



Reference: AF65-30-00-12 Code: 1SBL387001R1200

AF65-30-00-12 48-130V50/60HZ-DC

Contactor

Buy it at Electric Automation Network



AF65 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 Uc min. ... Uc 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:                    | 3471523132627 |
|-------------------------|---------------|
| 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:          | 3471523132627 |
| 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 <sub>th</sub> ): | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A   |
| Rated Operational Current AC-1 (I <sub>e</sub> ):         | (690 V) 40 °C 105 A<br>(690 V) 60 °C 90 A<br>(690 V) 70 °C 80 A  |
| Rated Operational Current AC-3 (I <sub>e</sub> ):         | (220 / 230 / 240 V) 60 °C 65 A<br>(380 / 400 V) 60 °C 65 A<br>(415 V) 60 °C 65 A<br>(440 V) 60 °C 65 A<br>(500 V) 60 °C 55 A<br>(690 V) 60 °C 39 A |
| Rated Operational Power AC-3 (P <sub>e</sub> ):           | (220 / 230 / 240 V) 18.5 kW<br>(380 / 400 V) 30 kW<br>(415 V) 37 kW<br>(440 V) 37 kW<br>(500 V) 37 kW<br>(690 V) 37 kW                             |

| Rated Short-time Withstand Current (I <sub>cw</sub> ): | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A |
|--|---|
| Maximum Breaking Capacity:                             | cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 950 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 600 A   |
| Maximum Electrical Switching Frequency:                | AC-1 600 cycles per hour<br>AC-2 / AC-4 150 cycles per hour<br>AC-3 1200 cycles per hour  |
| Rated Insulation Voltage (U <sub>i</sub> ):            | acc. to UL/CSA 600 V<br>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V  |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ):   | 6 kV  |
| Maximum Mechanical Switching Frequency:                | 3600 cycles per hour  |
| Rated Control Circuit Voltage (U <sub>c</sub> ):       | 50 Hz 48 130 V<br>60 Hz 48 130 V<br>DC Operation 48 130 V   |
| Operate Time:  | Between Coil De-energization and NC Contact Closing 19 105 ms Between Coil De-energization and NO Contact Opening 17 100 ms Between Coil Energization and NC Contact Opening 38 95 ms Between Coil Energization and NO Contact Closing 42 100 ms  |
| Connecting Capacity-Main Circuit:                      | Flexible with Insulated Ferrule 1/2x 435 mm²<br>Flexible with Ferrule 1/2x 435 mm²<br>Rigid 1/2x 635 mm²  |
| Connecting Capacity-Control Circuit:                   | Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.752.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.751.5 mm <sup>2</sup> Rigid 1/2x 12.5 mm <sup>2</sup>   |
| Wire Stripping Length:                                 | Main Circuit 16 mm  |
| Degree of Protection:                                  | acc. to IEC 60529, IEC 60947-1, EN 60529 Main<br>Terminals IP10   |
| Terminal Type:   | Screw Terminals   |
|  |   |

# Environmental

| Ambient Air Temperature:                | Close to Contactor for Storage -60+80 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor without Thermal O/L Relay -40 +70 °C |
|---|--|
| 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: | 5300 Hz 3 g closed position / 3 g open position  |

# Technical UL/CSA

| Horsepower Rating UL/CSA: | (120 V AC) Single Phase 5 Hp<br>(240 V AC) Single Phase 15 Hp<br>(200 208 V AC) Three Phase 20 Hp<br>(220 240 V AC) Three Phase 25 Hp<br>(440 480 V AC) Three Phase 50 Hp<br>(550 600 V AC) Three Phase 60 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: | 3210043                                   |
|-----------|---|
| ETIM 5:   | EC000066 - Magnet contactor, AC-switching |
| UNSPSC:   | 39121529                                  |