

Representative Image

Alternate Catalog No. AF580-30-22-68
Catalog No. 1SFL617001R6822

Description: AF580-30-22 24-60V DC Contactor

UPC No 7320500222010

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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 24-60 V, DC

Descriptors

Category	AF Contactors
Block Contactor Type	3-Pole Contactor

Specifications

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	DC Operation 24 ... 60 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
Resistance to Shock acc. to IEC 60068-2-27	Shock Direction: A 5 K40 Shock Direction: B1 5 K40 Shock Direction: B2 5 K40 Shock Direction: C1 5 K40 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 800 A (1000 V) 55 °C 700 A (1000 V) 70 °C 580 A (690 V) 40 °C 800 A (690 V) 55 °C 700 A (690 V) 70 °C 580 A

by ABB

Specifications

Rated Operational Power AC-3	(1000 V) 355 KWT (220 / 230 / 240 V) 160 KWT (380 / 400 V) 315 KWT (415 V) 355 KWT (440 V) 355 KWT (500 V) 400 KWT (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 (208 V AC) Three Phase 200 hp (220 ... 240 V AC) Three Phase 250 hp (440 ... 480 V AC) Three Phase 500 hp (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 60 Hz Main Circuit 50Hz
Rated Short-time Withstand Current	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 6400 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 7000 A 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 (220 / 230 / 240 V) 55 °C 580 A (380 / 400 V) 55 °C 580 A (415 V) 55 °C 580 A (440 V) 55 °C 580 A (500 V) 55 °C 580 A (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 (110 V) 2 Poles in Series, 40 °C 800 A (220 V) 3 Poles in Series, 40 °C 800 A (600 V) 3 Poles in Series, 40 °C 800 A (850 V) 3 Poles in Series, 40 °C 800 A
Maximum Electrical Switching Frequency	AC-1 300 cycles per hour AC-2 / AC-4 60 cycles per hour AC-3 300 cycles per hour
Rated Operational Current DC-5	(110 V) 1-Pole, 40 °C 800 A (110 V) 2 Poles in Series, 40 °C 800 A (220 V) 3 Poles in Series, 40 °C 800 A (600 V) 3 Poles in Series, 40 °C 800 A (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 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 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 (110 V) 2 Poles in Series, 40 °C 800 A (220 V) 3 Poles in Series, 40 °C 800 A (600 V) 3 Poles in Series, 40 °C 800 A (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 Between Coil De-energization and NO Contact Opening 53 ... 73 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms 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 Rigid Al-Cable 3x185 m² Rigid Cu-Cable 300 m²

Specifications

Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V - A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V - A Holding at Max. Rated Control Circuit Voltage DC 5.5 V - A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 780 V - A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 780 V - A Pull-in at Max. Rated Control Circuit Voltage DC 785 V - A
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 m² Flexible 2x0.75 ... 2.5 m² Stranded 2 x 1 .... 4 m²
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	13.6kg
Product Net Depth / Length	242 mm
Product Net Width	210 mm
Product Net Height	283 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	7320500222010
Package Level 1 Units	box 1 piece
Package Level 1 Gross Weight	15 kg

Ordering

Minimum Order Quantity	1
Customs Tariff Number	85364900