

Representative Image

Alternate Catalog No. AFS80-30-22-11
Catalog No. 1SBL397082R1122

Description: AFS80-30-22-11 24-60V50/60HZ 20-60VDC Contactor

UPC No 3471523157910

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AFS40 ... AFS96 contactors are designed for machine safety applications. They are delivered with fixed front-mounted auxiliary contact blocks making them ideal for monitoring and controlling circuits. Mechanically linked and mirror contacts make your system safer. - control circuit with electronic coil interface: - 24...60 V AC, 20...60 V DC and 100...250 V AC / DC operated accepting a wide control voltage range - reduced panel energy consumption - mirror and mechanically linked contacts, with front marked symbol acc. to IEC60947-5-1, always guaranteeing the right contactor status - front-mounted auxiliary contact block: - permanently fixed - protective cover to prevent manual operation - yellow housing for easy identification - minimum switching capacity 12 V / 3 mA, with a failure rate 10-7 acc. to IEC 60947-5-4 - built-in surge suppression

Descriptors

Category	AF Contactors
Block Contactor Type	3-Pole Contactor

Specifications

Product Type	AF
General Use Rating UL/CSA	(600 V AC) 105 A
Object Classification Code	Q
Terminal Type	Screw Terminals
Rated Control Circuit Voltage	50 Hz /60 Hz 24 ... 60 V DC Operation 20 ... 60 V
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 3 g closed position / 3 g open position
Number of Auxiliary Contacts NO	2
RoHS Status	Following EU Directive 2011/65/EU
Reference Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 1000 V
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 25 K40 Closed, Shock Direction: B1 25 K40 Closed, Shock Direction: B2 15 K40 Closed, Shock Direction: C1 25 K40 Closed, Shock Direction: C2 25 K40
Number of Auxiliary Contacts NC	2
Tightening Torque UL/CSA	Auxiliary Circuit 11 IA Control Circuit 11 IA Main Circuit 53 IA
Maximum Operating Altitude Permissible	3000 m
Rated Operational Current AC-1	(690 V) 40 °C 125 A (690 V) 60 °C 100 A (690 V) 70 °C 85 A

by ABB

Specifications

Rated Operational Power AC-3	(220 / 230 / 240 V) 22 KWT (380 / 400 V) 37 KWT (415 V) 45 KWT (440 V) 45 KWT (500 V) 45 KWT (690 V) 45 KWT (400 V) 37 KWT
Horsepower Rating UL/CSA	(220 ... 240 V AC) Three Phase 30 hp (440 ... 480 V AC) Three Phase 60 hp (550 ... 600 V AC) Three Phase 75 hp (120 V AC) Single Phase 7-1/2 hp (200 ... 208 V AC) Three Phase 25 hp (240 V AC) Single Phase 15 hp
Conventional Free-air Thermal Current	acc. to IEC 60947-5-1, q = 40 °C 16 A acc. to IEC 60947-4-1, Open Contactors q = 40 °C 130 A
Rated Operational Current AC-15	(220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A
Rated Frequency	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz 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 780 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A for 0.1 s 140 A for 1 s 100 A
Rated Operational Current AC-3	(220 / 230 / 240 V) 60 °C 80 A (380 / 400 V) 60 °C 80 A (415 V) 60 °C 80 A (440 V) 60 °C 80 A (500 V) 60 °C 65 A (690 V) 60 °C 49 A (1000 V) 60 °C 25 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour AC-15 1200 cycles per hour DC-13 900 cycles per hour
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 1150 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 750 A
Maximum Mechanical Switching Frequency	3600 cycles per hour
Operate Time	Between Coil De-energization and NC Contact Closing 19 ... 105 ms Between Coil De-energization and NO Contact Opening 17 ... 100 ms Between Coil Energization and NC Contact Opening 38 ... 95 ms Between Coil Energization and NO Contact Closing 42 ... 100 ms
Secondary Rated Impulse Withstand Voltage	8 kV
Connecting Capacity Main Circuit	Rigid 1x 6 ... 70 m²/2x 6 ... 50 m² / Flexible with Ferrule 1/2x 6 ... 50 m² Flexible with Insulated Ferrule 1/2x 6 ... 50 m²
Rated Operational Current DC-13	(125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (220 V) 0.27 A / 60 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 m² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 m²/2x 0.75 ... 1.5 m² Rigid 1/2x 1 ... 2.5 m²

Specifications

Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 m² Flexible with Insulated Ferrule 1x 0.75 ... 2.5/2x 0.75 ... 1.5 m² Rigid 1/2x 1 ... 2.5 m²
Screw Terminal Type	Screw Terminals
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 17 mm

Classifications

ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 6.0	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 5.0	EC000066 - Magnet contactor, AC-switching

Dimensions

Product Net Weight	1.27 kg
Product Net Depth / Length	149 mm
Product Net Width	70 mm
Product Net Height	125.5 mm

Package Information

Package Level 1 Width	167 mm
Package Level 1 Height	97 mm
Package Level 1 Depth / Length	180 mm
Package Level 1 EAN	3471523157910
Package Level 1 Units	box 1 piece
Package Level 2 Width	250 mm
Package Level 2 Height	300 mm
Package Level 1 Gross Weight	1.41 kg
Package Level 2 Units	box 6 piece
Package Level 3 Units	144 piece
Package Level 2 Depth / Length	300 mm
Package Level 2 Gross Weight	8.46 kg

Ordering

Minimum Order Quantity	1
Customs Tariff Number	85364900