



Electric Automation
Automation specialists

Reference: AF116-30-22-13
Code: 1SFL427001R1322

AF116-30-22-13 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 690 V. Operated with wide control voltage range 100-250 V, 50/60 Hz and DC

Ordering

EAN:	7320500476307
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

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

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:	1.606 kg
Package Level 1 EAN:	7320500476307

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 (I_{th}):	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 160 A
Rated Operational Current AC-1 (I_e):	(690 V) 55 °C 145 A (690 V) 40 °C 160 A (690 V) 70 °C 130 A
Rated Operational Current AC-3 (I_e):	(220 / 230 / 240 V) 55 °C 116 A (415 V) 55 °C 116 A (690 V) 55 °C 65 A (440 V) 55 °C 116 A (380 / 400 V) 55 °C 116 A (500 V) 55 °C 110 A
Rated Operational Power AC-3 (P_e):	(500 V) 75 kW (220 / 230 / 240 V) 30 kW (690 V) 55 kW (380 / 400 V) 55 kW (440 V) 75 kW (415 V) 55 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 250 A
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 928 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 536 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 160 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1160 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 379 A
Maximum Breaking Capacity:	$\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 2000 A $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 1000 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 Operational Current DC-1 (I_e):	(110 V) 2 Poles in Series, 40 °C 145 A (220 V) 3 Poles in Series, 40 °C 145 A
Rated Operational Current DC-3 (I_e):	(110 V) 2 Poles in Series, 40 °C 145 A (220 V) 3 Poles in Series, 40 °C 145 A

Rated Operational Current DC-5 (I_e):	(110 V) 2 Poles in Series, 40 °C 145 A (220 V) 3 Poles in Series, 40 °C 145 A
Rated Insulation Voltage (U_i):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 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 100...250 V 50 Hz 100...250 V DC Operation 100...250 V
Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 130 V·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 Hz 130 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 6 V·A
Operate Time:	Between Coil Energization and NO Contact Closing 25...55 ms Between Coil De-energization and NO Contact Opening 37...47 ms
Connecting Capacity-Main Circuit:	Rigid Cu-Cable 2x10...95 mm ² Flexible 2x10...70 mm ²
Connecting Capacity-Auxiliary Circuit:	Solid 1x1...4 mm ² Flexible with Insulated Ferrule 2x0.75...2.5 mm ² Stranded 1x1...4 mm ² Flexible 1x0.75...2.5 mm ² Flexible with Ferrule 2x0.75...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

Environmental

Ambient Air Temperature:	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U_c) -25...+50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U_c) -40...+70 °C Close to Contactor for Storage -40...+70 °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 UL/CSA:	Main Circuit 600 V
General Use Rating UL/CSA:	(600 V AC) 160 A
Horsepower Rating UL/CSA:	(208 V AC) Three Phase 30 Hp (440 ... 480 V AC) Three Phase 75 Hp (550 ... 600 V AC) Three Phase 100 Hp (220 ... 240 V AC) Three Phase 40 Hp (200 V AC) Three Phase 30 Hp

Certificates and Declarations (Document Number)

CB Certificate:	SE-70479
CCC Certificate:	CQC_2013010304604055
Declaration of Conformity - CE:	2CMT004242
RINA Certificate:	ELE060313XG/002
RoHS Information:	1SFC101055D0202

Classifications

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