## AFS52-30-22-11

Products $\boldsymbol{*}$ Low Voltage Products and Systems $\rightarrow$ Control Products $\rightarrow$ Contactors $\rightarrow$ Block Contactors

General Information

Extended Product Type:
Product ID:
EAN:
Catalog Description:
Long Description:

AFS52-30-22-11
1SBL367082R1122
3471523157712
AFS52-30-22-11 24-60V50/60HZ 20-60VDC Contactor
AFS40 ... AFS96 contactors are designed for machine safety applications. They are delivered with fixed front-mounted auxiliary contact blocks makin g them ideal for monitoring and controlling circuits. Mechanically linked an d mirror contacts make your system safer. - control circuit with electronic c oil interface: - $24 \ldots 60$ V AC, $20 . . .60$ V DC and 100... 250 V AC / DC operate d accepting a wide control voltage range - reduced panel energy consumpt ion - mirror and mechanically linked contacts, with front marked symbol ac c. to IEC60947-5-1, always guaranteeing the right contactor status - frontmounted auxiliary contact block: - permanently fixed - protective cover to $p$ revent manual operation - yellow housing for easy identification - minimum switching capacity $12 \mathrm{~V} / 3 \mathrm{~mA}$, with a failure rate 10-7 acc. to IEC 60947-5 -4 - built-in surge suppression

## Ordering

Minimum Order Quantity:
Customs Tariff Number

Popular Downloads
Instructions and Manuals:
1SBC101052M6801

Dimensions

| Product Net Width: | 55 mm |
| :--- | :--- |
| Product Net Depth / Length: | 144 mm |
| Product Net Height: | 125.5 mm |
| Product Net Weight: | 1.16 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 |
| Rated Operational Voltage: | Auxiliary Circuit 690 V |
|  | Main Circuit 690 V |


| Rated Frequency (f): | Auxiliary Circuit 50 / 60 Hz Main Circuit $50 / 60 \mathrm{~Hz}$ |
| :---: | :---: |
| Conventional Free-air Thermal Current ( $I_{\text {th }}$ ): | acc. to IEC 60947-4-1, Open Contactors q $=40^{\circ} \mathrm{C} 105 \mathrm{~A}$ acc. to IEC $60947-5-1, q=40^{\circ} \mathrm{C} 16 \mathrm{~A}$ |
| Rated Operational Current AC-1 $\left(I_{e}\right):$ | $\begin{aligned} & (690 \mathrm{~V}) 40^{\circ} \mathrm{C} 100 \mathrm{~A} \\ & (690 \mathrm{~V}) 60^{\circ} \mathrm{C} 80 \mathrm{~A} \\ & (690 \mathrm{~V}) 70^{\circ} \mathrm{C} 70 \mathrm{~A} \end{aligned}$ |
| Rated Operational Current AC-3 ( $\mathrm{I}_{\mathrm{e}}$ ): | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 60^{\circ} \mathrm{C} 53 \mathrm{~A} \\ & (380 / 400 \mathrm{~V}) 60^{\circ} \mathrm{C} 53 \mathrm{~A} \\ & (415 \mathrm{~V}) 60^{\circ} \mathrm{C} 53 \mathrm{~A} \\ & (440 \mathrm{~V}) 60^{\circ} \mathrm{C} 53 \mathrm{~A} \\ & (500 \mathrm{~V}) 60^{\circ} \mathrm{C} 45 \mathrm{~A} \\ & (690 \mathrm{~V}) 60^{\circ} \mathrm{C} 35 \mathrm{~A} \end{aligned}$ |
| Rated Operational Power AC-3 $\left(\mathrm{P}_{\mathrm{e}}\right):$ | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 15 \mathrm{~kW} \\ & (380 / 400 \mathrm{~V}) 22 \mathrm{~kW} \\ & (400 \mathrm{~V}) 22 \mathrm{~kW} \\ & (415 \mathrm{~V}) 30 \mathrm{~kW} \\ & (440 \mathrm{~V}) 30 \mathrm{~kW} \\ & (500 \mathrm{~V}) 30 \mathrm{~kW} \\ & (690 \mathrm{~V}) 30 \mathrm{~kW} \end{aligned}$ |
| Rated Operational Current AC-15 ( $\mathrm{I}_{\mathrm{e}}$ ): | $\begin{aligned} & (220 / 240 \mathrm{~V}) 4 \mathrm{~A} \\ & (24 / 127 \mathrm{~V}) 6 \mathrm{~A} \\ & (400 / 440 \mathrm{~V}) 3 \mathrm{~A} \\ & (500 \mathrm{~V}) 2 \mathrm{~A} \\ & (690 \mathrm{~V}) 2 \mathrm{~A} \end{aligned}$ |
| Rated Short-time Withstand Current ( $\mathrm{I}_{\mathrm{cw}}$ ): | 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 for 0.1 s 140 A for 1 s 100 A |
| Maximum Breaking Capacity: | $\begin{aligned} & \text { cos phi }=0.45(\cos \text { phi }=0.35 \text { for le }>100 \mathrm{~A}) \text { at } 440 \mathrm{~V} 950 \mathrm{~A} \\ & \text { cos phi }=0.45(\cos \text { phi }=0.35 \text { for le }>100 \mathrm{~A}) \text { at } 690 \mathrm{~V} 600 \mathrm{~A} \end{aligned}$ |
| Maximum Electrical Switching Frequency: | AC-1 600 cycles per hour AC-15 1200 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 cycles per hour DC-13 900 cycles per hour |


| Rated Operational Current DC-13 ( $\mathrm{I}_{\mathrm{e}}$ ): | (110 V) $0.55 \mathrm{~A} / 60 \mathrm{~W}$ (220 V) $0.27 \mathrm{~A} / 60 \mathrm{~W}$ (400 V) $0.15 \mathrm{~A} / 60 \mathrm{~W}$ (500 V) 0.13 A / 65 W ( 600 V ) 0.1 A / 60 W (125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) $0.27 \mathrm{~A} / 68 \mathrm{~W}$ (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W |
| :---: | :---: |
| 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 Impulse Withstand Voltage $\left(U_{i m p}\right):$ | 6 kV |
| Maximum Mechanical Switching Frequency: | 3600 cycles per hour |
| Rated Control Circuit Voltage ( $\mathrm{U}_{\mathrm{c}}$ ): | $\begin{aligned} & 50 \mathrm{~Hz} 24 \ldots 60 \mathrm{~V} \\ & 60 \mathrm{~Hz} 24 \ldots 60 \mathrm{~V} \\ & \mathrm{DC} \text { Operation } 20 \ldots 60 \mathrm{~V} \end{aligned}$ |
| 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 $1 / 2 \times 4 \ldots 35 \mathrm{~mm}^{2}$ Flexible with Ferrule $1 / 2 \times 4 \ldots 35 \mathrm{~mm}^{2}$ Rigid 1/2x 6 ... 35 mm $^{2}$ |
| Connecting Capacity Auxiliary Circuit: | Flexible with Ferrule $1 / 2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $2 \times 0.75 \ldots 1.5 \mathrm{~mm}^{2}$ Rigid 1/2x 1 ... 2.5 mm $^{2}$ |
| Connecting Capacity Control Circuit: | Flexible with Ferrule $1 / 2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $2 \times 0.75 \ldots 1.5 \mathrm{~mm}^{2}$ <br> Rigid 1/2x 1 ... $2.5 \mathrm{~mm}^{2}$ |
| Wire Stripping Length: | Main Circuit 16 mm |
| Degree of Protection: | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10 |
| Terminal Type: | Screw Terminals |
| Environmental |  |
| Ambient Air Temperature: | Close to Contactor for Storage $-60 \ldots+80^{\circ} \mathrm{C}$ Close to Contactor Fitted with Thermal O/L Relay $-25 \ldots+60^{\circ} \mathrm{C}$ Close to Contactor without Thermal O/L Relay $-40 \ldots+70{ }^{\circ} \mathrm{C}$ |
| Climatic Withstand: | Category B according to IEC 60947-1 Annex Q |

Maximum Operating Altitude
3000 m
Permissible:
Resistance to Vibrations acc. to IEC 60068-2-6:

Resistance to Shock acc. to IEC 60068-2-27:
$5 \ldots 300 \mathrm{~Hz} 3 \mathrm{~g}$ closed position / 3 g open position

Closed, Shock Direction: A 25 g
Closed, Shock Direction: B1 25 g
Closed, Shock Direction: B2 15 g
Closed, Shock Direction: C1 25 g
Closed, Shock Direction: C2 25 g

Technical UL/CSA

| General Use Rating UL/CSA: | $(600 \mathrm{~V} \mathrm{AC}) 80 \mathrm{~A}$ |
| :--- | :--- |
| Horsepower Rating UL/CSA: | $(120 \vee \mathrm{AC})$ Single Phase 3 Hp |
|  | $(240 \vee \mathrm{AC})$ Single Phase 10 Hp |
|  | $(200 \ldots 208 \mathrm{VAC})$ Three Phase 15 Hp |
|  | $(220 \ldots 240 \vee \mathrm{AC})$ Three Phase 20 Hp |
|  | $(440 \ldots 480 \vee \mathrm{AC})$ Three Phase 40 Hp |
|  | $(550 \ldots 600 \vee \mathrm{AC})$ Three Phase 50 Hp |

Tightening Torque UL/CSA: Auxiliary Circuit $11 \mathrm{in} \cdot \mathrm{lb}$
Control Circuit 11 in•lb Main Circuit $35 \mathrm{in} \cdot \mathrm{lb}$

Certificates and Declarations (Document Number)

| CB Certificate: | CB_SE_77418M1 |
| :--- | :--- |
| cUL Certificate: | UL_20170607-E312527-14-1 |
| Declaration of Conformity -CE: | 1SBD250022U1000 |
| Instructions and Manuals: | 1SBC101052M6801 |
| UL Listing Card: | E312527 |

Container Information

| Package Level 1 Units: | 1 piece |
| :--- | :--- |
| Package Level 1 Width: | 167 mm |
| Package Level 1 Depth / Length: | 180 mm |
| Package Level 1 Height: | 97 mm |
| Package Level 1 Gross Weight: | 1.16 kg |
| Package Level 1 EAN: | 3471523157712 |
| Package Level 2 Units: | 6 piece |
| Package Level 2 Width: | 250 mm |
| Package Level 2 Depth / Length: | 300 mm |
| Package Level 2 Height: | 300 mm |
| Package Level 2 Gross Weight: | 6.96 kg |
| Package Level 3 Units: | 144 piece |

Classifications

| Object Classification Code: | Q |
| :--- | :--- |
| ETIM 4: | ECOOO066-Magnet contactor, AC-switching |
| ETIM 5: | EC000066-Magnet contactor, AC-switching |
| ETIM 6: | EC000066-Power contactor, AC switching |
| ETIM 7: | EC000066-Power contactor, AC switching |

