Products Low Voltage Products and Systems Control Products Contactors Block Contactors

| General Information |  |
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| Extended Product Type: | AF65-30-00-14 |
| Product ID: | 1SBL387001R1400 |
| EAN: | 3471523132641 |
| Catalog Description: | AF65-30-00-14 250-500V50/60HZ-DC Contactor |
| Long Description: | AF65 contactors are used for controlling power circuits up to 690 VAC and 220 V DC. The y 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 $24 . . .500 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ 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 builtin surge protection and do not require additional surge suppressors. The AF... series 1 -sta ck 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 AnnexF of IEC 60947-4-1) - Control circuit: AC or DC operated - Accessories: a wide $r$ ange of accessories is available. |

Additional Information

| ABB Industrial IT Suite: | Control IT |
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| ABS Certificate: | ABS_15-GE1349500-PDA_90682247 |
| Ambient Air Temperature: | Close to Contactor for Storage $-60 \ldots+80^{\circ} \mathrm{C}$ <br> Close to Contactor Fitted with Thermal O/L Relay $-25 \ldots+60^{\circ} \mathrm{C}$ <br> Close to Contactor without Thermal O/L Relay - $40 \ldots+70^{\circ} \mathrm{C}$ |
| BV Certificate: | BV_2634H36994A |
| Block Contactor Type: | 3-Pole Contactor |
| CBCertificate: | CB_SE_77418 |
| CCC Certificate: | CCC_2012010304589737 |
| Climatic Withstand: | Category B according to IEC 60947-1 Annex Q |
| Coil Voltage Code: | 14 |
| Connecting Capacity Control Circuit: | Flexible with Ferrule $1 / 2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ Flexible with Insulated Ferrule $2 \times 0.75 \ldots 1.5 \mathrm{~mm}^{2}$ Rigid $1 / 2 \times 1$... $2.5 \mathrm{~mm}^{2}$ |
| Connecting Capacity Main Circuit: | Flexible with Insulated Ferrule $1 / 2 \times 4 \ldots 35 \mathrm{~mm}^{2}$ Flexible with Ferrule $1 / 2 \times 4 \ldots 35 \mathrm{~mm}^{2}$ Rigid $1 / 2 \times 6 \ldots 35 \mathrm{~mm}^{2}$ |
| Conventional Free-air Thermal Current ( $\mathrm{lth}_{\mathrm{th}}$ ): | acc. to IEC 60947-4-1, Open Contactors $\mathrm{q}=40^{\circ} \mathrm{C} 105 \mathrm{~A}$ |
| Country of Origin: | France (FR) |
| Customs Tariff Number: | 85364900 |
| Data Sheet, Technical Information: | 1SBC100173C0201 |
| Declaration of Conformity - CE | 1SBD250000U1000 |
| Degree of Protection: | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10 |
| E-nummer: | 3210047 |
| EAC Certificate: | EAC_RU C-FR ME77 B01010 |
| EAN: | 3471523132641 |
| EPLAN Catalog Tree: | Electrical engineering / Relays, contactors / Contactors |
| 巴LANFunction Definition: | Coil / Coil, 2 connection points / Coil for power contactor A1_A2 <br> NO contact / NO contact, 2 connection points / Power NO contact 1_2 <br> NO contact / NO contact, 2 connection points / Power NO contact 3_4 |


| EPLAN Macro: | 9AKK106930A0708 |
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| ETIM 4: | EC000066-Magnet contactor, AC-switching |
| ETIM 5: | EC000066-Magnet contactor, AC-switching |
| ETIM 6: | EC000066-Power contactor, AC switching |
| Environmental Information: | 1SBD250168E1000 |
| Full Load Amps Motor Use: | ( 120 V AC) Single Phase 56 A <br> ( 240 V AC) Single Phase 68 A <br> (200 ... 208 V AC) Three Phase 62.1 A <br> (220 ... 240 V AC) Three Phase 68 A <br> (440 ... 480 V AC) Three Phase 65 A <br> ( 550 ... 600 V AC) Three Phase 62 A |
| Horsepower Rating ULCSA: | ( 120 V AC) Single Phase 5 Hp (240 V AC) Single Phase 15 Hp (200 ... 208 V AC) Three Phase 20 Hp (220 ... 240 V AC) Three Phase 25 Hp ( 440 ... 480 V AC) Three Phase 50 Hp ( 550 ... 600 V AC) Three Phase 60 Hp |
| IIT Publishing Status: | Level 0 - Information enabled |
| Industrial IT Certification Level: | 0 |
| Instructions and Manuals: | 1SBC101036M6801 |
| Invoice Description: | AF65-30-00-14 250-500V50/60HZ-DC Contactor |
| LRCertificate: | LRS_1300087E1 |
| Low Coil Consumption: | No |
| 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 Eectrical Switching frequency: | AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour |
| Maximum Mechanical Switching Frequency: | 3600 cycles per hour |
| Maximum Operating Altitude Permissible: | 3000 m |
| Minimum Order Quantity: | 1 piece |
| Mounted Auxiliary Contacts: | 0 NO, 0 NC |
| Mounted Auxiliary Contacts 1st Stack: | 0 NO, 0 NC |
| Mounted Auxiliary Contacts 2nd Stack: | 0 NO, 0 NC |
| Mounting Position: | Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF40 ... AF96 |
| Mounting Positions: | 1SBC500297F0000 |
| Number of Auxiliary Contacts NC: | 0 |
| Number of Auxiliary Contacts NO: | 0 |
| Number of Main Contacts NC: | 0 |
| Number of Main Contacts NO: | 3 |
| Object Classification Code: | Q |
| 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 |
| Order Multiple: | 1 piece |
| Package Level 1 EAN: | 3471523132641 |
| Package Level 1 Gross Weight: | 1.05 kg |
| Package Level 1 Height: | 97 mm |
| Package Level 1 Length: | 150 mm |
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| Package Level 1 Width: | 150 mm |
| Package Level 2 Height: | 300 mm |
| Package Level 2 Length: | 300 mm |
| Package Level 2 Units: | 10 piece |
| Package Level 2 Width: | 250 mm |
| Package Level 3 Units: | 240 piece |
| Packing Type: | Box |
| Power Loss: | at Rated Operating Conditions AC-1 per Pole 7 W <br> at Rated Operating Conditions AC-3 per Pole 2.7 W |
| Product Main Type: | AF65 |
| Product Name: | Block Contactor |
| Product Net Depth: | 111 mm |
| Product Net Height: | 125.5 mm |
| Product Net Weight: | 0.950 kg |
| Product Net Width: | 55 mm |
| Product Packing Type: | Box |
| RINA Certificate: | RINA_ELE084013XG |
| RMRS Certificate: | RMRS_1400682124 |
| Rated Control Circuit Voltage ( $\mathrm{U}_{\mathrm{c}}$ ): | $\begin{aligned} & 50 \mathrm{~Hz} 250 \ldots 500 \mathrm{~V} \\ & 60 \mathrm{~Hz} 250 \ldots 500 \mathrm{~V} \\ & \text { DC Operation } 250 \ldots 500 \mathrm{~V} \end{aligned}$ |
| Rated Frequency ( $\mathbf{f}$ ): | Main Circuit 50 / 60 Hz |
| Rated Impulse Withstand Voltage ( $\mathrm{U}_{\text {imp }}$ ): | 6 kV |
| Rated Insulation Voltage ( $\mathrm{U}_{\mathrm{i}}$ ): | acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V |
| Rated Operational Current AC-1 (le): | $\begin{aligned} & (690 \mathrm{~V}) 40^{\circ} \mathrm{C} 105 \mathrm{~A} \\ & (690 \mathrm{~V}) 60^{\circ} \mathrm{C} 90 \mathrm{~A} \\ & (690 \mathrm{~V}) 70^{\circ} \mathrm{C} 80 \mathrm{~A} \end{aligned}$ |
| Rated Operational Current AC-3 ( $\mathrm{l}_{\mathrm{e}}$ ): | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 60^{\circ} \mathrm{C} 65 \mathrm{~A} \\ & (380 / 400 \mathrm{~V}) 60^{\circ} \mathrm{C} 65 \mathrm{~A} \\ & (415 \mathrm{~V}) 60^{\circ} \mathrm{C} 65 \mathrm{~A} \\ & (440 \mathrm{~V}) 60^{\circ} \mathrm{C} 65 \mathrm{~A} \\ & (500 \mathrm{~V}) 60^{\circ} \mathrm{C} 55 \mathrm{~A} \\ & (690 \mathrm{~V}) 60^{\circ} \mathrm{C} 39 \mathrm{~A} \end{aligned}$ |
| Rated Operational Power AC-3 ( $\mathrm{P}_{\mathrm{e}}$ ): | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 18.5 \mathrm{~kW} \\ & (380 / 400 \mathrm{~V}) 30 \mathrm{~kW} \\ & (400 \mathrm{~V}) 30 \mathrm{~kW} \\ & (415 \mathrm{~V}) 37 \mathrm{~kW} \\ & (440 \mathrm{~V}) 37 \mathrm{~kW} \\ & (500 \mathrm{~V}) 37 \mathrm{~kW} \\ & (690 \mathrm{~V}) 37 \mathrm{~kW} \end{aligned}$ |
| Rated Operational Voltage: | Main Circuit 690 V |
| Rated Short-time Withstand Current ( $\mathrm{l}_{\mathrm{cw}}$ ): | at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 600 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 110 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 250 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 350 A |
| Resistance to Shock acc. to IEC 60068-227: | 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: | $5 \ldots 300 \mathrm{~Hz} 3 \mathrm{~g}$ closed position / 3 g open position |



