## PRODUCT-DETAILS

## AF205-30-11-13

## AF205-30-11-13 Contactor



General Information

| Extended Product Type | AF205-30-11-13 |
| :--- | ---: |
| Product ID | 1SFL527002R1311 |
| EAN | AF205-30-11-13 Contactor |
| Catalog Description | 7320500480564 |

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 $110 \mathrm{~kW} / 400 \mathrm{~V}$ AC (AC-3) or $150 \mathrm{hp} / 480 \mathrm{~V}$ 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
$V 50 / 60 \mathrm{~Hz}$ and DC), managing large control voltage variations, reducing panel 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

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

## Popular Downloads

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


| CAD Dimensional | 2CDC001079B0201 |
| :--- | ---: |
| Drawing |  |
| Dimension Diagram | 1SFB535001G1056 |
|  |  |
| Dimensions | 105 mm |
| Product Net Width | 152 mm |
| Product Net Depth / | 196 mm |
| Length | 2.4 kg |
| Product Net Height |  |

## Technical

| Number of Main Contacts NO | 3 |
| :---: | :---: |
| 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 |
| Rated Frequency (f) | Main Circuit $50 / 60 \mathrm{~Hz}$ |
| Conventional Free-air Thermal Current ( $1_{\text {th }}$ ) | acc. to IEC 60947-4-1, Open Contactors $\Theta=40^{\circ} \mathrm{C} 350 \mathrm{~A}$ |
| Rated Operational Current AC-1 ( $\mathrm{I}_{\mathrm{e}}$ ) | (1000 V) $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ (1000 V) $55^{\circ} \mathrm{C} 250 \mathrm{~A}$ (1000 V) $60^{\circ} \mathrm{C} 250 \mathrm{~A}$ (1000 V) $70^{\circ} \mathrm{C} 200 \mathrm{~A}$ ( 690 V) $40^{\circ} \mathrm{C} 350 \mathrm{~A}$ ( 690 V ) $55^{\circ} \mathrm{C} 300 \mathrm{~A}$ ( 690 V ) $70^{\circ} \mathrm{C} 240 \mathrm{~A}$ |
| Rated Operational Current AC-3 ( $\mathrm{I}_{\mathrm{e}}$ ) | (415 V) $55^{\circ} \mathrm{C} 205 \mathrm{~A}$ (440 V) $55^{\circ} \mathrm{C} 205 \mathrm{~A}$ ( 500 V) $55^{\circ} \mathrm{C} 186 \mathrm{~A}$ ( 690 V) $55^{\circ} \mathrm{C} 165 \mathrm{~A}$ (1000 V) $55^{\circ} \mathrm{C} 100 \mathrm{~A}$ (380 / 400 V) $55^{\circ} \mathrm{C} 205 \mathrm{~A}$ (220 / $230 / 240$ V) $55^{\circ} \mathrm{C} 205$ |
| Rated Operational Power AC-3 ( $\mathrm{P}_{\mathrm{e}}$ ) | $(415 \mathrm{~V}) 110 \mathrm{~kW}$ $(440 \mathrm{~V}) 132 \mathrm{~kW}$ $(500 \mathrm{~V}) 132 \mathrm{~kW}$ $(690 \mathrm{~V}) 160 \mathrm{~kW}$ $(1000 \mathrm{~V}) 132 \mathrm{~kW}$ $(380 / 400 \mathrm{~V}) 110 \mathrm{~kW}$ $(220 / 230 / 240 \mathrm{~V}) 55 \mathrm{~kW}$ |
| Rated Breaking Capacity AC-3 | $8 \times \mathrm{le} \mathrm{AC-3}$ |
| Rated Making Capacity AC-3 | $10 \times \mathrm{le}$ AC-3 |
| Short-Circuit Protective Devices | gG Type Fuses 400 A |
| Rated Short-time Withstand Current Low Voltage ( $\mathrm{I}_{\mathrm{cw}}$ ) | at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 1640 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 350 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 670 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 2050 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 947 A |
| Maximum Breaking Capacity | cos phi $=0.45(\cos$ phi $=0.35$ for le $>100 \mathrm{~A})$ at 440 V 3500 A cos phi $=0.45(\cos$ phi $=0.35$ for le $>100 \mathrm{~A})$ at 690 V 2500 A |
| Maximum Electrical Switching Frequency | (AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour |
| Rated Operational Current | (110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ |

(110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$

| DC-1 ( $\mathrm{I}_{\mathrm{e}}$ ) | (220 V) 3 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ |
| :---: | :---: |
| Rated Operational Current DC-3 ( $\mathrm{I}_{\mathrm{e}}$ ) | (110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ (220 V) 3 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ |
| Rated Operational Current DC-5 (le) | (110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ (220 V) 3 Poles in Series, $40^{\circ} \mathrm{C} 275 \mathrm{~A}$ |
| Rated Insulation Voltage $\left(U_{i}\right)$ | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V |
| Rated Impulse Withstand Voltage ( $\mathrm{U}_{\mathrm{imp}}$ ) | 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) $0.85 \times$ Uc Min. ... 1.1 x Uc Max. (at $\theta \leq 70^{\circ} \mathrm{C}$ ) |
| Rated Control Circuit Voltage ( $\mathrm{U}_{\mathrm{c}}$ ) | $50 \mathrm{~Hz} 100 \ldots 250 \mathrm{~V}$ 60 Hz 100 ... 250 V DC Operation 100 ... 250 V |
| Coil Consumption | Holding at Max. Rated Control Circuit Voltage $50 \mathrm{~Hz} 7 \mathrm{~V} \cdot \mathrm{~A}$ Holding at Max. Rated Control Circuit Voltage $60 \mathrm{~Hz} 7 \mathrm{~V} \cdot \mathrm{~A}$ 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 Between Coil Energization and NO Contact Closing $25 \ldots 55 \mathrm{~ms}$ |
| Connecting Capacity Main Circuit | Flexible $2 \times 50 \ldots 95 \mathrm{~mm}^{2}$ <br> Rigid Al-Cable $1 \times 95$... $185 \mathrm{~mm}^{2}$ <br> Rigid Cu-Cable $1 \times 6 \ldots 150 \mathrm{~mm}^{2}$ |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ Flexible with Insulated Ferrule $2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ Flexible $2 \times 0.75$... $2.5 \mathrm{~mm}^{2}$ Solid $1 \times 1 \ldots 4 \mathrm{~mm}^{2}$ Stranded $1 \times 1 . . . .4 \mathrm{~mm}^{2}$ |
| 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 |
| Terminal Type | Main Circuit: Bars |
| Technical UL/CSA |  |
| Maximum Operating Voltage UL/CSA | Main Circuit 1000 V |
| General Use Rating UL/CSA | $(600 \mathrm{~V} \mathrm{AC)} 300 \mathrm{~A}$ |
| Horsepower Rating UL/CSA | (200 V AC) Three Phase 60 hp ( 208 V AC) Three Phase 60 hp (220 ... 240 VAC ) Three Phase 75 hp ( 440 ... 480 V AC) Three Phase 150 hp ( 550 ... 600 V AC) Three Phase 200 hp |
| Environmental |  |
| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay ( $0.85 \ldots 1.1$ Uc) $-25 \ldots 50^{\circ} \mathrm{C}$ Close to Contactor without Thermal O/L Relay ( $0.85 \ldots 1.1$ Uc) $-40 \ldots 70^{\circ} \mathrm{C}$ Close to Contactor for Storage - $40 \ldots . .70^{\circ} \mathrm{C}$ |
| Maximum Operating Altitude Permissible | Without Derating 3000 m |
| RoHS Status | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

## Circular Value

| ABB EcoSolutions | Yes |
| :--- | :--- |
| Circular Design Principles | Design for Closing Resource Loops - Standard EN45555-79.2 \% |

Recyclability Rate
End of Life Instructions
1SFC100112M0001

| Group Waste to Landfill | Non-hazardous waste is sent to a landfill, where there is no alternative option <br> available within 100 km of a facility |
| :--- | ---: |
| Improved Resource | Product Efficiency - Product requires less energy to operate compared to |
| similar product on market or older products from the same line |  |

## 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 |
| Declaration of Conformity | CQC2014010304724672 |
| CCC | 2020980304001306 |
| Declaration of Conformity | 2020980304001071 |
| Ceclaration of Conformity | 2CMT2015-005439 |
| 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 | box 1 piece |
| :--- | ---: |
| Package Level 1 Units | 160 mm |
| Package Level 1 Width | 258 mm |
| Package Level 1 Depth / <br> Length | 235 mm |
| Package Level 1 Height | 3 kg |
| Package Level 1 Gross 2 |  |
| Package Level 1 EAN | 7320500480564 |

## Classifications

| Object Classification Code | Q |
| :--- | :--- |
| ETIM 4 | EC000066 - Magnet contactor, AC-switching |

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| 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 |  |
| Code (IGCC) | $4758 \gg$ 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


