

PRODUCT-DETAILS

## AFS40-30-22-11

# AFS40-30-22-11 24-60V50/60HZ 20-60VDC Contactor



### **General Information**

Extended Product Type	AFS40-30-22-11
Product ID	1SBL347082R1122
EAN	3471523157613
Catalog Description	AFS40-30-22-11 24-60V50/60HZ 20-60VDC Contactor
Long Description	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: - 2460 V AC, 2060 V DC and 100250 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

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
E-Number (Sweden)	3210667

Container Information	
Package Level 1 Units	box 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	1.16 kg
Package Level 1 EAN	3471523157613
Package Level 2 Units	box 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	6.96 kg
Package Level 3 Units	144 piece

Certificates and Declarations (Document Number)	
CB Certificate	CB_SE-96554
CCC Certificate	CCC_2015010304824714
cUL Certificate	UL_20170607-E312527-14-1
Declaration of Conformity - CE	1SBD250022U1000
DNV Certificate	DNV-GL_TAE00001AF-3
DNV GL Certificate	DNV-GL_TAE00001AF-3
EAC Certificate	EAC_RUC-FRME77B03199
GL Certificate	DNV-GL_TAE00001AF-3
Instructions and Manuals	1SBC101052M6801

Manuals		
RMRS Certificate	RMRS_1802705280	
RoHS Information	1SBD250022U1000	
UL Listing Card	E312527	

General Use Rating UL/CSA	(600 V AC) 60 A
Horsepower Rating UL/CSA	(220 240 V AC) Three Phase 15 hp (440 480 V AC) Three Phase 30 hp
UL/CSA	(440 480 V AC) Three Phase 30 hg (550 600 V AC) Three Phase 40 hg (120 V AC) Single Phase 3 hg (200 208 V AC) Three Phase 10 hg (240 V AC) Single Phase 7-1/2 hg
Tightening Torque UL/CSA	Auxiliary Circuit 11 I/ Control Circuit 11 I/ Main Circuit 35 I/

Environmental	
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
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	3000 m
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

RoHS Status

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 Following EU Directive 2011/65/EU

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	Main Circuit 690 V Auxiliary Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-5-1, q = 40 °C 16 A acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 ℃ 70 A (690 V) 60 ℃ 60 A (690 V) 70 ℃ 50 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(220 / 230 / 240 V) 60 °C 40 A (380 / 400 V) 60 °C 40 A (415 V) 60 °C 40 A (440 V) 60 °C 40 A (500 V) 60 °C 35 A (690 V) 60 °C 25 A
Rated Operational Power AC-3 (P <sub>e</sub> )	(220 / 230 / 240 V) 11 kW (380 / 400 V) 18.5 kW (415 V) 22 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (400 V) 18.5 kW
Rated Operational Current AC-15 (I <sub>e</sub> )	(220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A
Rated Short-time Withstand Current (I <sub>cw</sub> )	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
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 600 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 Operational Current DC-13 (I <sub>e</sub> )	(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

Rated Insulation Voltage (U <sub>i</sub> )	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	acc. to lec 60947-4-1 and VDE 0110 (GL C) 090 V 6 kV
, Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 24 60 V 50 Hz / 60 Hz 24 60 V 60 Hz 24 60 V 60 Hz 24 60 V DC Operation 20 60 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	Rigid 1/2x 6 3 5 m² Flexible with Ferrule 1/2x 4 35 m² Flexible with Insulated Ferrule 1/2x 4 35 m²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 1.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 2.5 mm <sup>2</sup> Rigid 1/2x 1 2.5 m <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 2.5 m <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 2.5 m <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 1.5 m <sup>2</sup> Rigid 1/2x 1 2.5 m <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm 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

Product Net Width	55 mm
Product Net Depth / Length	144 mm
Product Net Height	125.5 mm
Product Net Weight	1.02 kg

ownloads	
d	1SBC101052M6801

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Categories

