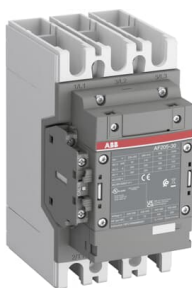




 PRODUCT-DETAILS

AF205-30-11-13

AF205-30-11-13 Contactor



Submitted by TECO Group

General Information

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

| | |
|------------------|--|
| Long Description | <p>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 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.</p> |
|------------------|--|

Ordering

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

Popular Downloads

| | |
|-----------------------------------|------------------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals | 1SFC100008M0201 |
| CAD Dimensional Drawing | 2CDC001079B0201 |
| <u>Dimension Diagram</u> | <u>1SFB535001G1056</u> |

Dimensions

| | |
|----------------------------|--------|
| Product Net Width | 105 mm |
| Product Net Depth / Length | 152 mm |
| Product Net Height | 196 mm |
| Product Net Weight | 2.4 kg |

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 |
| Number of Poles | 3P |
| Rated Operational Voltage | Main Circuit 1000 V |
| Rated Frequency (f) | Main Circuit 50 / 60 Hz |
| Conventional Free-air Thermal Current (I_{th}) | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40^\circ\text{C}$ 350 A |
| Rated Operational Current AC-1 (I_e) | (1000 V) 40 °C 275 A (1000 V) 55 °C 250 A (1000 V) 60 °C 250 A (1000 V) 70 °C 200 A (690 V) 40 °C 350 A (690 V) 55 °C 300 A (690 V) 70 °C 240 A |
| Rated Operational Current AC-3 (I_e) | (415 V) 55 °C 205 A (440 V) 55 °C 205 A (500 V) 55 °C 186 A (690 V) 55 °C 165 A (1000 V) 55 °C 100 A (380 / 400 V) 55 °C 205 A (220 / 230 / 240 V) 55 °C 205 A |
| Rated Operational Current DC-1 (I_e) | (110 V) 2 Poles in Series, 40 °C 275 A (220 V) 3 Poles in Series, 40 °C 275 A |
| Rated Operational Current DC-3 (I_e) | (110 V) 2 Poles in Series, 40 °C 275 A (220 V) 3 Poles in Series, 40 °C 275 A |
| Rated Operational Current DC-5 (I_e) | (110 V) 2 Poles in Series, 40 °C 275 A (220 V) 3 Poles in Series, 40 °C 275 A |
| Rated Operational Power AC-3 (P_e) | (415 V) 110 kW (440 V) 132 kW (500 V) 132 kW (690 V) 160 kW (1000 V) 132 kW (380 / 400 V) 110 kW (220 / 230 / 240 V) 55 kW |
| Rated Breaking Capacity AC-3 | 8 x I_e AC-3 |
| Rated Making Capacity AC-3 | 10 x I_e AC-3 |
| Short-Circuit Protective Devices | gG Type Fuses 400 A |
| Rated Short-time Withstand Current Low Voltage (I_{cw}) | 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 Capacity | cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 3500 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 2500 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 Voltage (U _{imp}) | Main Circuit 8 kV |
| Maximum Electrical Switching Frequency | (AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour |
| 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 $\theta \leq 70\text{ °C}$) |
| Rated Control Circuit Voltage (U _c) | 50 Hz 100 ... 250 V 60 Hz 100 ... 250 V 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 |
| Power Loss | at Rated Operating Conditions per Pole 8 W |
| Operate Time | Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms |
| Connecting Capacity Main Circuit | Flexible 2 x 50 ... 95 mm ² Rigid Al-Cable 1 x 95 ... 185 mm ² Rigid Cu-Cable 1 x 6 ... 150 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with 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 1 x 1 ... 4 mm ² Stranded 1 x 1 ... 4 mm ² |
| Connecting Capacity | Flexible 2 x 50 ... 95 mm ² Rigid Al-Cable 1 x 95 ... 185 mm ² Rigid Cu-Cable 2 x 50 ... 120 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 |
| Tightening Torque | Cable Lug 18 N·m Main Circuit 14 ... 31 N·m |
| Terminal Type | Main Circuit: Bars |
| Product Name | Block Contactor |

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 (208 V AC) Three Phase 60 hp (220 ... 240 V AC) Three Phase 75 hp (440 ... 480 V AC) Three Phase 150 hp (550 ... 600 V AC) Three Phase 200 hp |
| Full Load Amps Motor Use | (440 ... 480 V AC) Three Phase 180 A (550 ... 600 V AC) Three Phase 192 A |

Environmental

| | |
|--|--|
| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U _c) -25 ... 50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U _c) -40 ... 70 °C Close to Contactor for Storage -40 ... 70 °C |
| Maximum Operating Altitude Permissible | Without Derating 3000 m |

Material Compliance

| | |
|---|--|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658 |
| REACH Declaration | 2CMT2021-006202 |
| RoHS Information | 2CMT2021-006277 |
| RoHS Status | 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

| | |
|---|---|
| ABB EcoSolutions | Yes |
| ABB Site Meeting Group Waste To Landfill Target | Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility |
| End Of Life Disassembling Instructions | 1SFC100112M0001 |
| Environmental Product Declaration - EPD | 1SFC100095D0201 2TFP200018A1001 |
| Improved Energy Efficiency for Customers | Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line |
| Recyclability Rate of the Product acc. to EN45555 | Design for Closing Resource Loops - Standard EN45555 - 79.2 % |
| Sustainable Material Content in Product (wt. %) | Recycled Metal - 35 % |

Certificates and Declarations

| | |
|----------------------------------|--|
| A2L Certificate - UL | 9AKK108468A6695 |
| ABS Certificate | 14-LD1092198-PDA |
| BV Certificate | BV_36353_A0BV |
| CB Certificate | SE-82315 |
| CCS Certificate | GB14T00030 |
| CQC Certificate | CQC2014010304676685 CQC2014010304724672 |
| Declaration of Conformity - CCC | 2020980304001306 2020980304001071 |
| Declaration of Conformity - CE | 2CMT2015-005439 |
| Declaration of Conformity - 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 Weight | 3 kg |
| Package Level 1 EAN | 7320500480564 |

Classifications

| | |
|------------------------------------|--|
| Object Classification Code | Q |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 8 | EC000066 - Power contactor, AC switching |
| ETIM 9 | EC000066 - Power contactor, AC switching |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4758 >> Iec Contactors |
| E-Number (Finland) | 3706462 |
| E-Number (Norway) | 4117641 |
| E-Number (Sweden) | 3210147 |

Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|-----------------|----------------------|----------|----------|-----------------|
| 1SFN170801R1001 | RU19/120 LVRT-Module | RU19/120 | 1 | piece |
| 1SFN170801R1002 | RU19/240 LVRT-Module | RU19/240 | 1 | piece |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF205

