Products $\Rightarrow$ Low Voltage Products and Systems $\Rightarrow$ Control Products $\Rightarrow$ Contactors $\Rightarrow$ Block Contactors

| General Information |  |
| :--- | :--- |
| Extended Product Type: | AF140-30-22-13 |
| Product ID: | 1SFL447001R1322 |
| EAN: | 7320500476956 |
| Catalog Description: | AF140-30-22-13 Contactor |
| Long Description: | A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By- <br> pass and Distribution application up to max 690 V. Operated with wide control voltage rang <br> e 100-250 V,50/60 Hz and DC |

Ordering

| Minimum Order Quantity: | 1 piece |
| :--- | :--- |
| Customs Tariff Number: | 85364900 |

Popular Downloads

| Data Sheet, Technical Information: | 1SFC101070D0201 |
| :--- | :--- |
| Dimension Diagram: | 1SFB535001G1051 |

Dimensions

| Product Net Width: | 90.0 mm |
| :--- | :--- |
| Product Net Depth: | 126.0 mm |
| Product Net Height: | 150.0 mm |
| Product Net Weight: | 1.680 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: | Main Circuit 690 V |
| Rated Frequency (f): | Main Circuit 50/60 Hz |
| Conventional Free-air Thermal Current ( $\mathrm{l}_{\mathrm{th}}$ ): | acc. to IEC 60947-4-1, Open Contactors $q=40^{\circ} \mathrm{C} 200 \mathrm{~A}$ |
| Rated Operational Current AC-1 (le): | $\begin{aligned} & (690 \mathrm{~V}) 55^{\circ} \mathrm{C} 175 \mathrm{~A} \\ & (690 \mathrm{~V}) 40^{\circ} \mathrm{C} 200 \mathrm{~A} \\ & (690 \mathrm{~V}) 70^{\circ} \mathrm{C} 160 \mathrm{~A} \end{aligned}$ |
| Rated Operational Current AC-3 ( $\mathrm{l}_{\mathrm{e}}$ ): | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 55^{\circ} \mathrm{C} 140 \mathrm{~A} \\ & (415 \mathrm{~V}) 55^{\circ} \mathrm{C} 140 \mathrm{~A} \\ & (690 \mathrm{~V}) 55^{\circ} \mathrm{C} 80 \mathrm{~A} \\ & (440 \mathrm{~V}) 55^{\circ} \mathrm{C} 140 \mathrm{~A} \\ & (380 / 400 \mathrm{~V}) 55^{\circ} \mathrm{C} 140 \mathrm{~A} \\ & (500 \mathrm{~V}) 55^{\circ} \mathrm{C} 130 \mathrm{~A} \end{aligned}$ |
| Rated Operational Power AC-3 ( $\mathrm{P}_{\mathrm{e}}$ ): | $\begin{aligned} & (220 / 230 / 240 \mathrm{~V}) 37 \mathrm{~kW} \\ & (380 / 400 \mathrm{~V}) 75 \mathrm{~kW} \\ & (415 \mathrm{~V}) 75 \mathrm{~kW} \\ & (440 \mathrm{~V}) 90 \mathrm{~kW} \\ & (500 \mathrm{~V}) 90 \mathrm{~kW} \\ & (690 \mathrm{~V}) 75 \mathrm{~kW} \end{aligned}$ |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1: | 8 x le AC-3 |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1: | $10 \times$ le AC-3 |


| Short-Circuit Protective Devices: | gG Type Fuses 315 A |
| :---: | :---: |
| Rated Short-time Withstand Current ( $\mathrm{lcw}_{\text {cw }}$ ): | at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 1168 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 674 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 200 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 1460 A at $40^{\circ} \mathrm{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 477 A |
| Maximum Breaking Capacity: | cos phi=0.45 (cos phi=0.35 for le > 100 A ) at 440 V 3000 A cos phi $=0.45(\cos$ phi $=0.35$ for le $>100 \mathrm{~A})$ at 690 V 1500 A |
| Maximum lectrical Switching Frequency: | AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour |
| Rated Operational Current DC-1 (le): | (110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 160 \mathrm{~A}$ (220 V) 3 Poles in Series, $40^{\circ} \mathrm{C} 160 \mathrm{~A}$ |
| Rated Operational Current DC-3 (le): | (110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 160 \mathrm{~A}$ (220 V) 3 Poles in Series, $40^{\circ} \mathrm{C} 160 \mathrm{~A}$ |
| Rated Operational Current DC-5 ( $\mathrm{le}_{\text {e }}$ : | (110 V) 2 Poles in Series, $40^{\circ} \mathrm{C} 160 \mathrm{~A}$ (220 V) 3 Poles in Series, $40^{\circ} \mathrm{C} 160 \mathrm{~A}$ |
| Rated Insulation Voltage ( $\mathrm{U}_{\mathrm{i}}$ ): | acc. to UL/CSA 600 V <br> acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V |
| Rated Impulse Withstand Voltage ( $\mathrm{U}_{\mathrm{imp}}$ ): | Main Circuit 8 kV |
| Mechanical Durability: | 5 million |
| Maximum Mechanical Switching Frequency: | 300 cycles per hour |
| Coil Operating Limits: | (acc. to IEC 60947-4-1) $0.85 \times$ Uc Min. ... $1.1 \times$ Uc Max. (at $\theta \leq 70^{\circ} \mathrm{C}$ ) ${ }^{\circ} \mathrm{C}$ |
| Rated Control Circuit Voltage ( $\mathrm{U}_{\mathrm{c}}$ ): | $\begin{aligned} & 60 \mathrm{~Hz} 100 \ldots 250 \mathrm{~V} \\ & 50 \mathrm{~Hz} 100 \ldots 250 \mathrm{~V} \\ & \text { DC Operation } 100 \ldots 250 \mathrm{~V} \end{aligned}$ |
| Coil Consumption: | Pull-in at Max. Rated Control Circuit Voltage $60 \mathrm{~Hz} 130 \mathrm{~V} \cdot \mathrm{~A}$ Holding at Max. Rated Control Circuit Voltage DC 3 W Holding at Max. Rated Control Circuit Voltage 50 Hz 6 V•A Pull-in at Max. Rated Control Circuit Voltage DC 135 W Pull-in at Max. Rated Control Circuit Voltage $50 \mathrm{~Hz} 130 \mathrm{~V} \cdot \mathrm{~A}$ Holding at Max. Rated Control Circuit Voltage 60 Hz 6 V•A |
| Operate Time: | Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms |
| Connecting Capacity Main Circuit: | Rigid Cu-Cable $1 \times 10 \ldots 95 \mathrm{~mm}^{2}$ Flexible $2 \times 10 \ldots 70 \mathrm{~mm}^{2}$ |
| Connecting Capacity Auxiliary Circuit: | Solid $2 \times 1 \ldots 4 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Stranded $1 \times 1 \ldots .4 \mathrm{~mm}^{2}$ <br> Flexible $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ |
| Degree of Protection: | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00 |
| Terminal Type: | Double Clamp |

Environmental

| Ambient Air Temperature: | Close to Contactor Fitted with Thermal O/L Relay (0.85 $\ldots 1.1 \mathrm{Uc})-25 \ldots+50^{\circ} \mathrm{C}$ |
| :--- | :--- |
|  | Close to Contactor without Thermal O/L Relay $(0.85 \ldots 1.1 \mathrm{Uc})-40 \ldots+70^{\circ} \mathrm{C}$ |
|  | Close to Contactor for Storage $-40 \ldots+70^{\circ} \mathrm{C}$ |
| Maximum Operating Altitude Permissible: | 3000 m |
| RoHS Status: | Following EU Directive 2002/95/EC August 18,2005 and amendment |

Technical UL/CSA

| Maximum Operating Voltage ULCSA: | Main Circuit 600 V |
| :--- | :--- |
| General Use Rating ULCSA: | $(600 \mathrm{~V} \mathrm{AC}) 200 \mathrm{~A}$ |
| Horsepower Rating ULCSA: | $(208 \mathrm{~V} \mathrm{AC})$ Three Phase 40 Hp |

(440 ... 480 V AC) Three Phase 100 Hp
( 550 ... 600 V AC) Three Phase 125 Hp
( 220 ... 240 V AC) Three Phase 50 Hp (200 V AC) Three Phase 40 Hp

Certificates and Declarations (Document Number)

| ABS Certificate: | 14-LD1092198-PDA |
| :--- | :--- |
| BV Certificate: | BV_36353_A0BV |
| CB Certificate: | SEMKO_SE-70479M1 |
| CCC Certificate: | 2013010304604055 |
| CCS Certificate: | GB14T00030 |
| cUL Certificate: | 20120925-E36588 |
| Declaration of Conformity -CE: | 2CMT004242 |
| DNV Certificate: | DNV_E-14043 |
| EAC Certificate: | EAC_RUC-SE.ME77.B.01005 |
| Environmental Information: | 2CMT004732 |
| GLCertificate: | GL_95071-14HH |
| Instructions and Manuals: | 1SFC100003M0201 |
| LR Certificate: | LR_14_70011(E1) |
| PRS Certificate: | TE_2092_880423_16 |
| RINA Certificate: | ELE060313XG_002 |
| RMRS Certificate: | 9AKK107045A6978 |
| RoHS Information: | 1SFC101055D0202 |
| UL Listing Card: | UL_E36588 |

Container Information

| Package Level 1 Units: | 1 piece |
| :--- | :--- |
| Package Level 1 Width: | 194 mm |
| Package Level 1 Length: | 115 mm |
| Package Level 1 Height: | 169 mm |
| Package Level 1 Gross Weight: | 1.57 kg |
| Package Level 1 EAN: | 7320500476956 |

Classifications

| Object Classification Code: | $Q$ |
| :--- | :--- |
| ETM 4: | EC000066 - Magnet contactor, AC-switching |
| ETM 5: | EC000066 - Magnet contactor, AC-switching |
| ETM 6: | EC000066 - Power contactor, AC switching |
| UNSPSC: | 39121529 |



