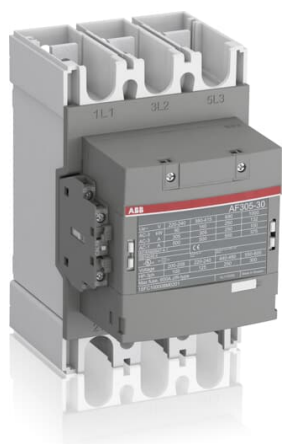


PRODUCT-DETAILS

# AF305-30-11-13

## AF305-30-11-13 Contactor



### General Information

|                       |   |
|-----------------------|---|
| Extended Product Type | AF305-30-11-13  |
| Product ID            | 1SFL587002R1311   |
| EAN                   | 7320500481776   |
| Catalog Description   | AF305-30-11-13 Contactor  |
| Long Description      | A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 100-250 V, 50/60 Hz and DC |

### Classifications

|                                    |   |
|------------------------------------|---|
| Object Classification Code         | Q   |
| ETIM 4                             | EC000066 - 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  |
| UNSPSC                             | 39121529                                  |
| IDEA Granular Category Code (IGCC) | 4755 >> Contactors                        |
| E-Number (Norway)                  | 4117650                                   |
| E-Number (Sweden)                  | 3210163                                   |

### Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 263 mm        |
| Package Level 1 Depth / Length | 203 mm        |
| Package Level 1 Height         | 289 mm        |
| Package Level 1 Gross Weight   | 4.6 kg        |
| Package Level 1 EAN            | 7320500481776 |

### Certificates and Declarations (Document Number)

|                                |                      |
|--------------------------------|----------------------|
| ABS Certificate                | 14-LD1092198-PDA     |
| BV Certificate                 | BV_36353_A0BV        |
| CB Certificate                 | SE-89316             |
| CCC Certificate                | CQC_2014010304676670 |
| CCS Certificate                | GB14T00030           |
| cUL Certificate                | 20121217-E36588      |
| Declaration of Conformity - CE | 2CMT2015-005439      |
| DNV Certificate                | DNV_E-14043          |
| DNV GL Certificate             | DNV_E-14043          |
| EAC Certificate                | 9AKK107046A8618      |
| Environmental Information      | 2CMT004732           |
| GL Certificate                 | GL_95073-14HH        |
| Instructions and Manuals       | 1SFC100008M0201      |
| LR Certificate                 | LR_14_70011(E1)      |
| PRS Certificate                | TE_2092_880423_16    |
| RINA Certificate               | ELE060313XG_002      |
| RMRS Certificate               | 9AKK107045A6978      |
| RoHS Information               | 2CMT2015-005439      |
| UL Listing Card                | UL_E36588            |

### Technical UL/CSA

|                                  |   |
|----------------------------------|---|
| Maximum Operating Voltage UL/CSA | Main Circuit 1000 V   |
| General Use Rating UL/CSA        | (600 V AC) 400 A  |
| Horsepower Rating UL/CSA         | (200 V AC) Three Phase 100 hp<br>(208 V AC) Three Phase 100 hp<br>(220 ... 240 V AC) Three Phase 125 hp<br>(440 ... 480 V AC) Three Phase 250 hp<br>(550 ... 600 V AC) Three Phase 300 hp |

### Environmental

|  |   |
|--|---|
| Ambient Air Temperature                | Close to Contactor for Storage -40 ... +70 °C<br>Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... +50 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +70 °C |
| Maximum Operating Altitude Permissible | 3000 m  |
| RoHS Status                            | Following EU Directive 2015/863 July 22, 2019 (RoHS 3)  |

### Technical

|                         |   |
|-------------------------|---|
| Number of Main Contacts | 3 |
|-------------------------|---|

NO

|   |  |
|---|--|
| 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 ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 500 A  |
| Rated Operational Current<br>AC-1 ( $I_e$ )           | (1000 V) $40^\circ\text{C}$ 375 A<br>(1000 V) $55^\circ\text{C}$ 325 A<br>(1000 V) $60^\circ\text{C}$ 325 A<br>(1000 V) $70^\circ\text{C}$ 260 A<br>(690 V) $40^\circ\text{C}$ 500 A<br>(690 V) $55^\circ\text{C}$ 400 A<br>(690 V) $70^\circ\text{C}$ 325 A   |
| Rated Operational Current<br>AC-3 ( $I_e$ )           | (1000 V) $55^\circ\text{C}$ 131 A<br>(220 / 230 / 240 V) $55^\circ\text{C}$ 305 A<br>(380 / 400 V) $55^\circ\text{C}$ 305 A<br>(415 V) $55^\circ\text{C}$ 305 A<br>(440 V) $55^\circ\text{C}$ 305 A<br>(500 V) $55^\circ\text{C}$ 290 A<br>(690 V) $55^\circ\text{C}$ 290 A  |
| Rated Operational Power<br>AC-3 ( $P_e$ )             | (1000 V) 185 kW<br>(220 / 230 / 240 V) 90 kW<br>(380 / 400 V) 160 kW<br>(415 V) 160 kW<br>(440 V) 160 kW<br>(500 V) 200 kW<br>(690 V) 250 kW   |
| Rated Breaking Capacity<br>AC-3 acc. to IEC 60947-4-1 | 8 x $I_e$ AC-3   |
| Rated Making Capacity<br>AC-3 acc. to IEC 60947-4-1   | 10 x $I_e$ AC-3  |
| Short-Circuit Protective<br>Devices                   | gG Type Fuses 500 A  |
| Rated Short-time<br>Withstand Current ( $I_{cw}$ )    | at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 2440 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 500 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 996 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 3050 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 1409 A |
| Maximum Breaking<br>Capacity                          | $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 4600 A<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 3800 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<br>DC-1 ( $I_e$ )           | (110 V) 1-Pole, $40^\circ\text{C}$ 500 A<br>(220 V) 2 Poles in Series, $40^\circ\text{C}$ 500 A<br>(220 V) 3 Poles in Series, $40^\circ\text{C}$ 500 A   |
| Rated Operational Current<br>DC-3 ( $I_e$ )           | (110 V) 2 Poles in Series, $40^\circ\text{C}$ 400 A<br>(220 V) 3 Poles in Series, $40^\circ\text{C}$ 400 A   |
| Rated Operational Current<br>DC-5 ( $I_e$ )           | (110 V) 2 Poles in Series, $40^\circ\text{C}$ 400 A<br>(220 V) 3 Poles in Series, $40^\circ\text{C}$ 400 A   |
| Rated Insulation Voltage<br>( $U_i$ )                 | acc. to UL/CSA 600 V<br>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V  |
| Rated Impulse Withstand<br>Voltage ( $U_{imp}$ )      | 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) $0.85 \times U_c$ Min. ... $1.1 \times U_c$ Max. (at $\theta \leq 70^\circ\text{C}$ )  |
| Rated Control Circuit<br>Voltage ( $U_c$ )            | 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 17.5 V·A   |

Holding at Max. Rated Control Circuit Voltage 60 Hz 17.5 V·A  
 Holding at Max. Rated Control Circuit Voltage DC 4.5 W  
 Pull-in at Max. Rated Control Circuit Voltage 50 Hz 385 V·A  
 Pull-in at Max. Rated Control Circuit Voltage 60 Hz 385 V·A  
 Pull-in at Max. Rated Control Circuit Voltage DC 410 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 Circuit      | Flexible 1 x 16 ... 240 mm <sup>2</sup><br>Rigid Al-Cable 1 x 185 ... 240 mm <sup>2</sup><br>Rigid Cu-Cable 2 x 70 ... 185 mm <sup>2</sup>   |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible 1x0.75 ... 2.5 mm <sup>2</sup><br>Solid 2 x 1 ... 4 mm <sup>2</sup><br>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   |

## Dimensions

|                            |        |
|----------------------------|--------|
| Product Net Width          | 140 mm |
| Product Net Depth / Length | 180 mm |
| Product Net Height         | 225 mm |
| Product Net Weight         | 3.9 kg |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100192C0206 |
| Instructions and Manuals          | 1SFC100008M0201 |

## Ordering

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

## Categories

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

