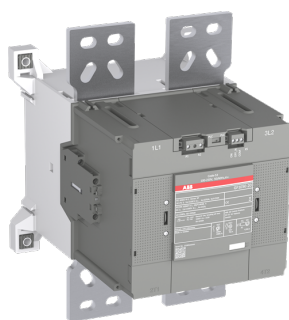


PRODUCT-DETAILS

# 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

### Classifications

ETIM 6	EC002552 - Power contactor, DC switching
ETIM 7	EC002552 - Power contactor, DC switching
IDEA Granular Category Code (IGCC)	4755 >> Contactors

### Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	402 mm
Package Level 1 Depth / Length	305 mm
Package Level 1 Height	415 mm

Package Level 1 Gross Weight	16.45 kg
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## Certificates and Declarations (Document Number)

CB Certificate	1SFC100041D0101
cUL Certificate	1SFC100021D0101
Declaration of Conformity - CE	1SFC100019D2701
Instructions and Manuals	1SFC100003M0001
RoHS Information	1SFC100019D2701

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## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 1500 V
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## Environmental

Ambient Air Temperature	Close to Contactor for Storage -40 ... +70 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +70 °C
Maximum Operating Altitude Permissible	2000 m
RoHS Status	Following EU Directive 2015/863 July 22, 2019 (RoHS 3)

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## Technical

Number of Main Contacts NO	2
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	2
Number of Auxiliary Contacts NC	2
Rated Operational Voltage	Main Circuit 1500 V
Rated Frequency (f)	Control Circuit 50/60Hz Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 1100 A acc. to IEC 60947-4-1, Open Contactors q = 60 °C 1050 A acc. to IEC 60947-4-1, Open Contactors q = 70 °C 850 A
Rated Short-time Withstand Current ( $I_{cw}$ )	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 ( $I_e$ )	(1500 V DC) 2-Pole, 40 °C 210 A
Rated Insulation Voltage ( $U_i$ )	acc. to UL/CSA 1500 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1500 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Main Circuit 8 kV

Mechanical Durability	50000 cycle
Maximum Mechanical Switching Frequency	60 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (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 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 W
Operate Time	Between Coil De-energization and NO Contact Opening 33...70 ms Between Coil Energization and NO Contact Closing 50...120 ms
Connecting Capacity Main Circuit	Solid 600 m <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 m <sup>2</sup> Solid 2x1 ... 4 m <sup>2</sup> Stranded 2x1 ... 4 m <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
Rated Operational Current DC-PV3 ( $I_{\theta}$ )	(1500 V DC) 2-Pole, 60 °C 1050 A (1500 V DC) 2-Pole, 70 °C 850 A

## Dimensions

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

## Popular Downloads

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

## Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	8536490099

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## Categories

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

