

PRODUCT-DETAILS

## AF370-40-22-13 Contactor



General Information	
Extended Product Type	AF370-40-22-13
Product ID	1SFL607102R1322
EAN	7320500504406
Catalog Description	AF370-40-22-13 Contactor
Long Description	The AF370-40-22-13 is a 4 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 200 kW / 400 V AC (AC-3) / and switching power circuits up to 525 A (AC-1) or 420 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

## Ordering Minimum Order Quantity 1 piece Customs Tariff Number 85364900

Popular Downloads		
Data Sheet, Technical Information		1SBC100192C0206
Instructions and Manuals		1SFC101066M0201
CAD Dimensional		2CDC001079B0201
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Drawing	
Dimension Diagram	1SFB535001G1123
Dimensions	
Product Net Width	184 mm
Product Net Depth / Length	180 mm
Product Net Height	225 mm
Product Net Weight	5.7 kg
Technical	
Number of Main Contacts NO	4
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	2
Number of Auxiliary Contacts NC	2
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 525 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(1000 V) 40 °C 400 A (1000 V) 60 °C 350 A (1000 V) 70 °C 290 A (690 V) 40 °C 525 A (690 V) 60 °C 425 A (690 V) 70 °C 350 A
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Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 525 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(1000 V) 40 °C 400 A (1000 V) 60 °C 350 A (1000 V) 70 °C 290 A (690 V) 40 °C 525 A (690 V) 60 °C 425 A (690 V) 70 °C 350 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 370 A (440 V) 55 °C 370 A (380 / 400 V) 55 °C 370 A (220 / 230 / 240 V) 55 °C 370
Rated Operational Power AC-3 (P <sub>e</sub> )	(415 V) 200 kW (440 V) 200 kW (380 / 400 V) 200 kW (220 / 230 / 240 V) 110 kW
Rated Breaking Capacity AC-3	8 x le AC-3
Rated Making Capacity AC-3	10 x le AC-3
Short-Circuit Protective Devices	gG Type Fuses 630 A
Rated Short-time Withstand Current Low Voltage (I <sub>CW</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 2960 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 1208 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 3700 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 1709 A
Maximum Breaking Capacity	cos phi= $0.45$ (cos phi= $0.35$ for le > 100 A) at 440 V 5000 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x Uc Min 1.1 x Uc Max. (at $\theta$ $\leq$ 70 °C)

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Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 100 250 V 60 Hz 100 250 V DC Operation 100 250 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 17.5 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 17.5 V·A Holding at Max. Rated Control Circuit Voltage DC 4.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 385 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 385 V·A Pull-in at Max. Rated Control Circuit Voltage DC 410 W
Operate Time	Between Coil De-energization and NO Contact Opening 45 80 ms Between Coil Energization and NO Contact Closing 30 60 ms
Connecting Capacity Main Circuit	Flexible 2 x 70 185 mm² Rigid Al-Cable 1 x 185 240 mm² Rigid Cu-Cable 2 x 70 185 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 2.5 mm² Flexible 2x0.75 2.5 mm² Solid 1 x 1 4 mm² Stranded 1 x 1 4 mm²
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
Terminal Type	Main Circuit: Bars
Technical UL/CSA	
Maximum Operating Voltage UL/CSA	Main Circuit 1000 V
General Use Rating UL/CSA	(600 V AC) 420 A
Horsepower Rating UL/CSA	(200 208 V AC) Three Phase 50 Hp (200 V AC) Three Phase 125 hp (208 V AC) Three Phase 125 hp (220 240 V AC) Three Phase 60 Hp (220 240 V AC) Three Phase 150 hp (440 480 V AC) Three Phase 125 Hp (440 480 V AC) Three Phase 300 hp (550 600 V AC) Three Phase 150 Hp (550 600 V AC) Three Phase 350 hp
Environmental	
Ambient Air Temperature	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 Close to Contactor for Storage -40 70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Circular Value	
ABB EcoSolutions	Yes
Circular Design Principles Recyclability Rate	Design for Closing Resource Loops - Standard EN45555 - 76.3 %
End of Life Instructions	1SFC100112M0001
Group Waste to Landfill Target	Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility
Improved Resource Efficiency for Customers	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line
Sustainable Material Content	Recycled Metal - 33 %

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Fco	Transparency
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UL Certificate

Environmental Product	1SFC100104D0201
Declaration - EPD	

Certificates and Declarations	
ABS Certificate	14-LD1092198-PDA
BV Certificate	BV_36353_A0BV
CB Certificate	SE-89316
CQC Certificate	CQC2014010304676670
Declaration of Conformity - CCC	2020980304001305
Declaration of Conformity - CE	2CMT2015-005439
Declaration of Conformity - UKCA	2CMT2020-006118
EAC Certificate	9AKK107046A8618
LR Certificate	LR_14_70011(E1)
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	212 mm
Package Level 1 Depth / Length	262 mm
Package Level 1 Height	212 mm
Package Level 1 Gross Weight	6.4 kg
Package Level 1 EAN	7320500504406

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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4758 >> lec Contactors
E-Number (Finland)	3707251

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## Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors$ 

