



 PRODUCT-DETAILS

AF205-30-00-14

AF205-30-00-14 Contactor



General Information

Extended Product Type	AF205-30-00-14
Product ID	1SFL527002R1400
EAN	7320500480533
Catalog Description	AF205-30-00-14 Contactor

Long Description	<p>The AF205-30-00-14 is a 3 pole - 1000 V IEC or 600 V UL contactor with Main Circuit Bars, controlling motors up to 110 kW / 400 V AC (AC-3) or 150 hp / 480 V UL and switching power circuits up to 350 A (AC-1) or 300 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (250-500 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.</p>
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Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

EPLAN Data	9AAC174542_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	105 mm
Product Net Depth / Length	152 mm
Product Net Height	196 mm
Product Net Weight	2.4 kg
Dimension Diagram	1SFB535001G1056.pdf

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	0
Number of Poles	3P
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 350 A
Rated Operational Current AC-1 (I_e)	(1000 V) 40 °C 275 A (1000 V) 55 °C 250 A (1000 V) 60 °C 250 A (1000 V) 70 °C 200 A (690 V) 40 °C 350 A (690 V) 55 °C 300 A (690 V) 70 °C 240 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 205 A (440 V) 55 °C 205 A (500 V) 55 °C 186 A (690 V) 55 °C 165 A (1000 V) 55 °C 100 A (380 / 400 V) 55 °C 205 A (220 / 230 / 240 V) 55 °C 205 A
Rated Operational Current DC-1 (I_e)	(110 V) 2 Poles in Series, 40 °C 275 A (220 V) 3 Poles in Series, 40 °C 275 A
Rated Operational Current DC-3 (I_e)	(110 V) 2 Poles in Series, 40 °C 275 A (220 V) 3 Poles in Series, 40 °C 275 A
Rated Operational Current DC-5 (I_e)	(110 V) 2 Poles in Series, 40 °C 275 A (220 V) 3 Poles in Series, 40 °C 275 A
Rated Operational Power AC-3 (P_e)	(415 V) 110 kW (440 V) 132 kW (500 V) 132 kW

	(690 V) 160 kW (1000 V) 132 kW (380 / 400 V) 110 kW (220 / 230 / 240 V) 55 kW
Rated Breaking Capacity AC-3	8 x Ie AC-3
Rated Breaking Capacity AC-3e	8.5 x Ie AC-3e
Rated Making Capacity AC-3	10 x Ie AC-3
Rated Making Capacity AC-3e	12 x Ie AC-3e
Short-Circuit Protective Devices	gG Type Fuses 400 A
Rated Short-time Withstand Current Low Voltage (I _{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 947 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 2050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1640 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 670 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 3500 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 2500 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-2 / AC-4) 150 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 θ ≤ 70 °C)
Rated Control Circuit Voltage (U _c)	50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 18.6 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 18.6 V-A Holding at Max. Rated Control Circuit Voltage DC 4.1 V-A Holding at Max. Rated Control Circuit Voltage DC 4.1 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 260 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 260 V-A Pull-in at Max. Rated Control Circuit Voltage DC 680 V-A Pull-in at Max. Rated Control Circuit Voltage DC 680 W
Power Loss	at Rated Operating Conditions per Pole 8 W
Operate Time	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
Connecting Capacity Main Circuit	Flexible 1 x 6 ... 120 mm ² Flexible 2 x 50 ... 95 mm ² Rigid Cu-Cable 2 x 50 ... 120 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Ferrule 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 ... 2.5 mm ² Flexible 2x0.75 ... 2.5 mm ² Solid 1 x 1 ... 4 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 ... 4 mm ²
Connecting Capacity	Flexible 1 x 6 ... 120 mm ² Flexible 2 x 50 ... 95 mm ² Rigid Al-Cable 1 x 95 ... 185 mm ² Rigid Cu-Cable 2 x 50 ... 120 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 14 ... 31 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) 275 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 60 hp (208 V AC) Three Phase 60 hp (220 ... 240 V AC) Three Phase 75 hp (440 ... 480 V AC) Three Phase 150 hp (550 ... 600 V AC) Three Phase 200 hp
Full Load Amps Motor Use	(440 ... 480 V AC) Three Phase 180 A (550 ... 600 V AC) Three Phase 192 A

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

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
End Of Life Disassembling Instructions	1SFC100112M0001
Environmental Product Declaration - EPD	1SFC100095D0201 2TFP200018A1001
Extended Product Lifetime	Product Durability
Improved Energy Efficiency for Customers	Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line 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 - 79.1 %

Certificates and Declarations

A2L Certificate – UL	9AKK108468A6695
ABS Certificate	14-LD1092198-PDA 14-LD1092198-1-PDA-DUP
BV Certificate	BV_36353_A0BV
CB Certificate	SE-82315
CCS Certificate	GB14T00030
CQC Certificate	CQC2014010304676685 CQC2014010304724672
Declaration of Conformity - CCC	2020980304001306 2020980304001071
Declaration of Conformity - CE	2CMT2015-005439
Declaration of Conformity - UKCA	2CMT2020-006118
DNV Certificate	DNV_E-14043
GL Certificate	GL_95072-14HH
KC Certificate	9AKK107046A9912
LR Certificate	16-20064
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
UL Certificate	20121023-E36588
UL Listing Card	UL_E36588

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	160 mm
Package Level 1 Depth / Length	258 mm
Package Level 1 Height	235 mm
Package Level 1 Gross Weight	3 kg
Package Level 1 EAN	7320500480533

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 >> lec Contactors
E-Number (Finland)	3706464
E-Number (Norway)	3210139

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SFN170801R1001	RU19/120 LVRT-Module	RU19/120	1	piece
1SFN170801R1002	RU19/240 LVRT-Module	RU19/240	1	piece

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF205

