

#### PRODUCT-DETAILS

# AF205-30-11-13 AF205-30-11-13 Contactor



| General Information   |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | AF205-30-11-13                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Product ID            | 1SFL527002R1311                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EAN                   | 7320500480564                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Catalog Description   | AF205-30-11-13 Contactor                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Long Description      | The AF205-30-11-13 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 110 kW / 400 V AC (AC-3) or 150 hp / 480 V UL and switching power circuits up to 350 A (AC-1) or 300 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy |

Ordering

V 50/60 Hz and DC), managing large control voltage variations, reducing paner energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

| Minimum Order Quantity | 1 piece  |
|------------------------|----------|
| Customs Tariff Number  | 85364900 |
| Guotomo Tumi Numboi    | 000010   |

| Popular Downloads                    |                 |
|--------------------------------------|-----------------|
| Data Sheet, Technical<br>Information | 1SBC100192C0206 |
| Instructions and Manuals             | 1SFC100008M0201 |

2CDC001079B0201

| Drawing                                                                 | 2CDC001073B0201                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension Diagram                                                       | 1SFB535001G1056                                                                                                                                                                                                                                                                                                                          |
|                                                                         |                                                                                                                                                                                                                                                                                                                                          |
| Dimensions                                                              |                                                                                                                                                                                                                                                                                                                                          |
| Product Net Width                                                       | 105 mm                                                                                                                                                                                                                                                                                                                                   |
| Product Net Depth /                                                     | 152 mm                                                                                                                                                                                                                                                                                                                                   |
| Length Product Net Height                                               | 196 mm                                                                                                                                                                                                                                                                                                                                   |
| Product Net Weight                                                      | 2.4 kg                                                                                                                                                                                                                                                                                                                                   |
|                                                                         |                                                                                                                                                                                                                                                                                                                                          |
| Technical                                                               |                                                                                                                                                                                                                                                                                                                                          |
| Number of Main Contacts<br>NO                                           | 3                                                                                                                                                                                                                                                                                                                                        |
| Number of Main Contacts<br>NC                                           | 0                                                                                                                                                                                                                                                                                                                                        |
| Number of Auxiliary<br>Contacts NO                                      | 1                                                                                                                                                                                                                                                                                                                                        |
| Number of Auxiliary<br>Contacts NC                                      | 1                                                                                                                                                                                                                                                                                                                                        |
| Rated Operational Voltage                                               | Main Circuit 1000 V                                                                                                                                                                                                                                                                                                                      |
| Rated Frequency (f)                                                     | Main Circuit 50 / 60 Hz                                                                                                                                                                                                                                                                                                                  |
| Conventional Free-air<br>Thermal Current (I <sub>th</sub> )             | acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 350 A                                                                                                                                                                                                                                                                            |
| Rated Operational Current<br>AC-1 (I <sub>e</sub> )                     | (1000 V) 40 °C 275 A<br>(1000 V) 55 °C 250 A<br>(1000 V) 60 °C 250 A<br>(1000 V) 70 °C 200 A<br>(690 V) 40 °C 350 A<br>(690 V) 5° C 300 A<br>(690 V) 70 °C 240 A                                                                                                                                                                         |
| Rated Operational Current AC-3 ( $I_e$ )                                | (415 V) 55 °C 205 A<br>(440 V) 55 °C 205 A<br>(500 V) 55 °C 186 A<br>(690 V) 55 °C 165 A<br>(1000 V) 55 °C 100 A<br>(380 / 400 V) 55 °C 205 A<br>(220 / 230 / 240 V) 55 °C 205 A                                                                                                                                                         |
| Rated Operational Power<br>AC-3 (P <sub>e</sub> )                       | (415 V) 110 kW<br>(440 V) 132 kW<br>(500 V) 132 kW<br>(690 V) 160 kW<br>(1000 V) 132 kW<br>(380 / 400 V) 110 kW<br>(220 / 230 / 240 V) 55 kW                                                                                                                                                                                             |
| Rated Breaking Capacity<br>AC-3                                         | 8 x le AC-3                                                                                                                                                                                                                                                                                                                              |
| Rated Making Capacity<br>AC-3                                           | 10 x le AC-3                                                                                                                                                                                                                                                                                                                             |
| Short-Circuit Protective<br>Devices                                     | gG Type Fuses 400 A                                                                                                                                                                                                                                                                                                                      |
| Rated Short-time<br>Withstand Current Low<br>Voltage (I <sub>cw</sub> ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1640 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 350 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 670 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 2050 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 947 A |
| Maximum Breaking<br>Capacity                                            | cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 3500 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 2500 A                                                                                                                                                                                                                    |
| Maximum Electrical<br>Switching Frequency                               | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(AC-3) 300 cycles per hour                                                                                                                                                                                                                                            |
| Rated Operational Current                                               | (110 V) 2 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                                   |
|                                                                         |                                                                                                                                                                                                                                                                                                                                          |

**CAD Dimensional** 

| DC-1 (I <sub>e</sub> )                                 | (220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Operational Current<br>DC-3 (I <sub>e</sub> )    | (110 V) 2 Poles in Series, 40 °C 275 A<br>(220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                          |
| Rated Operational Current<br>DC-5 (I <sub>e</sub> )    | (110 V) 2 Poles in Series, 40 °C 275 A<br>(220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                          |
| Rated Insulation Voltage $(U_i)$                       | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V                                                                                                                                                                                                                                                                                    |
| Rated Impulse Withstand<br>Voltage (U <sub>imp</sub> ) | Main Circuit 8 kV                                                                                                                                                                                                                                                                                                                                         |
| Mechanical Durability                                  | 5 million                                                                                                                                                                                                                                                                                                                                                 |
| Maximum Mechanical<br>Switching Frequency              | 300 cycles per hour                                                                                                                                                                                                                                                                                                                                       |
| 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<br>Voltage (U <sub>c</sub> )     | 50 Hz 100 250 V<br>60 Hz 100 250 V<br>DC Operation 100 250 V                                                                                                                                                                                                                                                                                              |
| Coil Consumption                                       | Holding at Max. Rated Control Circuit Voltage 50 Hz 7 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 7 V·A Holding at Max. Rated Control Circuit Voltage DC 2.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 220 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 220 V·A Pull-in at Max. Rated Control Circuit Voltage DC 190 W |
| Operate Time                                           | Between Coil De-energization and NO Contact Opening 37 47 ms<br>Between Coil Energization and NO Contact Closing 25 55 ms                                                                                                                                                                                                                                 |
| Connecting Capacity Main<br>Circuit                    | Flexible 2 x 50 95 mm²<br>Rigid Al-Cable 1 x 95 185 mm²<br>Rigid Cu-Cable 1 x 6 150 mm²                                                                                                                                                                                                                                                                   |
| Connecting Capacity<br>Auxiliary Circuit               | Flexible with Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 2.5 mm² Flexible 2x0.75 2.5 mm² Solid 1 x 1 4 mm² Stranded 1 x 1 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                                                                                                                                                                                                                                 |
|                                                        |                                                                                                                                                                                                                                                                                                                                                           |

| Technical UL/CSA                 |                                                                                                                                                                            |  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Maximum Operating Voltage UL/CSA | Main Circuit 1000 V                                                                                                                                                        |  |
| General Use Rating UL/CSA        | (600 V AC) 300 A                                                                                                                                                           |  |
| Horsepower Rating UL/CSA         | (200 V AC) Three Phase 60 hp<br>(208 V AC) Three Phase 60 hp<br>(220 240 V AC) Three Phase 75 hp<br>(440 480 V AC) Three Phase 150 hp<br>(550 600 V AC) Three Phase 200 hp |  |

| 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 |
| Maximum Operating<br>Altitude Permissible | Without Derating 3000 m                                                                                                                                                                |
| RoHS Status                               | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019                                                                                                                 |

| Circular Value   |  |  |
|------------------|--|--|
| ARR EcoSolutions |  |  |

 ${\it Circular Design Principles} \\ {\it Design for Closing Resource Loops - Standard EN 45555 - 79.2 \,\%} \\$ 

Yes

| Recyclability | Rate |
|---------------|------|
|---------------|------|

| End of Life Instructions                      | 1SFC100112M0001                                                                                                                            |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Group Waste to Landfill<br>Target             | Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility                       |
| Improved Resource<br>Efficiency for Customers | Product Efficiency - Product requires less energy to operate compared to<br>similar product on market or older products from the same line |
| Sustainable Material<br>Content               | Recycled Metal - 35 %                                                                                                                      |

### Eco Transparency

| Environmental Product | 1SFC100095D0201 |
|-----------------------|-----------------|
| Declaration - EPD     |                 |

#### Certificates and Declarations

| ABS Certificate                     | 14-LD1092198-PDA                           |
|-------------------------------------|--------------------------------------------|
| BV Certificate                      | BV_36353_A0BV                              |
| CB Certificate                      | SE-82315                                   |
| CCS Certificate                     | GB14T00030                                 |
| CQC Certificate                     | CQC2014010304676685<br>CQC2014010304724672 |
| Declaration of Conformity<br>- CCC  | 2020980304001306<br>2020980304001071       |
| Declaration of Conformity - CE      | 2CMT2015-005439                            |
| Declaration of Conformity<br>- UKCA | 2CMT2020-006118                            |
| DNV Certificate                     | DNV_E-14043                                |
| EAC Certificate                     | 9AKK107046A8618                            |
| GL Certificate                      | GL_95072-14HH                              |
| KC Certificate                      | 9AKK107046A9912                            |
| LR Certificate                      | LR_14_70011(E1)                            |
| PRS Certificate                     | TE_2092_880423_16                          |
| RINA Certificate                    | ELE060313XG_002                            |
| RMRS Certificate                    | 9AKK107045A6978                            |
| UL Certificate                      | 20121023-E36588                            |
| UL Listing Card                     | UL_E36588                                  |

### **Container Information**

| Package Level 1 Units           | box 1 piece   |
|---------------------------------|---------------|
| Package Level 1 Width           | 160 mm        |
| Package Level 1 Depth / Length  | 258 mm        |
| Package Level 1 Height          | 235 mm        |
| Package Level 1 Gross<br>Weight | 3 kg          |
| Package Level 1 EAN             | 7320500480564 |

### Classifications

| Object Classification Code | Q                                         |
|----------------------------|-------------------------------------------|
| ETIM /                     | FC000066 - Magnet contactor, AC-switching |

| ETIM 5                                | EC000066 - Magnet contactor, AC-switching |
|---------------------------------------|-------------------------------------------|
| ETIM 6                                | EC000066 - Power contactor, AC switching  |
| ETIM 7                                | EC000066 - Power contactor, AC switching  |
| ETIM 8                                | EC000066 - Power contactor, AC switching  |
| eClass                                | V11.0 : 27371003                          |
| UNSPSC                                | 39121529                                  |
| IDEA Granular Category<br>Code (IGCC) | 4758 >> lec Contactors                    |
| E-Number (Finland)                    | 3706462                                   |
| E-Number (Norway)                     | 4117641                                   |
| E-Number (Sweden)                     | 3210147                                   |

## Categories

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

