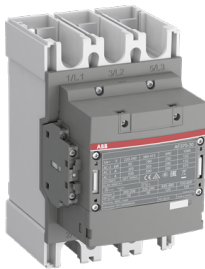




PRODUCT-DETAILS

# AF370-30-11-13

## AF370-30-11-13 Contactor



General Information

|                       |                          |
|-----------------------|--------------------------|
| Extended Product Type | AF370-30-11-13           |
| Product ID            | 1SFL607002R1311          |
| EAN                   | 7320500481899            |
| Catalog Description   | AF370-30-11-13 Contactor |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Long Description | The AF370-30-11-13 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 200 kW / 400 V AC (AC-3) or 300 hp / 480 V UL and switching power circuits up to 600 A (AC-1) or 520 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. |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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 |
| Dimension Diagram                 | 1SFB535001G1060 |

Dimensions

|                            |        |
|----------------------------|--------|
| Product Net Width          | 140 mm |
| Product Net Depth / Length | 180 mm |
| Product Net Height         | 225 mm |
| Product Net Weight         | 3.9 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 <sub>th</sub> )          | acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 600 A                                                                                                                                                        |
| Rated Operational Current AC-1 (I <sub>e</sub> )                  | (1000 V) 40 °C 400 A<br>(1000 V) 55 °C 350 A<br>(1000 V) 60 °C 350 A<br>(1000 V) 70 °C 290 A<br>(690 V) 40 °C 600 A<br>(690 V) 55 °C 500 A<br>(690 V) 70 °C 400 A                                             |
| Rated Operational Current AC-3 (I <sub>e</sub> )                  | (415 V) 55 °C 370 A<br>(440 V) 55 °C 370 A<br>(500 V) 55 °C 350 A<br>(690 V) 55 °C 315 A<br>(1000 V) 55 °C 141 A<br>(380 / 400 V) 55 °C 370 A<br>(220 / 230 / 240 V) 55 °C 370 A                              |
| Rated Operational Current DC-1 (I <sub>e</sub> )                  | (110 V) 2 Poles in Series, 40 °C 450 A<br>(220 V) 3 Poles in Series, 40 °C 450 A                                                                                                                              |
| Rated Operational Current DC-3 (I <sub>e</sub> )                  | (110 V) 2 Poles in Series, 40 °C 450 A<br>(220 V) 3 Poles in Series, 40 °C 450 A                                                                                                                              |
| Rated Operational Current DC-5 (I <sub>e</sub> )                  | (110 V) 2 Poles in Series, 40 °C 450 A<br>(220 V) 3 Poles in Series, 40 °C 450 A                                                                                                                              |
| Rated Operational Power AC-3 (P <sub>e</sub> )                    | (415 V) 200 kW<br>(440 V) 200 kW<br>(500 V) 250 kW<br>(690 V) 315 kW<br>(1000 V) 200 kW<br>(380 / 400 V) 200 kW<br>(220 / 230 / 240 V) 110 kW                                                                 |
| Rated Breaking Capacity AC-3                                      | 8 x I <sub>e</sub> AC-3                                                                                                                                                                                       |
| Rated Making Capacity AC-3                                        | 10 x I <sub>e</sub> AC-3                                                                                                                                                                                      |
| Short-Circuit Protective Devices                                  | gG Type Fuses 630 A                                                                                                                                                                                           |
| Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 2960 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 600 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 1208 A |

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 3700 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 1709 A                                                                                                                                                                                                                                          |
| Maximum Breaking Capacity                           | cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 5000 A<br>cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 4000 A                                                                                                                                                                                                                                                       |
| Rated Insulation Voltage (U <sub>i</sub> )          | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to UL/CSA 600 V                                                                                                                                                                                                                                                                                                      |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ) | Main Circuit 8 kV                                                                                                                                                                                                                                                                                                                                                              |
| Maximum Electrical Switching Frequency              | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(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 <sub>c</sub> Min. ... 1.1 x U <sub>c</sub> Max. (at θ ≤ 70 °C)                                                                                                                                                                                                                                                                                |
| Rated Control Circuit 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 17.5 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 17.5 V·A<br>Holding at Max. Rated Control Circuit Voltage DC 4.5 W<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 385 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 385 V·A<br>Pull-in at Max. Rated Control Circuit Voltage DC 410 W |
| Power Loss                                          | at Rated Operating Conditions per Pole 27 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 2 x 70 ... 185 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 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 1 x 1 ... 4 mm <sup>2</sup>                                                                                                                               |
| Connecting Capacity                                 | Flexible 2 x 70 ... 185 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>                                                                                                                                                                                                                                     |
| 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                                                                                                                                                                                                                                                   |
| Tightening Torque                                   | Cable Lug 28 N·m<br>Main Circuit 22 ... 43 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) 520 A                                                                                                                                                                          |
| Horsepower Rating UL/CSA         | (200 V AC) Three Phase 125 hp<br>(208 V AC) Three Phase 125 hp<br>(220 ... 240 V AC) Three Phase 150 hp<br>(440 ... 480 V AC) Three Phase 300 hp<br>(550 ... 600 V AC) Three Phase 350 hp |
| Full Load Amps Motor Use         | (440 ... 480 V AC) Three Phase 361 A<br>(550 ... 600 V AC) Three Phase 336 A                                                                                                              |

## Environmental

|                                        |                                                                                                                                                                                                                                            |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -25 ... 50 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40 ... 70 °C<br>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                                |
| Environmental Product Declaration - EPD | 1SFC100104D0201<br>2TFP200030A1001 |

## Certificates and Declarations

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| A2L Certificate - UL             | 9AKK108468A6695                            |
| ABS Certificate                  | 14-LD1092198-PDA                           |
| BV Certificate                   | BV_36353_A0BV                              |
| CB Certificate                   | SE-89316                                   |
| CCS Certificate                  | GB14T00030                                 |
| CQC Certificate                  | CQC2014010304676670<br>CQC2014010304673866 |
| Declaration of Conformity - CCC  | 2020980304001305<br>2020980304001068       |
| Declaration of Conformity - CE   | 2CMT2015-005439                            |
| Declaration of Conformity - UKCA | 2CMT2020-006118                            |
| DNV Certificate                  | DNV_E-14043                                |
| EAC Certificate                  | 9AKK107046A8618                            |
| GL Certificate                   | GL_95073-14HH                              |
| LR Certificate                   | LR_14_70011(E1)                            |
| PRS Certificate                  | TE_2092_880423_16                          |
| RINA Certificate                 | ELE060313XG_002                            |
| RMRS Certificate                 | 9AKK107045A6978                            |
| UL Certificate                   | 20121217-E36588                            |
| UL Listing Card                  | UL_E36588                                  |

## 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            | 7320500481899 |

## 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)                 | 3706498                                  |
| E-Number (Norway)                  | 4117655                                  |
| E-Number (Sweden)                  | 3210171                                  |

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 → AF370

