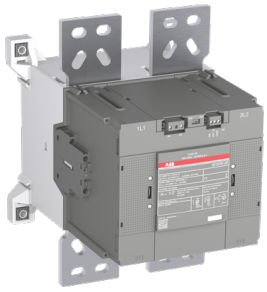
PRODUCT-DETAILS

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	1SBC100214C0202
Instructions and Manuals	1SFC100003M0001

© 2025 ABB. All rights reserved.

CAD Dimensional 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	0
Number of Auxiliary Contacts NO	2
Number of Auxiliary Contacts NC	2
Number of Poles	2P
Rated Operational Voltage	Main Circuit 1500 V
Rated Frequency (f)	Control Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 1100 A acc. to IEC 60947-4-1, Open Contactors Θ = 60 °C 1050 A acc. to IEC 60947-4-1, Open Contactors Θ = 70 °C 850 A
Rated Operational Current DC-1 (I_e)	(1500 V DC) 2-Pole, 40 °C 210 A
Rated Operational Current DC-PV3 (I_e)	(1500 V DC) 2-Pole, 60 °C 1050 A (1500 V DC) 2-Pole, 70 °C 850 A
Rated Short-time Withstand Current Low Voltage (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
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1500 V acc. to UL/CSA 1500 V
Rated Impulse Withstand Voltage (U_{imp})	Main Circuit 8 kV
Maximum Electrical Switching Frequency	15 cycles per hour
Mechanical Durability	0.05 million
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 θ ≤ 70 °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 23 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 23 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 505 V·A
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	Solid 600 mm²

© 2025 ABB. All rights reserved.

Main Circuit	
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm² Flexible 2x0.75 ... 2.5 mm² Solid 2x1 ... 4 mm² Stranded 2x1 ... 4 mm²
Connecting Capacity	Solid 600 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
Product Name	Block Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 1500 V

Environmental

Ambient Air Temperature	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	Without Derating 2000 m

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Declaration	2CMT2021-006277
RoHS Information	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

© 2025 ABB. All rights reserved.

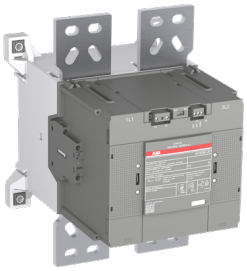
Package Level 1 Units	box 1 piece
Package Level 1 Width	402 mm
Package Level 1 Depth / Length	305 mm
Package Level 1 Height	415 mm
Package Level 1 Gross Weight	16.45 kg
Package Level 1 EAN	7320500540954

External Classifications and Standards

ETIM 7	EC002552 - Power contactor, DC switching
ETIM 8	EC002552 - Power contactor, DC switching
ETIM 9	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 → Control Products → Contactors → Block Contactors → GF Contactors → GF1050



© 2025 ABB. All rights reserved.