

AF146-30-11-11



AF146-30-11-11 Contactor

General Information

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| Extended Product Type | AF146-30-11-11 |
| Product ID | 1SFL467001R1111 |
| EAN | 7320500482056 |
| Catalog Description | AF146-30-11-11 Contactor |
| Long Description | A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 24-60 V, 50 and 60 Hz, 20-60 V DC |

Classifications

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| Object Classification Code | Q |
| ETIM 4 | EC000066 - 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 |
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4755 >> Contactors |
| E-Number (Norway) | 4117630 |

Container Information

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| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 194 mm |
| Package Level 1 Depth / Length | 115 mm |
| Package Level 1 Height | 169 mm |
| Package Level 1 Gross Weight | 1.75 kg |
| Package Level 1 EAN | 7320500482056 |

Certificates and Declarations (Document Number)

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| 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 |

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|--------------------------------|-------------------|
| Declaration of Conformity - CE | 2CMT2015-005439 |
| DNV Certificate | DNV_E-14043 |
| DNV GL Certificate | DNV_E-14043 |
| EAC Certificate | 9AKK107046A8618 |
| Environmental Information | 2CMT004732 |
| GL Certificate | DNV_E-14043 |
| Instructions and Manuals | 1SFC100003M0201 |
| KC Certificate | 9AKK107046A9910 |
| LR Certificate | LR_14_70011(E1) |
| PRS Certificate | TE_2092_880423_16 |
| RINA Certificate | ELE060313XG_002 |
| RMRS Certificate | 9AKK107045A6978 |
| RoHS Information | 2CMT2015-005439 |
| UL Listing Card | UL_E36588 |

Technical UL/CSA

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| Maximum Operating Voltage UL/CSA | Main Circuit 600 V |
| General Use Rating UL/CSA | (600 V AC) 200 A |
| Horsepower Rating UL/CSA | (208 V 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 |

Environmental

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| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... +50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +70 °C Close to Contactor for Storage -40 ... +70 °C |
| Maximum Operating Altitude Permissible | 3000 m |
| RoHS Status | Following EU Directive 2011/65/EU |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 1 |
| Number of Auxiliary Contacts NC | 1 |
| Rated Operational Voltage | Main Circuit 1000 V |
| Rated Frequency (f) | Main Circuit 50/60 Hz |
| Conventional Free-air Thermal Current (I_{th}) | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 225 A |
| Rated Operational Current AC-1 (I_e) | (690 V) 55 °C 200 A (690 V) 40 °C 225 A (1000 V) 40 °C 225 A (1000 V) 55 °C 200 A (690 V) 70 °C 175 A (1000 V) 70 °C 175 A |
| Rated Operational Current AC-3 (I_e) | (1000 V) 55 °C 60 A (690 V) 55 °C 93 A (415 V) 55 °C 146 A (220 / 230 / 240 V) 55 °C 146 A (440 V) 55 °C 146 A (380 / 400 V) 55 °C 146 A (500 V) 55 °C 93 A |

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| Rated Operational Power AC-3 (P_e) | (220 / 230 / 240 V) 45 kW (380 / 400 V) 75 kW (415 V) 75 kW (440 V) 90 kW (500 V) 90 kW (690 V) 90 kW (1000 V) 75 kW |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x I_e AC-3 |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1 | 10 x I_e AC-3 |
| Short-Circuit Protective Devices | gG Type Fuses 315 A |
| Rated Short-time Withstand Current (I_{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 674 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1168 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1460 A at 40 °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 $I_e > 100$ A) at 440 V 3000 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 1500 A |
| Maximum Electrical Switching Frequency | AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour |
| Rated Insulation Voltage (U_i) | acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V |
| Rated Impulse Withstand Voltage (U_{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 x U_c Min. ... 1.1 x U_c Max. (at $\theta \leq 70$ °C) °C |
| Rated Control Circuit Voltage (U_c) | 60 Hz 24 ... 60 V 50 Hz 24 ... 60 V DC Operation 20 ... 60 V |
| Coil Consumption | Pull-in at Max. Rated Control Circuit Voltage 60 Hz 225 V·A Holding at Max. Rated Control Circuit Voltage DC 2.5 W Holding at Max. Rated Control Circuit Voltage 50 Hz 5.5 V·A Pull-in at Max. Rated Control Circuit Voltage DC 210 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 225 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 5.5 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 | Flexible 2 x 10 ... 70 mm ² Rigid Cu-Cable 2 x 10 ... 95 mm ² |
| Connecting Capacity Auxiliary Circuit | Solid 1 x 1 ... 4 mm ² Flexible with Insulated Ferrule 2 x 0.75 ... 2.5 mm ² Stranded 2 x 1 ... 4 mm ² Flexible 2x0.75 ... 2.5 mm ² Flexible with Ferrule 2 x 0.75 ... 2.5 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 |

Dimensions

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| Product Net Width | 90 mm |
| Product Net Depth / Length | 126 mm |
| Product Net Height | 150 mm |
| Product Net Weight | 1.644 kg |

Popular Downloads

| | |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100192C0206 |
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| Instructions and Manuals | 1SFC100003M0201 |
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| Dimension Diagram | 1SFB535001G1051 |
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Ordering

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| Minimum Order Quantity | 1 piece |
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| Customs Tariff Number | 85364900 |
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Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

