

1SFC101050M0201

PRODUCT-DETAILS

Information

Instructions and Manuals

## AF2650-30-22-70 AF2650-30-22 100-250V 50/60Hz / 100-250 DC Contactor



General Information	
Extended Product Type	AF2650-30-22-70
Product ID	1SFL667001R7022
EAN	7320500481660
Catalog Description	AF2650-30-22 100-250V 50/60Hz / 100-250 DC Contactor
Long Description	The AF2650-30-22-70 is a 3 pole - 1000 V IEC or 1000 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, switching power circuits up to 2650 A (AC-1) or 2700 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

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Dimensions	
Product Net Width	438 mm
Product Net Depth / Length	244 mm
Product Net Height	422 mm
Product Net Weight	43 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 2650 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(1000 V) 40 °C 2650 A (1000 V) 55 °C 2350 A (1000 V) 70 °C 2120 A (690 V) 40 °C 2650 (690 V) 55 °C 2350 (690 V) 70 °C 2120
Rated Making Capacity AC-3 acc. to IEC 60947-4-	10 x le AC-3
Rated Short-time Withstand Current ( $I_{\rm CW}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 10000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 2800 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 5500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 12000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 7500 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 8400 A
Maximum Electrical Switching Frequency	(AC-1) 15 cycles per hour
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	0.3 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 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 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 2x0.75 2.5 mm²

Solid 2 x 1 ... 4 mm² Stranded 2 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	(1000 V AC) 2700 A (600 V AC) 2700 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	3000 m	
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019	

Certificates and Declarations (Document Number	r)
CB Certificate	SEMKO_SE70500M1
CCC Certificate	2013010304604050
CCS Certificate	GB14T00030
CQC Certificate	CQC2013010304604054 CQC2017010304970103
cUL Certificate	9AKK107046A8617
Declaration of Conformity - CCC	2020980304001265 2020980304001041
Declaration of Conformity - CE	2CMT2019-005796
EAC Certificate	9AKK107046A8618
Environmental Information	2CMT004732 1SAC200047H0009
Instructions and Manuals	1SFC101050M0201
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	45 kg
Package Level 1 EAN	7320500481660

## Classifications

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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
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Finland)	3706013

## Categories

 $\text{Low Voltage Products and Systems} \rightarrow \text{Control Products} \rightarrow \text{Contactors} \rightarrow \text{Block Contactors}$ 

