



 PRODUCT-DETAILS

GAF460-10-11-68

GAF460-10-11 24-60V DC Contactor



General Information

Extended Product Type	GAF460-10-11-68
Product ID	1SFL597025R6811
EAN	7320500383995
Catalog Description	GAF460-10-11 24-60V DC Contactor
Long Description	A 3-pole Contactor suitable for DC-1 applications where all three poles must be connected in series in a 1-pole configuration up to max 1000 VDC. Operated with wide control voltage range 24-60 V, DC

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

EPLAN Data	9AAC171152_EPLAN
Data Sheet, Technical Information	1SBC100214C0202

Data Sheet, Technical Information (Part 2)	1SAC200017M0002
Instructions and Manuals	1SFC101045M9701
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	186 mm
Product Net Depth / Length	216 mm
Product Net Height	278 mm
Product Net Weight	10.6 kg
Dimension Diagram	53540919-59

Technical

Number of Main Contacts NO	1
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Number of Poles	1P
Rated Operational Voltage	Main Circuit 1000 V
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $\theta = 40\text{ °C}$ 700 A
Rated Operational Current DC-1 (I_e)	(1000 V) 3 Poles in Series, 40 °C 700 A (1000 V) 3 Poles in Series, 55 °C 600 A (1000 V) 3 Poles in Series, 70 °C 480 A (220 V) 3 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 55 °C 600 A (220 V) 3 Poles in Series, 70 °C 480 A (400 V) 3 Poles in Series, 40 °C 700 A (400 V) 3 Poles in Series, 55 °C 600 A (400 V) 3 Poles in Series, 70 °C 480 A (600 V) 3 Poles in Series, 40 °C 700 A (600 V) 3 Poles in Series, 55 °C 600 A (600 V) 3 Poles in Series, 70 °C 480 A
Short-Circuit Protective Devices	gG Type Fuses 800 A
Rated Insulation Voltage (U_i)	acc. to UL/CSA 1000 V
Rated Impulse Withstand Voltage (U_{imp})	Main Circuit 8 kV
Mechanical Durability	3 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 $\theta \leq 70\text{ °C}$)
Rated Control Circuit Voltage (U_c)	50 Hz 24 ... 60 V DC Operation 24 ... 60 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage DC 7.5 V·A Holding at Max. Rated Control Circuit Voltage DC 4 W

Pull-in at Max. Rated Control Circuit Voltage 50 Hz 890 V-A
 Pull-in at Max. Rated Control Circuit Voltage 60 Hz 890 V-A
 Pull-in at Max. Rated Control Circuit Voltage DC 990 V-A

Power Loss	at Rated Operating Conditions per Pole 42 W
Connecting Capacity Main Circuit	Bar 47 mm ² Rigid Al-Cable 2x240 mm ² Rigid Cu-Cable 240 mm ² Rigid Cu-Cable 2x240 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 2x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 4 mm ²
Connecting Capacity	Bar 47 mm ² Rigid Al-Cable 2x240 mm ² Rigid Cu-Cable 2x240 mm ²
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
Connecting Terminals (delivered in open position) Main Poles	M 3.5 (+,-) pozidriv 2 screw with cable clamp
Recommended Screw Driver	Main Circuit M10 Control Circuit Pozidriv 2 Control Circuit M3.5
Tightening Torque	Cable Lug 35 N-m Main Circuit 35 N-m
Terminal Type	Main Circuit: Bars
Suitable for Product Class	Block Contactors Block Contactors
Product Name	Block Contactor

Technical UL/CSA

Horsepower Rating NEMA	(200 V AC) Three Phase 150 Hp (230 V AC) Three Phase 200 Hp (460 V AC) Three Phase 400 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 1000 V
General Use Rating UL/CSA	(1000 V DC) 650 A (440 V DC) 650 A (600 V AC) 650 A (600 V DC) 650 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 Operation -40 ... 70 °C Storage -40 ... +70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Shock Direction: A 5 g Shock Direction: B1 5 g Shock Direction: B2 5 g Shock Direction: C1 5 g Shock Direction: C2 5 g

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)

ABB EcoSolutions

End Of Life Disassembling Instructions	1SFC100112M0003
Environmental Product Declaration - EPD	1SFC100105D0201
Improved Energy Efficiency for Customers	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line

Certificates and Declarations

CB Certificate	SEMKO_SE-66699
CQC Certificate	CQC2012010304547008
Declaration of Conformity - CCC	2020980304001542
Declaration of Conformity - CE	2CMT003517
Declaration of Conformity - UKCA	2CMT2020-006118
EAC Certificate	9AKK107046A8618
UL Certificate	20130517-E73397
UL Listing Card	UL_E73397

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	280 mm
Package Level 1 Depth / Length	375 mm
Package Level 1 Height	310 mm
Package Level 1 Gross Weight	12 kg
Package Level 1 EAN	7320500383995

External Classifications and Standards

Object Classification Code	Q
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

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → GA Contactors → GAF460

