



**Electric Automation**  
Automation specialists

Reference: AF460-30-11  
Code: 1SFL597001R6811

AF460-30-11 24-60V DC Contactor

Buy it at Electric Automation Network



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, DC

### Ordering

EAN:	7320500217887
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

### Dimensions

Product Net Width:	186.0 mm
Product Net Depth:	216.0 mm
Product Net Height:	278.0 mm
Product Net Weight:	12.000 kg

### Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	260 mm
Package Level 1 Length:	250 mm
Package Level 1 Height:	350 mm

Package Level 1 Gross Weight:	12 kg
Package Level 1 EAN:	7320500217887

## 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 Hz Main Circuit 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ ):	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 700 A
Rated Operational Current AC-1 ( $I_e$ ):	(690 V) 55 °C 600 A (690 V) 40 °C 700 A (1000 V) 40 °C 700 A (1000 V) 55 °C 600 A (690 V) 70 °C 480 A (1000 V) 70 °C 480 A
Rated Operational Current AC-3 ( $I_e$ ):	(1000 V) 55 °C 200 A (415 V) 55 °C 460 A (690 V) 55 °C 400 A (220 / 230 / 240 V) 55 °C 460 A (440 V) 55 °C 460 A (380 / 400 V) 55 °C 460 A (500 V) 55 °C 460 A
Rated Operational Power AC-3 ( $P_e$ ):	(500 V) 315 kW (690 V) 355 kW (220 / 230 / 240 V) 132 kW (380 / 400 V) 250 kW (440 V) 250 kW (415 V) 250 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 800 A
Rated Short-time Withstand Current ( $I_{cw}$ ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 840 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 4400 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 3100 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 4600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 2500 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 5000 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 4500 A
Maximum Electrical Switching Frequency:	AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 60 cycles per hour

Rated Operational Current DC-1 ( $I_e$ ):	(600 V) 3 Poles in Series, 40 °C 700 A (110 V) 1-Pole, 40 °C 700 A (110 V) 2 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 40 °C 700 A
Rated Operational Current DC-3 ( $I_e$ ):	(600 V) 3 Poles in Series, 40 °C 700 A (110 V) 1-Pole, 40 °C 700 A (110 V) 2 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 40 °C 700 A
Rated Operational Current DC-5 ( $I_e$ ):	(600 V) 3 Poles in Series, 40 °C 700 A (110 V) 1-Pole, 40 °C 700 A (110 V) 2 Poles in Series, 40 °C 700 A (220 V) 3 Poles in Series, 40 °C 700 A
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 ( $U_c$ ):	DC Operation 24 ... 60 V
Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 900 V·A Holding at Max. Rated Control Circuit Voltage DC 5 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Pull-in at Max. Rated Control Circuit Voltage DC 900 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 900 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A
Operate Time:	Between Coil Energization and NO Contact Closing 50 ... 120 ms Between Coil De-energization and NO Contact Opening 48 ... 58 ms Between Coil De-energization and NC Contact Closing 45 ... 55 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms
Connecting Capacity-Main Circuit:	Rigid Al-Cable 2x240 mm <sup>2</sup> Bar 47 mm Rigid Cu-Cable 240 mm <sup>2</sup>
Connecting Capacity-Auxiliary Circuit:	Solid 2x1...4 mm <sup>2</sup> Flexible with Insulated Ferrule 2x0.75...2.5 mm <sup>2</sup> Stranded 2x1...4 mm <sup>2</sup> Flexible 1x0.75...2.5 mm <sup>2</sup> 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 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
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 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
Resistance to Shock acc. to IEC 60068-2-27:	Shock Direction: A 5 g Shock Direction: C2 5 g Shock Direction: C1 5 g Shock Direction: B2 5 g Shock Direction: B1 5 g
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment

## Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V
General Use Rating UL/CSA:	(600 V AC) 650 A
Horsepower Rating UL/CSA:	(208 V AC) Three Phase 150 Hp (440 ... 480 V AC) Three Phase 400 Hp (550 ... 600 V AC) Three Phase 500 Hp (220 ... 240 V AC) Three Phase 200 Hp (200 V AC) Three Phase 150 Hp

## Certificates and Declarations (Document Number)

BV Certificate:	11727/C0 BV
CB Certificate:	SE-69485
CCC Certificate:	CQC_2007010304256683
CSA Certificate:	306711
Declaration of Conformity - CE:	1SFA1-65
DNV Certificate:	DNV_E-10966
GL Certificate:	GL_42988-02HH
LOVAG Certificate:	SE-0115087
LR Certificate:	LR_13_20009
RINA Certificate:	ELE060313XG/002
RoHS Information:	1SFC101055D0202

## Classifications

E-nummer:	3228342
ETIM 5:	EC000066 - Magnet contactor, AC-switching
UNSPSC:	39121529