



**Electric Automation**  
Automation specialists

Referência: AF52-30-00-12  
Código: 1SBL367001R1200

AF52-30-00-12 48-130V50 / 60Hz-DC  
contator

A partir de Electric Automation Network



AF52 contactors are used for controlling power circuits up to 690 V AC and 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. AF... contactors include an electronic coil interface accepting a wide control voltage  $U_c$  min. ...  $U_c$  max. Only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC. AF contactors can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. AF contactors have built-in surge protection and do not require additional surge suppressors. The AF... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, front and side-mounted add-on auxiliary contact blocks (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1. N.C. mirror contacts compliant with Annex F of IEC 60947-4-1) - Control circuit: AC or DC operated - Accessories: a wide range of accessories is available.

### Ordering

|                         |               |
|-------------------------|---------------|
| EAN:                    | 3471523132320 |
| Minimum Order Quantity: | 1 piece       |
| Customs Tariff Number:  | 85369085      |

### Dimensions

|                    |        |
|--------------------|--------|
| Product Net Width: | 55 mm  |
| Product Net Depth: | 111 mm |

|                     |          |
|---------------------|----------|
| Product Net Height: | 125.5 mm |
| Product Net Weight: | 0.970 kg |

## Container Information

|                               |               |
|-------------------------------|---------------|
| Package Level 1 Units:        | 1 piece       |
| Package Level 1 Width:        | 150 mm        |
| Package Level 1 Length:       | 150 mm        |
| Package Level 1 Height:       | 97 mm         |
| Package Level 1 Gross Weight: | 1.07 kg       |
| Package Level 1 EAN:          | 3471523132320 |
| Package Level 2 Units:        | 12 piece      |
| Package Level 2 Width:        | 300 mm        |
| Package Level 2 Length:       | 320 mm        |
| Package Level 2 Height:       | 500 mm        |

## Technical

|   |  |
|---|--|
| Number of Main Contacts NO:                         | 3  |
| Number of Main Contacts NC:                         | 0  |
| Number of Auxiliary Contacts NO:                    | 0  |
| Number of Auxiliary Contacts NC:                    | 0  |
| Rated Operational Voltage:                          | Main Circuit 690 V   |
| Rated Frequency (f):                                | Main Circuit 50 / 60 Hz  |
| Conventional Free-air Thermal Current ( $I_{th}$ ): | acc. to IEC 60947-4-1, Open Contactors $\vartheta = 40\text{ °C}$ 105 A  |
| Rated Operational Current AC-1 ( $I_e$ ):           | (690 V) 40 °C 100 A<br>(690 V) 60 °C 80 A<br>(690 V) 70 °C 70 A  |
| Rated Operational Current AC-3 ( $I_e$ ):           | (220 / 230 / 240 V) 60 °C 53 A<br>(380 / 400 V) 60 °C 53 A<br>(415 V) 60 °C 53 A<br>(440 V) 60 °C 53 A<br>(500 V) 60 °C 45 A<br>(690 V) 60 °C 35 A |
| Rated Operational Power AC-3 ( $P_e$ ):             | (220 / 230 / 240 V) 15 kW<br>(380 / 400 V) 22 kW<br>(415 V) 30 kW<br>(440 V) 30 kW<br>(500 V) 30 kW<br>(690 V) 30 kW                               |

|  |  |
|--|--|
| Rated Short-time Withstand Current ( $I_{cw}$ ): | <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A</p> |
| Maximum Breaking Capacity:                       | <p>cos phi=0.45 (cos phi=0.35 for <math>I_e &gt; 100</math> A) at 440 V 950 A</p> <p>cos phi=0.45 (cos phi=0.35 for <math>I_e &gt; 100</math> A) at 690 V 600 A</p>  |
| Maximum Electrical Switching Frequency:          | <p>AC-1 600 cycles per hour</p> <p>AC-2 / AC-4 150 cycles per hour</p> <p>AC-3 1200 cycles per hour</p>  |
| Rated Insulation Voltage ( $U_i$ ):              | <p>acc. to UL/CSA 600 V</p> <p>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V</p>  |
| Rated Impulse Withstand Voltage ( $U_{imp}$ ):   | 6 kV   |
| Maximum Mechanical Switching Frequency:          | 3600 cycles per hour   |
| Rated Control Circuit Voltage ( $U_c$ ):         | <p>50 Hz 48 ... 130 V</p> <p>60 Hz 48 ... 130 V</p> <p>DC Operation 48 ... 130 V</p>   |
| Operate Time:                                    | <p>Between Coil De-energization and NC Contact Closing 19 ... 105 ms</p> <p>Between Coil De-energization and NO Contact Opening 17 ... 100 ms</p> <p>Between Coil Energization and NC Contact Opening 38 ... 95 ms</p> <p>Between Coil Energization and NO Contact Closing 42 ... 100 ms</p>   |
| Connecting Capacity-Main Circuit:                | <p>Flexible with Insulated Ferrule 1/2x 4...35 mm<sup>2</sup></p> <p>Flexible with Ferrule 1/2x 4...35 mm<sup>2</sup></p> <p>Rigid 1/2x 6...35 mm<sup>2</sup></p>  |
| Connecting Capacity-Control Circuit:             | <p>Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup></p> <p>Flexible with Insulated Ferrule 1x 0.75...2.5 mm<sup>2</sup></p> <p>Flexible with Insulated Ferrule 2x 0.75...1.5 mm<sup>2</sup></p> <p>Rigid 1/2x 1...2.5 mm<sup>2</sup></p>   |
| Wire Stripping Length:                           | Main Circuit 16 mm   |
| Degree of Protection:                            | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10   |
| Terminal Type:                                   | Screw Terminals  |

## Environmental

|   |  |
|---|--|
| Ambient Air Temperature:                | <p>Close to Contactor for Storage -60...+80 °C</p> <p>Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C</p> <p>Close to Contactor without Thermal O/L Relay -40 ... +70 °C</p> |
| Maximum Operating Altitude Permissible: | 3000 m   |

|   |  |
|---|--|
| Resistance to Shock acc. to IEC 60068-2-27:     | Closed, Shock Direction: A 25 g<br>Closed, Shock Direction: B1 25 g<br>Closed, Shock Direction: B2 15 g<br>Closed, Shock Direction: C1 25 g<br>Closed, Shock Direction: C2 25 g<br>Open, Shock Direction: B1 5 g |
| Resistance to Vibrations acc. to IEC 60068-2-6: | 5...300 Hz 3 g closed position / 3 g open position   |

## Technical UL/CSA

|                            |   |
|----------------------------|---|
| General Use Rating UL/CSA: | (600 V AC) 80 A   |
| Horsepower Rating UL/CSA:  | (120 V AC) Single Phase 3 Hp<br>(240 V AC) Single Phase 10 Hp<br>(200 ... 208 V AC) Three Phase 15 Hp<br>(220 ... 240 V AC) Three Phase 20 Hp<br>(440 ... 480 V AC) Three Phase 40 Hp<br>(550 ... 600 V AC) Three Phase 50 Hp |
| Tightening Torque UL/CSA:  | Control Circuit 11 in·lb<br>Main Circuit 35 in·lb   |

## Certificates and Declarations (Document Number)

|                                 |                               |
|---------------------------------|-------------------------------|
| ABS Certificate:                | ABS_15-GE1349500-PDA_90682247 |
| BV Certificate:                 | BV_2634H36994A                |
| CB Certificate:                 | CB_SE_77418                   |
| CCC Certificate:                | CCC_2012010304589737          |
| cUL Certificate:                | UL_20130926-E312527_14_1      |
| Declaration of Conformity - CE: | 1SBD250176C3000               |
| DNV Certificate:                | DNV-GL_E13871                 |
| EAC Certificate:                | EAC_RU C-FR ME77 B01010       |
| GL Certificate:                 | DNV-GL_E13871                 |
| LR Certificate:                 | LRS_1300087E1                 |
| RINA Certificate:               | RINA_ELE084013XG              |
| RMRS Certificate:               | RMRS_1400682124               |
| RoHS Information:               | 1SBD251021E1000               |

## Classifications

|           |   |
|-----------|---|
| E-nummer: | 3210038                                   |
| ETIM 5:   | EC000066 - Magnet contactor, AC-switching |
| UNSPSC:   | 39121529                                  |