



**Electric Automation**  
Automation specialists

Reference: AF1250-30-11  
Code: 1SFL647001R7111

AF1250-30-11 250-500V 50/60Hz /  
250-500V DC Contactor

Buy it at Electric Automation Network



A 3-phase Contactor suitable for various applications such as, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 250-500 V, AC/DC

### Ordering

|                         |               |
|-------------------------|---------------|
| EAN:                    | 7320500355114 |
| Minimum Order Quantity: | 1 piece       |
| Customs Tariff Number:  | 85364900      |

### Dimensions

|                     |           |
|---------------------|-----------|
| Product Net Width:  | 210.0 mm  |
| Product Net Depth:  | 242.0 mm  |
| Product Net Height: | 344.0 mm  |
| Product Net Weight: | 15.000 kg |

### Container Information

|                         |         |
|-------------------------|---------|
| Package Level 1 Units:  | 1 piece |
| Package Level 1 Width:  | 290 mm  |
| Package Level 1 Length: | 270 mm  |
| Package Level 1 Height: | 350 mm  |

|                               |               |
|-------------------------------|---------------|
| Package Level 1 Gross Weight: | 15 kg         |
| Package Level 1 EAN:          | 7320500355114 |

## Technical

|   |  |
|---|--|
| 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 $q = 40\text{ °C}$ 1050 A   |
| Rated Operational Current AC-1 ( $I_e$ ):           | (690 V) 55 °C 1040 A<br>(690 V) 40 °C 1260 A<br>(1000 V) 40 °C 1260 A<br>(1000 V) 55 °C 1040 A<br>(690 V) 70 °C 875 A<br>(1000 V) 70 °C 875 A  |
| 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  |
| Rated Short-time Withstand Current ( $I_{cw}$ ):    | at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 6000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1600 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 8000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 10000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 4500 A |
| Maximum Breaking Capacity:                          | $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 7500 A<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 7000 A   |
| Maximum Electrical Switching Frequency:             | AC-1 300 cycles per hour   |
| Rated Operational Current DC-1 ( $I_e$ ):           | (850 V) 3 Poles in Series, 40 °C 1250 A<br>(600 V) 3 Poles in Series, 40 °C 1250 A<br>(220 V) 3 Poles in Series, 40 °C 1250 A  |
| Rated Operational Current DC-3 ( $I_e$ ):           | (850 V) 3 Poles in Series, 40 °C 1250 A<br>(600 V) 3 Poles in Series, 40 °C 1250 A<br>(220 V) 3 Poles in Series, 40 °C 1250 A  |
| Rated Operational Current DC-5 ( $I_e$ ):           | (850 V) 3 Poles in Series, 40 °C 1250 A<br>(600 V) 3 Poles in Series, 40 °C 1250 A<br>(220 V) 3 Poles in Series, 40 °C 1250 A  |
| Rated Insulation Voltage ( $U_i$ ):                 | acc. to UL/CSA 600 V<br>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:                              | 0.5 million  |

|   |  |
|---|--|
| Maximum Mechanical Switching Frequency:                       | 300 cycles per hour  |
| Coil Operating Limits:  | (acc. to IEC 60947-4-1)0.85 x Uc Min. ... 1.1 x Uc Max.<br>(at $\theta \leq 70$ °C) °C   |
| Rated Control Circuit Voltage (U <sub>c</sub> ):              | 60 Hz 250 ... 500 V<br>50 Hz 250 ... 500 V<br>DC Operation 250 ... 500 V   |
| Coil Consumption:   | Pull-in at Max. Rated Control Circuit Voltage 60 Hz 985 V·A<br>Holding at Max. Rated Control Circuit Voltage DC 7.5 V·A<br>Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A<br>Pull-in at Max. Rated Control Circuit Voltage DC 910 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 985 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A |
| Operate Time:   | Between Coil Energization and NO Contact Closing 50 ... 120 ms<br>Between Coil De-energization and NO Contact Opening 53 ... 73 ms<br>Between Coil De-energization and NC Contact Closing 50 ... 70 ms<br>Between Coil Energization and NC Contact Opening 45 ... 115 ms   |
| Connecting Capacity-Main Circuit:                             | Bar 50 mm  |
| Connecting Capacity-Auxiliary Circuit:                        | Solid 2x1...4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x0.75...2.5 mm <sup>2</sup><br>Stranded 2x1...4 mm <sup>2</sup><br>Flexible 1x0.75...2.5 mm <sup>2</sup><br>Flexible with Ferrule 2x0.75...2.5 mm <sup>2</sup>   |
| Degree of Protection:   | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00   |
| Connecting terminals (delivered in open position) Main poles: | M 3.5 (+,-) pozidriv 2 screw with cable clamp  |
| Terminal Type:  | Main Circuit: Bars   |

## Environmental

|   |   |
|---|---|
| Ambient Air Temperature:                    | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25...+50 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40...+70 °C<br>Close to Contactor for Storage -40...+70 °C |
| Maximum Operating Altitude Permissible:     | 3000 m  |
| Resistance to Shock acc. to IEC 60068-2-27: | Shock Direction: A 5 g<br>Shock Direction: C2 5 g<br>Shock Direction: B2 5 g<br>Shock Direction: C1 5 g<br>Shock Direction: B1 5 g  |
| RoHS Status:                                | Planned to follow EU Directive 2002/95/EC August 18, 2005 and amendment after 2009 Q2   |

## Technical UL/CSA

|                                   |                    |
|-----------------------------------|--------------------|
| Maximum Operating Voltage UL/CSA: | Main Circuit 600 V |
| General Use Rating UL/CSA:        | (600 V AC) 1210 A  |

### Certificates and Declarations (Document Number)

|                                 |                      |
|---------------------------------|----------------------|
| CB Certificate:                 | SE-72146             |
| CCC Certificate:                | CQC_2006010304213519 |
| Declaration of Conformity - CE: | 1SFA1-88             |
| RINA Certificate:               | ELE060313XG/002      |
| RoHS Information:               | 1SFC101034D0203      |

### Classifications

|         |   |
|---------|---|
| ETIM 5: | EC000066 - Magnet contactor, AC-switching |
| UNSPSC: | 39121529                                  |