



 PRODUCT-DETAILS

AF370-40-00-12

AF370-40-00-12 Contactor



General Information

Extended Product Type:	AF370-40-00-12
Product ID:	1SFL607102R1200
EAN:	7320500504352
Catalog Description:	AF370-40-00-12 Contactor
Long Description:	The AF370-40-00-12 is a 4 pole - 1000 V IEC or 600 V UL contactor with 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 (48-130 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. Includes Mounting kit, containing all necessary screws, washers and sockets for connecting the terminals, and screws for mounting the device.
Display Name:	AF370-40-00-12

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

EPLAN Data:	9AAC175204_EPLAN
Data Sheet, Technical Information:	1SBC100214C0202
Data Sheet, Technical Information (Part 2):	1SAC200017M0002
Instructions and Manuals:	1SFC100008M0201
CAD Dimensional Drawing:	2CDC001079B0201

Dimensions

Product Net Width:	184 mm
Product Net Depth / Length:	180 mm
Product Net Height:	225 mm
Product Net Weight:	5.7 kg
Dimension Diagram:	1SFB535001G1123

Technical

Number of Main Contacts NO:	4
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Auxiliary Contacts NC:	0
Number of Poles:	4P
Rated Operational Voltage:	Main Circuit 1000 V
Rated Frequency (f):	Main Circuit 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th} acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 525 A):	
Rated Operational Current AC-1 (I_e):	(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_e):	(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 A
Rated Operational Power AC-3 (P_e):	(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 I_e AC-3
Rated Breaking Capacity AC-3e:	8.5 x I_e AC-3e
Rated Making Capacity AC-3:	10 x I_e AC-3
Rated Making Capacity AC-3e:	12 x I_e AC-3e

Short-Circuit Protective Devices:	gG Type Fuses 630 A
Rated Short-time Withstand Current Low Voltage (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 1709 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3700 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 2960 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 1208 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 5000 A
Rated Insulation Voltage (U_i):	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp}):	Main Circuit 8 kV
Maximum Electrical Switching Frequency:	(AC-1) 300 cycles per hour (AC-3) 300 cycles per hour
Mechanical Durability:	5 million
Maximum Mechanical Switching Frequency:	300 cycles per hour
Coil Operating Limits:	(acc. to IEC 60947-4-1) 0.85 x U_c Min. ... 1.1 x U_c Max. (at $\theta \leq 70$ °C)
Rated Control Circuit Voltage (U_c):	50 Hz 48 ... 130 V 60 Hz 48 ... 130 V DC Operation 48 ... 130 V
Coil Consumption:	Holding at Max. Rated Control Circuit Voltage 50 Hz 23.2 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 23.2 V-A Holding at Max. Rated Control Circuit Voltage DC 2 V-A Holding at Max. Rated Control Circuit Voltage DC 2 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 975 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 975 V-A Pull-in at Max. Rated Control Circuit Voltage DC 1225 V-A Pull-in at Max. Rated Control Circuit Voltage DC 1225 W
Power Loss:	72 W at Rated Operating Conditions per Pole 72 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 mm ² Rigid Al-Cable 1 x 185 ... 240 mm ² Rigid Cu-Cable 1 x 6 ... 300 mm ² Rigid Cu-Cable 2 x 70 ... 185 mm ²
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 2x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 ... 4 mm ²
Connecting Capacity:	Flexible 2 x 70 ... 185 mm ² Rigid Cu-Cable 2 x 70 ... 185 mm ²
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
Tightening Torque:	Cable Lug 9 N-m Main Circuit 22 ... 43 N-m
Terminal Type:	Main Circuit: Bars
Product Name:	Block Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V
General Use Rating UL/CSA:	(1000 V AC) 520 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
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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
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Maximum Operating Altitude Permissible: Without Derating 3000 m

Material Compliance

Conflict Minerals Reporting Template (CMRT):	9AKK108467A5658
REACH Declaration:	2CMT2021-006202
RoHS Declaration:	2CMT2021-006277
RoHS Information:	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA:	2CMT2023-006525
WEEE B2C / B2B:	Business To Business
WEEE Category:	5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

ABB EcoSolutions:	Yes
ABB Site Meeting 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 UL 2799 Zero Waste To Landfill Validation available
EcoSolutions Profile:	1SFC100125C0366
End Of Life Disassembling Instructions:	1SFC100112M0002
Environmental Product Declaration - EPD:	1SFC100104D0201
Extended Product Lifetime:	Product Durability
Improved Energy Efficiency for Customers:	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line
Recyclability Rate of the Product acc. to EN45555:	Design for Closing Resource Loops - Standard EN45555 - 76.2 %

Certificates and Declarations

A2L Certificate – UL:	9AKK108468A6695
ABS Certificate:	14-LD1092198-PDA 14-LD1092198-1-PDA-DUP

BV Certificate:	BV_36353_A0BV
CB Certificate:	SEMKO_SE-73326
CQC Certificate:	CQC2014010304676670
Declaration of Conformity - CCC:	2020980304001305
Declaration of Conformity - CE:	2CMT2015-005439
Declaration of Conformity - UKCA:	2CMT2020-006118
LR Certificate:	16-20064
PRS Certificate:	TE_2092_880423_16
RINA Certificate:	ELE060313XG_002
RMRS Certificate:	9AKK107045A6978
UL Certificate:	20140910-E73397

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:	7320500504352

External Classifications and Standards

Object Classification Code:	Q
ETIM 7:	EC000066 - Power contactor, AC switching
ETIM 8:	EC000066 - Power contactor, AC switching
ETIM 9:	EC000066 - Power contactor, AC switching
eClass:	V11.0 : 27371003
UNSPSC:	39121529
IDEA Granular Category Code (IGCC):	4758 >> Iec Contactors
E-Number (Finland):	3707246

Accessories

Identifier	Description	Qty	Type	Unit Of Measure
1SFN010820R1011	CAL19-11 Auxiliary Contact Block	1	CAL19-11	piece
1SFN010820R3311	CAL19-11B Auxiliary Contact Block	1	CAL19-11B	piece
1SFN010832R1001	CEL19-01 Auxiliary Contact Block	1	CEL19-01	piece
1SFN010832R1010	CEL19-10 Auxiliary Contact Block	1	CEL19-10	piece

1SFN074208R2000	LD146-40 Connection Module	1	LD146-40	piece
1SFN124203R2000	LT140-40L Terminal Shroud	1	LT140-40L	piece
1SFN124801R2000	LT205-40C Terminal Shroud	1	LT205-40C	piece
1SFN074807R2000	LW205-40 Terminal Enlargement	1	LW205-40	piece
1SFN124803R2000	LT205-40L Terminal Shroud	1	LT205-40L	piece
1SFN075407R2000	LW370-40 Terminal Enlargement	1	LW370-40	piece
1SFN125401R2000	LT370-40C Terminal Shroud	1	LT370-40C	piece
1SFN125403R2000	LT370-40L Terminal Shroud	1	LT370-40L	piece

Categories

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