

**PRODUCT-DETAILS** 

## AF140-30-22-13 Contactor



General Information	
Extended Product Type	AF140-30-22-13
Product ID	1SFL447001R1322
EAN	7320500476956
Catalog Description	AF140-30-22-13 Contactor

Long Description

The AF140-30-22-13 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and double clamp, controlling motors up to 75 kW / 400 V AC (AC-3) or 100 hp / 480 V UL and switching power circuits up to 200 A (AC-1) or 200 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	1SFC100003M0201
Dimension Diagram	1SFB535001G1051

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Dimensions	
Product Net Width	90 mm
Product Net Depth / Length	126 mm
Product Net Height	150 mm
Product Net Weight	1.55 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	Main Circuit 690 V
Rated Frequency (f)	Main Circuit 50/60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 200 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 200 (690 V) 70 °C 160
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 140 A (440 V) 55 °C 140 A (500 V) 55 °C 130 A (690 V) 55 °C 80 A (380 / 400 V) 55 °C 140 A (220 / 230 / 240 V) 55 °C 140
Rated Operational Power AC-3 (P <sub>e</sub> )	(415 V) 75 kW (440 V) 90 kW (500 V) 90 kW (690 V) 75 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 37 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4- 1	8 x le AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4- 1	10 x le AC-3
Short-Circuit Protective Devices	gG Type Fuses 315 A
Rated Short-time Withstand Current (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1168 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 477 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1460 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 674 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 3000 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 1500 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Rated Operational Current DC-1 (I <sub>e</sub> )	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
Rated Operational Current DC-3 (I <sub>e</sub> )	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
Rated Operational Current DC-5 (I <sub>e</sub> )	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 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

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	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 $\theta \le 70$ °C)
Rated Control Circuit	50 Hz 100 250 V
Voltage (U <sub>c</sub> )	60 Hz 100 250 V DC Operation 100 250 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 6 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 6 V·A Holding at Max. Rated Control Circuit Voltage DC 3 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 130 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 130 V·A Pull-in at Max. Rated Control Circuit Voltage DC 135 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 2 x 10 70 mm² Rigid Cu-Cable 1 x 10 95 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 2.5 mm² Flexible 1x0.75 2.5 mm² Solid 2 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	Double Clamp
Technical UL/CSA	
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 200 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 40 hp (208 V AC) Three Phase 40 hp (220 240 V AC) Three Phase 50 hp (440 480 V AC) Three Phase 100 hp (550 600 V AC) Three Phase 125 hp
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Environmental	(*** *** **, *** *** **
	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
Ambient Air Temperature  Maximum Operating	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
Ambient Air Temperature  Maximum Operating Altitude Permissible	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
Ambient Air Temperature  Maximum Operating Altitude Permissible  RoHS Status	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 3000 m Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Ambient Air Temperature  Maximum Operating Altitude Permissible RoHS Status  Certificates and Declarations (Docume	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 3000 m Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
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Ambient Air Temperature  Maximum Operating Altitude Permissible  RoHS Status  Certificates and Declarations (Docume  ABS Certificate  BV Certificate	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 3000 m  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  ent Number)  14-LD1092198-PDA  BV_36353_A0BV
Ambient Air Temperature  Maximum Operating Altitude Permissible RoHS Status  Certificates and Declarations (Docume ABS Certificate BV Certificate CB Certificate	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 3000 m  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  ent Number)  14-LD1092198-PDA  BV_36353_A0BV  SEMKO_SE-70479M1
Ambient Air Temperature  Maximum Operating Altitude Permissible RoHS Status  Certificates and Declarations (Docume ABS Certificate BV Certificate CB Certificate CCC Certificate	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 3000 m  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  ent Number)  14-LD1092198-PDA BV_36353_A0BV SEMKO_SE-70479M1
Ambient Air Temperature  Maximum Operating Altitude Permissible  RoHS Status  Certificates and Declarations (Docume  ABS Certificate  BV Certificate  CB Certificate  CCC Certificate  CCC Certificate  CCS Certificate	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 3000 m  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  ent Number)  14-LD1092198-PDA BV_36353_A0BV SEMKO_SE-70479M1 2013010304604055
Ambient Air Temperature  Maximum Operating Altitude Permissible  RoHS Status  Certificates and Declarations (Docume ABS Certificate  BV Certificate  CB Certificate  CCC Certificate  CCC Certificate  CCS Certificate  CQC Certificate	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 3000 m  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  ent Number)  14-LD1092198-PDA  BV_36353_A0BV  SEMKO_SE-70479M1  2013010304604055  GB14T00030  CQC2013010304604055
Environmental  Ambient Air Temperature  Maximum Operating Altitude Permissible  RoHS Status  Certificates and Declarations (Docume ABS Certificate BV Certificate CCC Certificate CCC Certificate CCC Certificate CCC Certificate CUL Certificate Declaration of Conformity - CCC	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 3000 m  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  ent Number)  14-LD1092198-PDA BV_36353_A0BV SEMKO_SE-70479M1 2013010304604055

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DNV Certificate

DNV GL Certificate

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EAC Certificate	9AKK107046A8618
Environmental Information	2CMT004732 1SAC200032H0002
GL Certificate	DNV_E-14043
Instructions and Manuals	1SFC100003M0201
LR Certificate	LR_14_70011(E1)
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
RoHS Information	2CMT2015-005439
UL Listing Card	UL_E36588

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	207 mm
Package Level 1 Depth / Length	216 mm
Package Level 1 Height	150 mm
Package Level 1 Gross Weight	1.75 kg
Package Level 1 EAN	7320500476956

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
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Finland)	3706193

## Categories

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

