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PRODUCT-DETAILS

# GF1050-20-22-53

# GF1050-20-22-53 Contactor



General Information	
Extended Product Type	GF1050-20-22-53
Product ID	1SFL637731R5322
EAN	7320500540954
Catalog Description	GF1050-20-22-53 Contactor
Long Description	A 2-phase Contactor suitable for PV solar power applications up to max 1500V DC.  Operated with wide voltage range 100-250V AC 50/60Hz and DC

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	8536490099

Popular Downloads	
Data Sheet, Technical Information	1SBC100218B0201
Instructions and Manuals	1SFC100003M0001

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CAD Dimensional 2CDC001079B0201 Drawing 2CDC001079B0201

Dimensions	
Product Net Width	253 mm
Product Net Depth / Length	300 mm
Product Net Height	355 mm
Product Net Weight	14.3 kg

Technical	
Number of Main Contacts NO	2
Number of Main Contacts NC	C
Number of Auxiliary Contacts NO	ž
Number of Auxiliary Contacts NC	ā
Rated Operational Voltage	Main Circuit 1500 V
Rated Frequency (f)	Control Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 1100 A acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 60 °C 1050 A acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 70 °C 850 A
Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 6336 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1392 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3800 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 7600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 5207 A
Maximum Electrical Switching Frequency	15 cycles per hour
Rated Operational Current DC-1 (I <sub>e</sub> )	(1500 V DC) 2-Pole, 40 °C 210 A
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1500 V
(U <sub>i</sub> )	acc. to UL/CSA 1500 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Mechanical Durability	50000 cycle
Maximum Mechanical Switching Frequency	60 cycles per hou
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 100250 V 60 Hz 100250 V DC Operation 100250 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 17 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 17 V-A Holding at Max. Rated Control Circuit Voltage DC 12 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 600 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 600 V-A Pull-in at Max. Rated Control Circuit Voltage DC 700 V-A
Operate Time	Between Coil De-energization and NO Contact Opening 3370 ms Between Coil Energization and NO Contact Closing 50120 ms
Connecting Capacity Main Circuit	Solid 600 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 2.5 mm²

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	Flexible 2x0.75 2.5 mm² Solid 2x1 4 mm² Stranded 2x1 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
Rated Operational	(1500 V DC) 2-Pole, 60 °C 1050 A
Current DC-PV3 (Ie)	(1500 V DC) 2-Pole. 70 °C 850 A

## Technical UL/CSA

Maximum Operating Main Circuit 1500 V Voltage UL/CSA

### **Environmental**

Ambient Air	Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 70 °C
Temperature	Close to Contactor for Storage -40 70 °C
Maximum Operating	Without Derating 2000 m
Altitude Permissible	

#### **Material Compliance**

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Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

### Certificates and Declarations

ABS Certificate	9AKK108466A1583
BV Certificate	9AKK108466A6837
CB Certificate	1SFC100041D0101
CQC Certificate	CQC20012271919
Declaration of Conformity - CCC	2020980304002803
Declaration of Conformity - CE	1SFC100019D2701
Declaration of Conformity - UKCA	2CMT2020-006118
DNV Certificate	9AKK108466A1584
LR Certificate	9AKK108466A2274
UL Certificate	1SFC100021D0101

## **Container Information**

Package Level 1 Units	box 1 piece
Package Level 1 Width	402 mm

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Package Level 1 Depth / Length	305 mm
Package Level 1 Height	415 mm
Package Level 1 Gross Weight	16.45 kg

Classifications	
ETIM 6	EC002552 - Power contactor, DC switching
ETIM 7	EC002552 - Power contactor, DC switching
ETIM 8	EC002552 - Power contactor, DC switching
eClass	V11.0 : 27371018
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching
E-Number (Norway)	4115803

## **Categories**

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors \rightarrow GF\ Contactors \rightarrow GF1050$ 

