



PRODUCT-DETAILS

AF205-30-11-11

AF205-30-11-11 Contactor



360°

| General Information    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type: | AF205-30-11-11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product ID:            | 1SFL527002R1111                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EAN:                   | 7320500480540                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Catalog Description:   | AF205-30-11-11 Contactor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Long Description:      | The AF205-30-11-11 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 (24-60 V 50/60 Hz and 20-60 V 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. Includes Mounting kit, containing all necessary screws, washers and sockets for connecting the terminals, and screws for mounting the device. |
| Display Name:          | AF205-30-11-11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Ordering                |         |
|-------------------------|---------|
| Minimum Order Quantity: | 1 piece |

Customs Tariff Number: 85364900

## Popular Downloads

|                                             |                  |
|---------------------------------------------|------------------|
| EPLAN Data:                                 | 9AAC174542_EPLAN |
| Data Sheet, Technical Information:          | 1SBC100214C0202  |
| Data Sheet, Technical Information (Part 2): | 1SAC200017M0002  |
| Instructions and Manuals:                   | 1SFC100008M0201  |
| CAD Dimensional Drawing:                    | 2CDC001079B0201  |

## Dimensions

|                             |                     |
|-----------------------------|---------------------|
| Product Net Width:          | 105 mm              |
| Product Net Depth / Length: | 152 mm              |
| Product Net Height:         | 196 mm              |
| Product Net Weight:         | 2.4 kg              |
| Dimension Diagram:          | 1SFB535001G1056.pdf |

## 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 <sub>th</sub> ): | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 350 A                                                                                                             |
| Rated Operational Current AC-1 (I <sub>e</sub> ):         | (1000 V) 40 °C 275 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) 55 °C 300 A<br>(690 V) 60 °C 300 A<br>(690 V) 70 °C 240 A                 |
| Rated Operational Current AC-3 (I <sub>e</sub> ):         | (415 V) 60 °C 205 A<br>(440 V) 60 °C 205 A<br>(500 V) 60 °C 186 A<br>(690 V) 60 °C 165 A<br>(1000 V) 60 °C 100 A<br>(380 / 400 V) 60 °C 205 A<br>(220 / 230 / 240 V) 60 °C 205 A |
| Rated Operational Current DC-1 (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 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                                                                                                 |

|                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Rated Operational Current DC-5 (<math>I_e</math>):</b>                    | (110 V) 2 Poles in Series, 40 °C 275 A<br>(220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Rated Operational Power AC-3 (<math>P_e</math>):</b>                      | (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                                                                                                                                                                                                                                                                                                                                                       |
| <b>Rated Breaking Capacity AC-3:</b>                                         | 8 x $I_e$ AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Rated Breaking Capacity AC-3e:</b>                                        | 8.5 x $I_e$ AC-3e                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Rated Making Capacity AC-3:</b>                                           | 10 x $I_e$ AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Rated Making Capacity AC-3e:</b>                                          | 12 x $I_e$ AC-3e                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Short-Circuit Protective Devices:</b>                                     | gG Type Fuses 400 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Rated Short-time Withstand Current Low Voltage (<math>I_{cw}</math>):</b> | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 947 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 2050 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1640 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 670 A                                                                                                                                               |
| <b>Maximum Breaking Capacity:</b>                                            | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 3500 A<br>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 2500 A                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Rated Insulation Voltage (<math>U_i</math>):</b>                          | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to UL/CSA 600 V                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>               | Main Circuit 8 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Maximum Electrical Switching Frequency:</b>                               | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(AC-3) 300 cycles per hour                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Mechanical Durability:</b>                                                | 5 million                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Maximum Mechanical Switching Frequency:</b>                               | 300 cycles per hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Coil Operating Limits:</b>                                                | (acc. to IEC 60947-4-1) 0.85 x $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70$ °C)                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Rated Control Circuit Voltage (<math>U_c</math>):</b>                     | 50 Hz 24 ... 60 V<br>60 Hz 24 ... 60 V<br>DC Operation 20 ... 60 V                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Coil Consumption:</b>                                                     | 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 2.5 V-A<br>Holding at Max. Rated Control Circuit Voltage DC 2.5 W<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 245 V-A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 245 V-A<br>Pull-in at Max. Rated Control Circuit Voltage DC 370 V-A<br>Pull-in at Max. Rated Control Circuit Voltage DC 370 W |
| <b>Power Loss:</b>                                                           | at Rated Operating Conditions per Pole 8 W                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Operate Time:</b>                                                         | Between Coil De-energization and NO Contact Opening 37 ... 47 ms<br>Between Coil Energization and NO Contact Closing 25 ... 55 ms                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Connecting Capacity Main Circuit:</b>                                     | Flexible 2 x 50 ... 95 mm <sup>2</sup><br>Rigid Al-Cable 1 x 95 ... 185 mm <sup>2</sup><br>Rigid Cu-Cable 2 x 50 ... 120 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                           |
| <b>Connecting Capacity Auxiliary Circuit:</b>                                | Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>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 2 x 1 ... 4 mm <sup>2</sup><br>Stranded 2 x 1 ... 4 mm <sup>2</sup>                                                                                                                                                                                          |
| <b>Connecting Capacity:</b>                                                  | Flexible 2 x 50 ... 95 mm <sup>2</sup><br>Rigid Al-Cable 1 x 95 ... 185 mm <sup>2</sup><br>Rigid Cu-Cable 2 x 50 ... 120 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                           |

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| <b>Degree of Protection:</b> | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40<br>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 |
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|                           |                                               |
|---------------------------|-----------------------------------------------|
| <b>Tightening Torque:</b> | Cable Lug 9 N-m<br>Main Circuit 14 ... 31 N-m |
|---------------------------|-----------------------------------------------|

|                       |                    |
|-----------------------|--------------------|
| <b>Terminal Type:</b> | Main Circuit: Bars |
|-----------------------|--------------------|

|                      |                 |
|----------------------|-----------------|
| <b>Product Name:</b> | Block Contactor |
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## Technical UL/CSA

|                                          |                     |
|------------------------------------------|---------------------|
| <b>Maximum Operating Voltage UL/CSA:</b> | Main Circuit 1000 V |
|------------------------------------------|---------------------|

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|-----------------------------------|---------------------------------------|
| <b>General Use Rating UL/CSA:</b> | (1000 V AC) 275 A<br>(600 V AC) 300 A |
|-----------------------------------|---------------------------------------|

|                                  |                                                                                                                                                                                        |
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| <b>Horsepower Rating UL/CSA:</b> | (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 |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                  |                                                                              |
|----------------------------------|------------------------------------------------------------------------------|
| <b>Full Load Amps Motor Use:</b> | (440 ... 480 V AC) Three Phase 180 A<br>(550 ... 600 V AC) Three Phase 192 A |
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## Environmental

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|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ambient Air Temperature:</b> | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 50 °C<br>Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 55 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 70 °C<br>Close to Contactor for Storage -40 ... 70 °C |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| <b>Maximum Operating Altitude Permissible:</b> | Without Derating 3000 m |
|------------------------------------------------|-------------------------|

## Material Compliance

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|-----------------------------------------------------|-----------------|
| <b>Conflict Minerals Reporting Template (CMRT):</b> | 9AKK108467A5658 |
|-----------------------------------------------------|-----------------|

|                           |                 |
|---------------------------|-----------------|
| <b>REACH Declaration:</b> | 2CMT2021-006202 |
|---------------------------|-----------------|

|                          |                 |
|--------------------------|-----------------|
| <b>RoHS Declaration:</b> | 2CMT2021-006277 |
|--------------------------|-----------------|

|                          |                                                                        |
|--------------------------|------------------------------------------------------------------------|
| <b>RoHS Information:</b> | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
|--------------------------|------------------------------------------------------------------------|

|              |                                            |
|--------------|--------------------------------------------|
| <b>SCIP:</b> | 27cea2ac-860d-4d5d-a6b3-e80b9863721d China |
|--------------|--------------------------------------------|

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Simplified SCIP:</b>                     | 032d51aa-7c69-4b1d-b924-c80556cf1144 Finland<br>0b952e5d-339d-46b0-bfbc-d95909fc0528 Portugal<br>0d8a7b4d-afe4-468e-b741-1edefb03ea34 Romania<br>1015ffb4-651b-4520-8034-c11189deb7a8 France<br>22a4200e-05f0-48fc-abdd-f30eadea31e3 Bulgaria<br>22d1f44c-c7e9-46f3-bf70-a1ec82d8065b Netherlands<br>3c2c061e-fff2-4eb4-9fbc-66f5e8e63e2b Poland<br>47301f54-4a5c-4948-977f-32af2d85e88f Norway<br>57796cea-8ef1-4802-89ac-255ecc89112c Croatia<br>61f1971b-320f-45e3-af79-4f27cadfeef3 Estonia<br>69abf9bf-2d8f-429f-9341-f97a0d8a0b93 Greece<br>6d37d293-f23d-486c-bede-df1b39d0f6f0 Denmark<br>770c1017-aa5d-4cf7-9fe4-9e448fb276d8 Belgium<br>91630efd-0788-450a-b4c0-e66406028c93 Spain<br>d54bffb1-3f2b-4818-87fe-3ec7bfda988d Hungary<br>db55b618-54ee-49de-b3f1-a279381a9b16 Czechia<br>dc81899c-6f3d-4c30-ac44-878d11c56ea6 Germany<br>f45e251a-3227-46a3-9aeb-2c49b83fca0d Sweden |
| <b>Toxic Substances Control Act - TSCA:</b> | 2CMT2023-006525                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>WEEE B2C / B2B:</b>                      | Business To Business                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>WEEE Category:</b>                       | 5. Small Equipment (No External Dimension More Than 50 cm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## ABB EcoSolutions

|                                                           |                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ABB EcoSolutions:</b>                                  | Yes                                                                                                                                                                                                                                                                                 |
| <b>ABB Site Meeting Group Waste To Landfill Target:</b>   | Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility<br>UL 2799 Zero Waste To Landfill Validation available                                                                                                         |
| <b>EcoSolutions Profile:</b>                              | 1SFC100125C0366                                                                                                                                                                                                                                                                     |
| <b>End Of Life Disassembling Instructions:</b>            | 1SFC100112M0001                                                                                                                                                                                                                                                                     |
| <b>Environmental Product Declaration - EPD:</b>           | 1SFC100095D0201<br>2TFP200018A1001                                                                                                                                                                                                                                                  |
| <b>Extended Product Lifetime:</b>                         | Product Durability                                                                                                                                                                                                                                                                  |
| <b>Improved Energy Efficiency for Customers:</b>          | Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line<br>Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line |
| <b>Recyclability Rate of the Product acc. to EN45555:</b> | Design for Closing Resource Loops - Standard EN45555 - 79.1 %                                                                                                                                                                                                                       |

## Certificates and Declarations

|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| <b>A2L Certificate – UL:</b>           | 9AKK108468A6695                            |
| <b>ABS Certificate:</b>                | 14-LD1092198-PDA<br>14-LD1092198-1-PDA-DUP |
| <b>BV Certificate:</b>                 | BV_36353_A0BV                              |
| <b>CB Certificate:</b>                 | SE-82315                                   |
| <b>CCS Certificate:</b>                | GB14T00030<br>GZ15T00069                   |
| <b>CQC Certificate:</b>                | CQC2014010304676685<br>CQC2014010304724672 |
| <b>cULus Certificate:</b>              | 20121023-E36588                            |
| <b>Declaration of Conformity - CE:</b> | 2CMT2015-005439                            |

|                                   |                   |
|-----------------------------------|-------------------|
| Declaration of Conformity - UKCA: | 2CMT2020-006118   |
| DNV Certificate:                  | DNV_E-14043       |
| LR Certificate:                   | 16-20064          |
| PRS Certificate:                  | TE_2092_880423_16 |
| RINA Certificate:                 | ELE060313XG_002   |
| 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:            | 7320500480540 |

### External Classifications and Standards

|                                     |                                          |
|-------------------------------------|------------------------------------------|
| 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 >> lec Contactors                   |
| E-Number (Finland):                 | 3706456                                  |
| E-Number (Norway):                  | 4117642                                  |
| E-Number (Sweden):                  | 3210140                                  |

### Accessories

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

### Categories

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

