

AF580-30-22 250-500V 50/60Hz / 250-500V DC



General Information

Extended Product Type:	AF580-30-22 250-500V 50/60Hz / 250-500V DC
Product ID:	1SFL617001R7122
EAN:	7320500310625
Catalog Description:	AF580-30-22 250-500V 50/60Hz / 250-500V DC Contactor
Long Description:	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, Bypass and Distribution application up to max 1000 V. Operated with wide control voltage range 250-500 V, AC/DC

Categories

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

Ordering

EAN:	7320500310625
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:	283.0 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:	7320500310625

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 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 $q = 40\text{ °C}$ 800 A
Rated Operational Current AC-1 (I_e):	(690 V) 55 °C 700 A (690 V) 40 °C 800 A (1000 V) 40 °C 800 A (1000 V) 55 °C 700 A (690 V) 70 °C 580 A (1000 V) 70 °C 580 A
Rated Operational Current AC-3 (I_e):	(1000 V) 55 °C 250 A (690 V) 55 °C 500 A (415 V) 55 °C 580 A (220 / 230 / 240 V) 55 °C 580 A (440 V) 55 °C 580 A (380 / 400 V) 55 °C 580 A (500 V) 55 °C 580 A
Rated Operational Power AC-3 (P_e):	(500 V) 750 kW (220 / 230 / 240 V) 750 kW (690 V) 650 kW (380 / 400 V) 750 kW (440 V) 750 kW (415 V) 750 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 1000 A
Rated Short-time Withstand Current	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 4500 A

(I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 6400 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 7000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3500 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 6000 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 5000 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):	(850 V) 3 Poles in Series, 40 °C 800 A (600 V) 3 Poles in Series, 40 °C 800 A (110 V) 1-Pole, 40 °C 800 A (110 V) 2 Poles in Series, 40 °C 800 A (220 V) 3 Poles in Series, 40 °C 800 A
Rated Operational Current DC-3 (I_e):	(850 V) 3 Poles in Series, 40 °C 800 A (600 V) 3 Poles in Series, 40 °C 800 A (110 V) 1-Pole, 40 °C 800 A (110 V) 2 Poles in Series, 40 °C 800 A (220 V) 3 Poles in Series, 40 °C 800 A
Rated Operational Current DC-5 (I_e):	(850 V) 3 Poles in Series, 40 °C 800 A (600 V) 3 Poles in Series, 40 °C 800 A (110 V) 1-Pole, 40 °C 800 A (110 V) 2 Poles in Series, 40 °C 800 A (220 V) 3 Poles in Series, 40 °C 800 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:	3 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 θ ≤ 70 °C) °C
Rated Control Circuit Voltage (U_c):	60 Hz 250 ... 500 V 50 Hz 250 ... 500 V DC Operation 250 ... 500 V
Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 985 V·A Holding at Max. Rated Control Circuit Voltage DC 7.5 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Pull-in at Max. Rated Control Circuit Voltage DC 910 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 985 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 53 ... 73 ms Between Coil De-energization and NC Contact Closing 50 ... 70 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms
Connecting Capacity Main Circuit:	Rigid Al-Cable 3x185 mm ² Bar 52 mm Rigid Cu-Cable 300 mm ²
Connecting Capacity Auxiliary Circuit:	Solid 2x1...4 mm ² Flexible with Insulated Ferrule 1x0.75...2.5 mm ² Stranded 2x1...4 mm ² Flexible 2x0.75...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:	Main Circuit: Bars

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
Resistance to Shock acc. to IEC 60068-2-27:	Shock Direction: A 5 g Shock Direction: C2 5 g Shock Direction: B2 5 g Shock Direction: C1 5 g 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) 750 A

Horsepower Rating UL/CSA: (208 V AC) Three Phase 200 Hp
(440 ... 480 V AC) Three Phase 500 Hp
(550 ... 600 V AC) Three Phase 600 Hp
(220 ... 240 V AC) Three Phase 250 Hp
(200 V AC) Three Phase 200 Hp

Certificates and Declarations (Document Number)

BV Certificate:	11727/C0 BV
CB Certificate:	SE-69492
CCC Certificate:	CQC_2007010304256684
Data Sheet, Technical Information:	1SBC100122C0202
Declaration of Conformity - CE:	1SFA1-65
DNV Certificate:	DNV_E-10966
GL Certificate:	GL_42988-02HH
LOVAG Certificate:	SE-0115021
LR Certificate:	LR_13_20009
RINA Certificate:	ELE060313XG/002
RoHS Information:	1SFC101034D0203
Instructions and Manuals:	1SFC380023-en

Classifications

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
UNSPSC:	39121529

