



**Electric Automation**  
Automation specialists

Reference: AF2050-30-22  
Code: 1SFL707001R7022

AF2050-30-22 100-250V 50/60Hz /  
100-250 DC Contactor

Buy it at Electric Automation Network



A 3-phase Contactor suitable for various applications such as Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 100-250 V, AC/DC

### Ordering

EAN:	7320500359105
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

### Dimensions

Product Net Width:	438.0 mm
Product Net Depth:	244.0 mm
Product Net Height:	392.0 mm
Product Net Weight:	33.000 kg

### Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	250 mm
Package Level 1 Length:	440 mm
Package Level 1 Height:	430 mm

Package Level 1 Gross Weight:	38 kg
Package Level 1 EAN:	7320500359105

## 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 ( $I_{th}$ ):	acc. to IEC 60947-4-1, Open Contactors $\theta = 40\text{ °C}$ 2050 A
Rated Operational Current AC-1 ( $I_e$ ):	(690 V) 55 °C 1750 A (690 V) 40 °C 2050 A (1000 V) 40 °C 2050 A (1000 V) 55 °C 1750 A (690 V) 70 °C 1500 A (1000 V) 70 °C 1500 A
Rated Making Capacity AC-3 acc. to IEC 60947-4-1:	10 x $I_e$ AC-3
Rated Short-time Withstand Current ( $I_{cw}$ ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 7500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 2200 A 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 1 s 12000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 5500 A
Maximum Breaking Capacity:	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 12000 A
Maximum Electrical Switching Frequency:	AC-1 60 cycles per hour
Rated Operational Current DC-1 ( $I_e$ ):	(850 V) 3 Poles in Series, 40 °C 2050 A (600 V) 3 Poles in Series, 40 °C 2050 A (220 V) 3 Poles in Series, 40 °C 2050 A
Rated Operational Current DC-3 ( $I_e$ ):	(850 V) 3 Poles in Series, 40 °C 2050 A (600 V) 3 Poles in Series, 40 °C 2050 A (220 V) 3 Poles in Series, 40 °C 2050 A
Rated Operational Current DC-5 ( $I_e$ ):	(850 V) 3 Poles in Series, 40 °C 2050 A (600 V) 3 Poles in Series, 40 °C 2050 A (220 V) 3 Poles in Series, 40 °C 2050 A
Rated Insulation Voltage ( $U_i$ ):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
Rated Impulse Withstand Voltage ( $U_{imp}$ ):	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 $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70\text{ °C}$ ) °C

Rated Control Circuit Voltage (U <sub>c</sub> ):	60 Hz 100 ... 250 V 50 Hz 100 ... 250 V DC Operation 100 ... 250 V
Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 2450 V·A Holding at Max. Rated Control Circuit Voltage DC 20.5 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 48 V·A Pull-in at Max. Rated Control Circuit Voltage DC 2290 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 2450 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 48 V·A
Operate Time:	Between Coil Energization and NO Contact Closing 50 ... 80 ms Between Coil De-energization and NO Contact Opening 35 ... 55 ms Between Coil De-energization and NC Contact Closing 35 ... 55 ms Between Coil Energization and NC Contact Opening 50 ... 80 ms
Connecting Capacity-Main Circuit:	Bar 100 mm
Connecting Capacity-Auxiliary Circuit:	Solid 2x1...4 mm <sup>2</sup> Flexible with Insulated Ferrule 1x0.75...2.5 mm <sup>2</sup> Stranded 2x1...4 mm <sup>2</sup> Flexible 1x0.75...2.5 mm <sup>2</sup> Flexible with Ferrule 2x0.75...2.5 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:	Main Circuit: Bars

## Environmental

Ambient Air Temperature:	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -25...+50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40...+70 °C Close to Contactor for Storage -40...+70 °C
Maximum Operating Altitude Permissible:	3000 m
RoHS Status:	No declaration needed

## Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V
General Use Rating UL/CSA:	(600 V AC) 2100 A

## Certificates and Declarations (Document Number)

CB Certificate:	SE-69484
CCC Certificate:	CQC_2003010304101933

Declaration of Conformity - CE:	1SFA1-92
RINA Certificate:	ELE060313XG/002
RoHS Information:	1SFC101061D0211

## Classifications

ETIM 5:	EC000066 - Magnet contactor, AC-switching
UNSPSC:	39121529