

**PRODUCT-DETAILS** 

# AF1350-30-22-70 AF1350-30-22 100-250V 50/60Hz / 100-250V DC Contactor



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General	Information

Extended Product Type	AF1350-30-22-70
Product ID	1SFL657001R7022
EAN	7320500250150

Catalog Description

AF1350-30-22 100-250V 50/60Hz / 100-250V DC Contactor

Long Description

The AF1350-30-22-70 is a 3 pole - 1000 V IEC or 1000 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 475 kW / 400 V AC (AC-3) or 800 hp / 480 V UL and switching power circuits up to 1350 A (AC-1) or 1350 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 1SBC100192C0206 Information

Instructions and Manuals	1SFC101002M5501
Dimension Diagram	53540930-7
Dimensions	
Product Net Width	438 mm
Product Net Depth / Length	244 mm
Product Net Height	392 mm
Product Net Weight	32 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 1000 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 1350 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(1000 V) 40 °C 1350 A (1000 V) 55 °C 1150 A (1000 V) 70 °C 1000 A (690 V) 40 °C 1350 (690 V) 55 °C 1150 (690 V) 70 °C 1000
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 860 A (440 V) 55 °C 860 A (500 V) 55 °C 800 A (690 V) 55 °C 800 A (1000 V) 55 °C 375 A (380 / 400 V) 55 °C 860 A (220 / 230 / 240 V) 55 °C 860
Rated Operational Power AC-3 (P <sub>e</sub> )	(415 V) 500 kW (440 V) 560 kW (500 V) 560 kW (690 V) 800 kW (1000 V) 560 kW (380 / 400 V) 475 kW (220 / 230 / 240 V) 257 kW
Rated Making Capacity AC-3 acc. to IEC 60947-4- 1	10 x le AC-3
Rated Short-time Withstand Current (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 8000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 4500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 10000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 6000 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 10000 A
Maximum Electrical Switching Frequency	(AC-1) 60 cycles per hour (AC-2 / AC-4) 60 cycles per hour (AC-3) 60 cycles per hour

Rated Operational Current DC-1 $(I_e)$	(220 V) 3 Poles in Series, 40 °C 1350 A (600 V) 3 Poles in Series, 40 °C 1350 A (850 V) 3 Poles in Series, 40 °C 1350 A
Rated Operational Current DC-3 (I <sub>e</sub> )	(220 V) 3 Poles in Series, 40 °C 1350 A (600 V) 3 Poles in Series, 40 °C 1350 A (850 V) 3 Poles in Series, 40 °C 1350 A
Rated Operational Current DC-5 (I <sub>e</sub> )	(220 V) 3 Poles in Series, 40 °C 1350 A (600 V) 3 Poles in Series, 40 °C 1350 A (850 V) 3 Poles in Series, 40 °C 1350 A
Rated Insulation Voltage $(U_i)$	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 1000 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Mechanical Durability	0.5 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 $\theta$ ≤ 70 °C)
Rated Control Circuit Voltage $(U_c)$	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 48 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 48 V·A Holding at Max. Rated Control Circuit Voltage DC 20.5 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage DC 2290 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 35 55 ms Between Coil De-energization and NO Contact Opening 35 55 ms Between Coil Energization and NC Contact Opening 50 80 ms Between Coil Energization and NO Contact Closing 50 80 ms
Connecting Capacity Main Circuit	Bar 100 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
	Main Circuit: Bars

Technical GL/GGA		
Maximum Operating Voltage UL/CSA	Main Circuit 1000 V	
General Use Rating UL/CSA	(1000 V AC) 1350 A (600 V AC) 1350 A	

Horsepower Rating (220 ... 240 V AC) Three Phase 400 hp UL/CSA (440 ... 480 V AC) Three Phase 800 hp (550 ... 600 V AC) Three Phase 1000 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 3000 m

#### Altitude Permissible

RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
NOI IO Otatus	I dilowing Lo Directive 20 i 1/05/Lo and Amendment 20 i5/005 July 22, 20 i5

ABS Certificate	15-LD1408622-PDA
BV Certificate	BV_13409-C0B\
CB Certificate	SEMKO_SE-74013
CCC Certificate	CQC_2003010304101933
CCS Certificate	GB14T00030
CQC Certificate	CQC2003010304101933 CQC2015010304752548
cUL Certificate	UL_20130904-E73397
Declaration of Conformity - CCC	2020980304001303 2020980304001043
Declaration of Conformity - CE	2CMT2019-005796
DNV GL Certificate	TAE00001W1
EAC Certificate	9AKK107046A8618
Environmental Information	1SFC101014D0201 1SAC200046H0008
GL Certificate	GL_20263-04HF
Instructions and Manuals	1SFC101002M5501
LOVAG Certificate	SE-202726
LR Certificate	16-20064
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
RoHS Information	2CMT2019-005796
UL Listing Card	UL_E73397

# Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	555 mm
Package Level 1 Depth / Length	365 mm
Package Level 1 Height	500 mm
Package Level 1 Gross Weight	34 kg
Package Level 1 EAN	7320500250150
Package Level 2 Units	1 piece

## 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 con	
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Finland)	3707162

Where Used (as a spare part for "Products")			
Identifier	Description	Quantity	Unit Of Measure
ACS 5000 Water Cooled	No Description Available	1	piece
ACS 6000	No Description Available	1	piece

Product specific part data		
Product	Category	Drive Part Category
ACS 5000 Water Cooled	ACS5000	Switches, Relays, Contactors
ACS 6000	ACS6000	Switches, Relays, Contactors

### Categories

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

 $\mathsf{Drives} \to \mathsf{Medium} \ \mathsf{voltage} \ \mathsf{AC} \ \mathsf{drives} \to \mathsf{General} \ \mathsf{Performance} \ \mathsf{Drives} \to \mathsf{ACS5000}$ 

 $\mathsf{Drives} \to \mathsf{Medium} \ \mathsf{voltage} \ \mathsf{AC} \ \mathsf{drives} \to \mathsf{Industrial} \ \mathsf{drives} \to \mathsf{ACS6000}$ 

