

Products → Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

General Information

Extended Product Type:	AFS52-30-22-13
Product ID:	1SBL367082R1322
EAN:	3471523157736
Catalog Description:	AFS52-30-22-13 100-250V50/60HZ-DC Contactor
Long Description:	<p>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</p>

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

Instructions and Manuals:	1SBC101052M6801
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Dimensions

Product Net Width:	55 mm
Product Net Depth / Length:	144 mm
Product Net Height:	125.5 mm
Product Net Weight:	1.14 kg

Technical

Number of Main Contacts NO:	3
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	2
Number of Auxiliary Contacts NC:	2
Rated Operational Voltage:	Auxiliary Circuit 690 V Main Circuit 690 V

Rated Frequency (f):	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th}):	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 105 A acc. to IEC 60947-5-1, $q = 40\text{ °C}$ 16 A
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (I_e):	(220 / 230 / 240 V) 60 °C 53 A (380 / 400 V) 60 °C 53 A (415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 A
Rated Operational Power AC-3 (P_e):	(220 / 230 / 240 V) 15 kW (380 / 400 V) 22 kW (400 V) 22 kW (415 V) 30 kW (440 V) 30 kW (500 V) 30 kW (690 V) 30 kW
Rated Operational Current AC-15 (I_e):	(220 / 240 V) 4 A (24 / 127 V) 6 A (400 / 440 V) 3 A (500 V) 2 A (690 V) 2 A
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity:	$\cos\phi=0.45$ ($\cos\phi=0.35$ for $I_e > 100\text{ A}$) at 440 V 950 A $\cos\phi=0.45$ ($\cos\phi=0.35$ for $I_e > 100\text{ A}$) at 690 V 600 A
Maximum Electrical Switching Frequency:	AC-1 600 cycles per hour AC-15 1200 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour DC-13 900 cycles per hour

Rated Operational Current DC-13 (I_e):	(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 (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
Rated Insulation Voltage (U_i):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U_{imp}):	6 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U_c):	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
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
Connecting Capacity Main Circuit:	Flexible with Insulated Ferrule 1/2x 4 ... 35 mm ² Flexible with Ferrule 1/2x 4 ... 35 mm ² Rigid 1/2x 6 ... 35 mm ²
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 1 ... 2.5 mm ²
Connecting Capacity Control Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 1 ... 2.5 mm ²
Wire Stripping Length:	Main Circuit 16 mm
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
Terminal Type:	Screw Terminals

Environmental

Ambient Air Temperature:	Close to Contactor for Storage -60 ... +80 °C Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C
Climatic Withstand:	Category B according to IEC 60947-1 Annex Q

Maximum Operating Altitude	3000 m
Permissible:	
Resistance to Vibrations acc. to IEC 60068-2-6:	5 ... 300 Hz 3 g closed position / 3 g open position
Resistance to Shock acc. to IEC 60068-2-27:	Closed, Shock Direction: A 25 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: B2 15 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g

Technical UL/CSA

General Use Rating UL/CSA:	(600 V AC) 80 A
Horsepower Rating UL/CSA:	(120 V AC) Single Phase 3 Hp (240 V AC) Single Phase 10 Hp (200 ... 208 V AC) Three Phase 15 Hp (220 ... 240 V AC) Three Phase 20 Hp (440 ... 480 V AC) Three Phase 40 Hp (550 ... 600 V AC) Three Phase 50 Hp
Tightening Torque UL/CSA:	Auxiliary Circuit 11 in·lb Control Circuit 11 in·lb Main Circuit 35 in·lb

Certificates and Declarations (Document Number)

CB Certificate:	CB_SE_77418M1
cUL Certificate:	UL_20170607-E312527-14-1
Declaration of Conformity - CE:	1SBD250022U1000
Instructions and Manuals:	1SBC101052M6801
UL Listing Card:	E312527

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	167 mm
Package Level 1 Depth / Length:	180 mm
Package Level 1 Height:	97 mm
Package Level 1 Gross Weight:	1.14 kg
Package Level 1 EAN:	3471523157736
Package Level 2 Units:	6 piece
Package Level 2 Width:	250 mm
Package Level 2 Depth / Length:	300 mm
Package Level 2 Height:	300 mm
Package Level 2 Gross Weight:	6.84 kg
Package Level 3 Units:	144 piece

Classifications

Object Classification Code: Q

ETIM 4: EC000066 - Magnet contactor, AC-switching

ETIM 5: EC000066 - Magnet contactor, AC-switching

ETIM 6: EC000066 - Power contactor, AC switching

ETIM 7: EC000066 - Power contactor, AC switching

