

PRODUCT-DETAILS

# AF2850-30-22-70

## AF2850-30-22-70 Contactor



### General Information

Extended Product Type	AF2850-30-22-70
Product ID	1SFL687001R7022
EAN	7320500515105
Catalog Description	AF2850-30-22-70 Contactor
Long Description	<p>The AF2850-30-22-70 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 2850 A (AC-1) or 2850 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.</p>

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Data Sheet, Technical Information	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 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 2850 A
Rated Operational Current AC-1 ( $I_e$ )	(1000 V) $40^\circ\text{C}$ 2850 A (1000 V) $55^\circ\text{C}$ 2600 A (1000 V) $70^\circ\text{C}$ 2300 A (690 V) $40^\circ\text{C}$ 2850 A (690 V) $55^\circ\text{C}$ 2600 A (690 V) $70^\circ\text{C}$ 2300 A
Rated Short-time Withstand Current ( $I_{cw}$ )	at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 10000 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 3000 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 5500 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 12000 A at $40^\circ\text{C}$ 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 $I_e > 100\text{ A}$ ) 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 ( $U_{imp}$ )	8 kV
Mechanical Durability	0.3 million
Maximum Mechanical Switching Frequency	60 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 ... 1.1 x $U_c$ (at $\theta \leq 70^\circ\text{C}$ )
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 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 2540 V·A Pull-in at Max. Rated Control Circuit Voltage DC 2290 W

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 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 2x0.75 ... 2.5 mm <sup>2</sup> Solid 2 x 1 ... 4 mm <sup>2</sup> Stranded 2 x 1 ... 4 mm <sup>2</sup>
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	Screw Terminals

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 1000 V
General Use Rating UL/CSA	(1000 V AC) 2850 A (600 V AC) 2850 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)

CB Certificate	SEMKO_SE70500M1
CQC Certificate	CQC2013010304604054
cUL Certificate	9AKK107046A8617
Declaration of Conformity - CCC	2020980304001265
Declaration of Conformity - CE	2CMT2019-005796
EAC Certificate	9AKK107046A8618
Environmental Information	1SFC101014D0203 1SAC200047H0009
Instructions and Manuals	1SFC101050M0201
RoHS Information	2CMT2019-005796

## 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	7320500515105

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## 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

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## Categories

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

