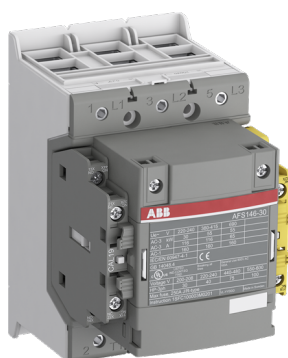


PRODUCT-DETAILS

AFS146-30-12-13

AFS146-30-12-13



General Information

Extended Product Type	AFS146-30-12-13
Product ID	1SFL467081R1312
EAN	7320500540770
Catalog Description	AFS146-30-12-13
Long Description	A 3-phase Safety 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 100-250 V, 50/60 Hz and DC

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Instructions and Manuals	1SFC100003M0201
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Dimensions

Product Net Width	90 mm
Product Net Depth / Length	126 mm

Product Net Height	150 mm
Product Net Weight	1.3 kg

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
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 $q = 40^\circ\text{C}$ 225 A
Rated Operational Current AC-1 (I_e)	(1000 V) 40°C 225 A (1000 V) 60°C 200 A (1000 V) 70°C 175 A (690 V) 40°C 225 A (690 V) 60°C 200 A (690 V) 70°C 175 A
Rated Operational Current AC-3 (I_e)	(415 V) 60°C 146 A (440 V) 60°C 146 A (500 V) 60°C 130 A (690 V) 60°C 93 A (1000 V) 60°C 60 A (380 / 400 V) 60°C 146 A (220 / 230 / 240 V) 60°C 146 A
Rated Operational Power AC-3 (P_e)	(415 V) 75 kW (440 V) 90 kW (500 V) 90 kW (690 V) 90 kW (1000 V) 75 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 45 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 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 min 477 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 30 s 674 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-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 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) $0.85 \times U_c$ Min. ... $1.1 \times U_c$ Max. (at $\theta \leq 70^\circ\text{C}$)
Rated Control Circuit Voltage (U_c)	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 6 V·A

	Holding at Max. Rated Control Circuit Voltage 60 Hz 6 V-A Holding at Max. Rated Control Circuit Voltage DC 4 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 130 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 130 V-A Pull-in at Max. Rated Control Circuit Voltage DC 135 V
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 1 x 10 ... 70 mm ² Rigid Cu-Cable 2 x 10 ... 95 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 1x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 ... 4 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

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 200 A
Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 40 hp (220 ... 240 V AC) Three Phase 50 hp (440 ... 480 V AC) Three Phase 100 hp (550 ... 600 V AC) Three Phase 125 hp

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
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Certificates and Declarations (Document Number)

CB Certificate	SEMKO_SE-70479M1
CCC Certificate	2013010304604055
CQC Certificate	CQC2013010304604055
cUL Certificate	20120925-E36588
Declaration of Conformity - CCC	2020980304001304
Declaration of Conformity - CE	2CMT2018-005695
EAC Certificate	1SFC101360D1101
Instructions and Manuals	1SFC100003M0201
RoHS Information	2CMT2018-005695

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	207 mm
Package Level 1 Depth / Length	216 mm
Package Level 1 Height	150 mm
Package Level 1 Gross	1.5 kg

Weight

Package Level 1 EAN

7320500540770

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	
ETIM 7	EC000066 - Power contactor, AC switching	
eClass		V11.0 : 27371003
UNSPSC		39121529
IDEA Granular Category Code (IGCC)		4755 >> Contactors
E-Number (Finland)		3708098

Categories

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

