 85 A (220 / 230 / 240 V) 55 °C 190 A (380 / 400 V) 55 °C 190 A (415 V) 55 °C 190 A (440 V) 55 °C 190 A (500 V) 55 °C 135 A (690 V) 55 °C 135 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) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 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 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Short-Circuit Protective Devices	gG Type Fuses 355 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 I <sub>e</sub> > 100 A) at 440 V 3300 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 2200 A
Mechanical Durability	5 million
Rated Operational Current DC-3	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 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 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 50 ... 95 m <sup>2</sup> Rigid Al-Cable 1 x 95 ... 185 m <sup>2</sup> Rigid Cu-Cable 2 x 50 ... 120 m <sup>2</sup>
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 4 V - A Holding at Max. Rated Control Circuit Voltage 60 Hz 4 V - A Holding at Max. Rated Control Circuit Voltage DC 2.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 175 V - A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 175 V - A 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 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 m <sup>2</sup> Flexible 2x0.75 ... 2.5 m <sup>2</sup> Stranded 2 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	2.4 kg
Product Net Depth / Length	152 mm
Product Net Width	105 mm
Product Net Height	196 mm

## Package Information

Package Level 1 Width	160 mm
Package Level 1 Height	235 mm
Package Level 1 Depth / Length	258 mm
Package Level 1 EAN	7320500480472
Package Level 1 Units	box 1 piece
Package Level 1 Gross Weight	3 kg

## Ordering

Minimum Order Quantity	1
Customs Tariff Number	85364900