



PRODUCT-DETAILS

**AF12N0R-30-22-13**  
AF12N0R-30-22-13 100-250V50/60HZ-DC  
Reversing Contactor



| General Information   |                                                         |
|-----------------------|---------------------------------------------------------|
| Extended Product Type | AF12N0R-30-22-13                                        |
| Product ID            | 1SBX303301R1322                                         |
| EAN                   | 3471523020337                                           |
| Catalog Description   | AF12N0R-30-22-13 100-250V50/60HZ-DC Reversing Contactor |
| Long Description      | AF12N0R-30-22-13 100-250V50/60HZ-DC Reversing Contactor |

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

| Popular Downloads       |                 |
|-------------------------|-----------------|
| CAD Dimensional Drawing | 2CDC001079B0201 |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 90 mm    |
| Product Net Depth / Length | 102.5 mm |
| Product Net Height         | 104 mm   |
| Product Net Weight         | 0.662 kg |

## Technical

|                                                   |                                                                                                                                                                                                                                               |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts NO                        | 3                                                                                                                                                                                                                                             |
| Number of Main Contacts NC                        | 0                                                                                                                                                                                                                                             |
| Number of Auxiliary Contacts NO                   | 2                                                                                                                                                                                                                                             |
| Number of Auxiliary Contacts NC                   | 2                                                                                                                                                                                                                                             |
| Number of Poles                                   | 3P                                                                                                                                                                                                                                            |
| Standards                                         | IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60335-2-40 LZGH2 A2L, UL 60947-4-1, CSA C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 60947-4-1                                                                                                          |
| Rated Operational Voltage                         | Auxiliary Circuit 690 V<br>Main Circuit 690 V                                                                                                                                                                                                 |
| Rated Frequency (f)                               | Auxiliary Circuit 50 / 60 Hz<br>Control Circuit 50 / 60 Hz<br>Main Circuit 50 / 60 Hz                                                                                                                                                         |
| Rated Operational Current AC-1 (I <sub>e</sub> )  | (1000 V) 60 °C 28 A<br>(690 V) 40 °C 28 A<br>(690 V) 70 °C 24 A                                                                                                                                                                               |
| Rated Operational Current AC-3 (I <sub>e</sub> )  | (415 V) 60 °C 12 A<br>(440 V) 60 °C 12 A<br>(500 V) 60 °C 12.5 A<br>(690 V) 60 °C 9 A<br>(380 / 400 V) 60 °C 12 A<br>(220 / 230 / 240 V) 60 °C 12 A                                                                                           |
| Rated Operational Current AC-3e (I <sub>e</sub> ) | (415 V) 60 °C 12 A<br>(440 V) 60 °C 12 A<br>(500 V) 60 °C 12.5 A<br>(690 V) 60 °C 9 A<br>(380 / 400 V) 60 °C 12 A<br>(220 / 230 / 240 V) 60 °C 12 A                                                                                           |
| Rated Operational Current AC-15 (I <sub>e</sub> ) | (500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(400 / 440 V) 3 A                                                                                                                                                      |
| Rated Operational Current DC-13 (I <sub>e</sub> ) | (24 V) 6 A / 144 W<br>(48 V) 2.8 A / 134 W<br>(72 V) 1 A / 72 W<br>(110 V) 0.55 A / 60 W<br>(125 V) 0.55 A / 69 W<br>(220 V) 0.27 A / 60 W<br>(250 V) 0.27 A / 68 W<br>(400 V) 0.15 A / 60 W<br>(500 V) 0.13 A / 65 W<br>(600 V) 0.1 A / 60 W |
| Rated Operational Power AC-3 (P <sub>e</sub> )    | (415 V) 5.5 kW<br>(440 V) 5.5 kW<br>(500 V) 7.5 kW<br>(690 V) 7.5 kW<br>(380 / 400 V) 5.5 kW<br>(220 / 230 / 240 V) 3 kW                                                                                                                      |
| Rated Operational Power AC-3e (P <sub>e</sub> )   | (415 V) 5.5 kW<br>(440 V) 5.5 kW                                                                                                                                                                                                              |

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                   | (500 V) 7.5 kW<br>(690 V) 7.5 kW<br>(380 / 400 V) 5.5 kW<br>(220 / 230 / 240 V) 3 kW                                                                                                                                                                                                                                                                                                |
| Rated Short-time<br>Withstand Current Low<br>Voltage ( $I_{cw}$ ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A<br>for 0.1 s 140 A<br>for 1 s 100 A |
| Maximum Breaking<br>Capacity                                      | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 250 A<br>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 106 A                                                                                                                                                                                                                                                        |
| Rated Insulation Voltage<br>( $U_i$ )                             | acc. to IEC 60947-4-1 690 V<br>acc. to IEC 60947-5-1 690 V<br>acc. to UL/CSA 600 V                                                                                                                                                                                                                                                                                                  |
| Rated Impulse<br>Withstand Voltage ( $U_{imp}$ )                  | 6 kV                                                                                                                                                                                                                                                                                                                                                                                |
| Maximum Electrical<br>Switching Frequency                         | (AC-15) 1200 cycles per hour<br>(DC-13) 900 cycles per hour                                                                                                                                                                                                                                                                                                                         |
| Rated Control Circuit<br>Voltage ( $U_c$ )                        | 50 Hz 100 ... 250 V<br>60 Hz 100 ... 250 V<br>DC Operation 100 ... 250 V                                                                                                                                                                                                                                                                                                            |
| Power Loss                                                        | at 6 A per Pole 0.1 W<br>at Rated Operating Conditions AC-1 per Pole 1 W<br>at Rated Operating Conditions AC-3 per Pole 0.2 W                                                                                                                                                                                                                                                       |
| Mounting on DIN Rail                                              | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715                                                                                                                                                                                                                                                                      |
| Mounting by Screws (not<br>supplied)                              | 2 x M4 screws placed diagonally                                                                                                                                                                                                                                                                                                                                                     |
| Connecting Capacity<br>Main Circuit                               | Flexible with Ferrule 1/2x 0.75 ... 6 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Rigid Solid 1/2x 1 ... 4 mm <sup>2</sup><br>Rigid Stranded 1/2x 1 ... 6 mm <sup>2</sup>                                                                                                |
| Connecting Capacity<br>Auxiliary Circuit                          | Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid Stranded 1/2x 1 ... 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                                                                         |
| Connecting Capacity<br>Control Circuit                            | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid Stranded 1/2x 1 ... 2.5 mm <sup>2</sup>                                                                                        |
| Wire Stripping Length                                             | Auxiliary Circuit 10 mm<br>Control Circuit 10 mm<br>Main Circuit 10 mm                                                                                                                                                                                                                                                                                                              |
| Degree of Protection                                              | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20                                                                                                                                                                                                                                                                                                                        |
| Tightening Torque                                                 | Auxiliary Circuit 1.2 N·m<br>Control Circuit 1.2 N·m<br>Main Circuit 1.5 N·m                                                                                                                                                                                                                                                                                                        |
| Terminal Type                                                     | Screw Terminals                                                                                                                                                                                                                                                                                                                                                                     |
| Product Name                                                      | Contactor Starter                                                                                                                                                                                                                                                                                                                                                                   |

Technical UL/CSA

|                                                 |                                                             |
|-------------------------------------------------|-------------------------------------------------------------|
| Maximum Operating<br>Voltage UL/CSA             | Main Circuit 600 V                                          |
| Connecting Capacity<br>Main Circuit UL/CSA      | Rigid Solid 1/2x 16-10 AWG<br>Rigid Stranded 1/2x 16-10 AWG |
| Connecting Capacity<br>Auxiliary Circuit UL/CSA | Rigid Solid 1/2x 18-14 AWG<br>Rigid Stranded 1/2x 18-14 AWG |
| Connecting Capacity<br>Control Circuit UL/CSA   | Rigid Solid 1/2x 18-14 AWG<br>Rigid Stranded 1/2x 18-14 AWG |

|                   |                            |
|-------------------|----------------------------|
| Tightening Torque | Auxiliary Circuit 11 in-lb |
| UL/CSA            | Control Circuit 11 in-lb   |
|                   | Main Circuit 13 in-lb      |

Environmental

|                         |                                                                |
|-------------------------|----------------------------------------------------------------|
| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C |
|                         | Close to Contactor without Thermal O/L Relay -40 ... 70 °C     |
|                         | Close to Contactor for Storage -60 ... +80 °C                  |
| Pollution Degree        | 3                                                              |

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)             |

Certificates and Declarations

|                      |                                 |
|----------------------|---------------------------------|
| A2L Certificate – UL | 9AKK108469A4875;9AKK108469A4879 |
| CB Certificate       | CB_SE-113345                    |
| UL Certificate       | UL-US-2150887-5                 |
|                      | UL-CA-2142658-5                 |

Container Information

|                              |               |
|------------------------------|---------------|
| Package Level 1 Units        | box 1 piece   |
| Package Level 1 Gross Weight | 2.162 kg      |
| Package Level 1 EAN          | 3471523020337 |

Classifications

|                                    |                                      |
|------------------------------------|--------------------------------------|
| ETIM 7                             | EC000010 - Combination of contactors |
| ETIM 8                             | EC000010 - Combination of contactors |
| ETIM 9                             | EC000010 - Combination of contactors |
| eClass                             | V11.0 : 27371003                     |
| UNSPSC                             | 39121529                             |
| IDEA Granular Category Code (IGCC) | 4762 >> Nema Contactors              |

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF12

