

## PRODUCT-DETAILS

# GAF300-10-11-72

## GAF300-10-11 20-60V DC Contactor



### General Information

|                       |                                                                                                                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | GAF300-10-11-72                                                                                                                                                                                        |
| Product ID            | 1SFL557025R7211                                                                                                                                                                                        |
| EAN                   | 7320500400876                                                                                                                                                                                          |
| Catalog Description   | GAF300-10-11 20-60V 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 20-60 V, DC |

### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

### Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100192C0206 |
| Instructions and Manuals          | 1SFC101046M0201 |
| Dimension Diagram                 | 53540930-2      |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 140 mm   |
| Product Net Depth / Length | 180.5 mm |
| Product Net Height         | 227 mm   |
| Product Net Weight         | 5.5 kg   |

## 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Rated Operational Voltage                          | Main Circuit 1000 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 500 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum Breaking Capacity                          | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 3000 A<br>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 2500 A                                                                                                                                                                                                                                                                                                                                                                                          |
| Rated Operational Current DC-1 ( $I_e$ )           | (1000 V) 3 Poles in Series, 40 °C 500 A<br>(1000 V) 3 Poles in Series, 55 °C 400 A<br>(1000 V) 3 Poles in Series, 70 °C 325 A<br>(220 V) 3 Poles in Series, 40 °C 500 A<br>(220 V) 3 Poles in Series, 55 °C 400 A<br>(220 V) 3 Poles in Series, 70 °C 325 A<br>(400 V) 3 Poles in Series, 40 °C 500 A<br>(400 V) 3 Poles in Series, 55 °C 400 A<br>(400 V) 3 Poles in Series, 70 °C 325 A<br>(600 V) 3 Poles in Series, 40 °C 500 A<br>(600 V) 3 Poles in Series, 55 °C 400 A<br>(600 V) 3 Poles in Series, 70 °C 325 A |
| Rated Insulation Voltage ( $U_i$ )                 | acc. to UL/CSA 1000 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Rated Impulse Withstand Voltage ( $U_{imp}$ )      | Main Circuit 8 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mechanical Durability                              | 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 $\theta \leq 70$ °C)                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Rated Control Circuit Voltage ( $U_c$ )            | DC Operation 20 ... 60 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Coil Consumption                                   | Holding at Max. Rated Control Circuit Voltage 50 Hz 10 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 10 V·A<br>Holding at Max. Rated Control Circuit Voltage DC 2 W<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 470 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 470 V·A<br>Pull-in at Max. Rated Control Circuit Voltage DC 520 W                                                                                                                                                |
| Connecting Capacity Main Circuit                   | Bar 32 mm <sup>2</sup><br>Rigid Al-Cable 2 x 95 ... 120 mm <sup>2</sup><br>Rigid Cu-Cable 16 ... 240 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connecting Capacity Auxiliary Circuit              | Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible 2x0.75 ... 2.5 mm <sup>2</sup><br>Solid 1 x 1 ... 4 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                |

Stranded 1 x 1 .... 4 mm<sup>2</sup>

|                      |                                                                                                                              |
|----------------------|------------------------------------------------------------------------------------------------------------------------------|
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00 |
|----------------------|------------------------------------------------------------------------------------------------------------------------------|

|               |                    |
|---------------|--------------------|
| Terminal Type | Main Circuit: Bars |
|---------------|--------------------|

## Technical UL/CSA

|                                  |                                                           |
|----------------------------------|-----------------------------------------------------------|
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V                                        |
| General Use Rating UL/CSA        | (1000 V DC) 400 A<br>(440 V DC) 400 A<br>(600 V DC) 400 A |

## Environmental

|                                            |                                                                                                                                              |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                    | Operation -40 ... +80 °C<br>Storage -40 ... +70 °C                                                                                           |
| Maximum Operating Altitude Permissible     | 3000 m                                                                                                                                       |
| Resistance to Shock acc. to IEC 60068-2-27 | Shock Direction: A 5 K40<br>Shock Direction: B1 5 K40<br>Shock Direction: B2 5 K40<br>Shock Direction: C1 5 K40<br>Shock Direction: C2 5 K40 |
| RoHS Status                                | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019                                                                       |

## Certificates and Declarations (Document Number)

|                                 |                      |
|---------------------------------|----------------------|
| CB Certificate                  | SEMKO_SE-70017       |
| CCC Certificate                 | CQC_2013010304595899 |
| CQC Certificate                 | CQC2013010304595899  |
| Declaration of Conformity - CCC | 2020980304001540     |
| Declaration of Conformity - CE  | 2CMT003517           |
| EAC Certificate                 | 9AKK107046A8618      |
| Environmental Information       | 1SFC101066D0201      |
| Instructions and Manuals        | 1SFC101046M0201      |
| RoHS Information                | 2CMT003517           |
| UL Listing Card                 | UL_E73397            |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 203 mm        |
| Package Level 1 Depth / Length | 245 mm        |
| Package Level 1 Height         | 188 mm        |
| Package Level 1 Gross Weight   | 6.2 kg        |
| Package Level 1 EAN            | 7320500400876 |

| Classifications                    |                                          |
|------------------------------------|------------------------------------------|
| Object Classification Code         | Q                                        |
| ETIM 4                             | EC002552 - Power contactor, DC switching |
| ETIM 5                             | EC002552 - Power contactor, DC switching |
| ETIM 6                             | EC002552 - Power contactor, DC switching |
| ETIM 7                             | 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

