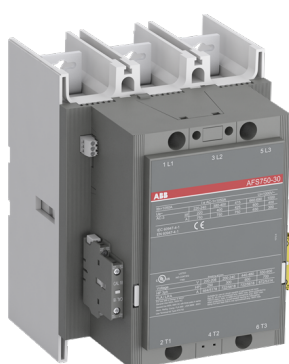


PRODUCT-DETAILS

# AFS750-30-12-70

# AFS750-30-12-70



## General Information

Extended Product Type	AFS750-30-12-70
Product ID	1SFL637081R7012
EAN	7320500540794
Catalog Description	AFS750-30-12-70
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

Data Sheet, Technical Information	1SBC100208C02_
Instructions and Manuals	1SFC380023-en

## Dimensions

Product Net Width	210 mm
Product Net Depth / Length	242 mm
Product Net Height	283 mm
Product Net Weight	10 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 $q = 40$ °C 1050 A
Rated Operational Current AC-1 ( $I_e$ )	(1000 V) 40 °C 1000 A (1000 V) 55 °C 875 A (1000 V) 70 °C 720 A (690 V) 40 °C 1050 A (690 V) 55 °C 875 A (690 V) 70 °C 720 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) 55 °C 750 A (440 V) 55 °C 750 A (500 V) 55 °C 750 A (690 V) 55 °C 650 A (1000 V) 55 °C 300 A (380 / 400 V) 55 °C 750 A (220 / 230 / 240 V) 55 °C 750 A
Rated Operational Power AC-3 ( $P_e$ )	(415 V) 425 kW (440 V) 450 kW (500 V) 520 kW (690 V) 600 kW (1000 V) 400 kW (380 / 400 V) 400 kW (220 / 230 / 240 V) 220 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 ( $I_{cw}$ )	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 min 3500 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 30 s 4500 A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 7500 A $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 7000 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 60 cycles per hour (AC-3) 300 cycles per hour
Rated Operational Current	(110 V) 1-Pole, 40 °C 1050 A

DC-1 ( $I_e$ )	(110 V) 2 Poles in Series, 40 °C 1050 A (220 V) 3 Poles in Series, 40 °C 1050 A (600 V) 3 Poles in Series, 40 °C 1050 A (850 V) 3 Poles in Series, 40 °C 1050 A
Rated Operational Current DC-3 ( $I_e$ )	(110 V) 1-Pole, 40 °C 1050 A (110 V) 2 Poles in Series, 40 °C 1050 A (220 V) 3 Poles in Series, 40 °C 1050 A (600 V) 3 Poles in Series, 40 °C 1050 A (850 V) 3 Poles in Series, 40 °C 1050 A
Rated Operational Current DC-5 ( $I_e$ )	(110 V) 1-Pole, 40 °C 1050 A (110 V) 2 Poles in Series, 40 °C 1050 A (220 V) 3 Poles in Series, 40 °C 1050 A (600 V) 3 Poles in Series, 40 °C 1050 A (850 V) 3 Poles in Series, 40 °C 1050 A
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 x $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70$ °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 12 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage DC 5.5 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 880 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 880 V·A Pull-in at Max. Rated Control Circuit Voltage DC 880 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 50 ... 70 ms Between Coil De-energization and NO Contact Opening 53 ... 73 ms Between Coil Energization and NC Contact Opening 45 ... 115 ms Between Coil Energization and NO Contact Closing 50 ... 120 ms
Connecting Capacity Main Circuit	Bar 52 mm <sup>2</sup> Rigid Al-Cable 300 mm <sup>2</sup> Rigid Cu-Cable 300 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 1x0.75 ... 2.5 mm <sup>2</sup> Solid 2 x 1 ... 4 mm <sup>2</sup> Stranded 2 x 1 ... 4 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

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(1000 V AC) 900 A (600 V AC) 900 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 250 hp (208 V AC) Three Phase 250 hp (220 ... 240 V AC) Three Phase 300 hp (440 ... 480 V AC) Three Phase 600 hp (550 ... 600 V AC) Three Phase 700 hp

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**Environmental**


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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

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**Certificates and Declarations (Document Number)**


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CB Certificate	SE-82863
CCC Certificate	CQC_2007010304256684
CQC Certificate	CQC2007010304256684
cUL Certificate	UL_20111101-E36588
Declaration of Conformity - CCC	2020980304001301
Declaration of Conformity - CE	2CMT2018-005695
EAC Certificate	1SFC101360D1101
Instructions and Manuals	1SFC380023-en
RoHS Information	2CMT2018-005695
SUVA Certificate	2CMT2019-005860

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**Container Information**


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Package Level 1 Units	box 1 piece
Package Level 1 Width	280 mm
Package Level 1 Depth / Length	375 mm
Package Level 1 Height	310 mm
Package Level 1 Gross Weight	12 kg
Package Level 1 EAN	7320500540794

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**Classifications**


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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)	3709052

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## Categories

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

