PRODUCT-DETAILS

AFS750-30-12-70

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General Information

Extended Product Type	AFS750-30-12-70
Product ID	1SFL637081R7012
EAN	7320500540794
Catalog Description	AFS750-30-12-70
Long Description	The AFS750-30-12-70 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted 1 left (1 N.O + 1 N.C.) and fixed 1 right (1 N.C.) side mounted auxiliary contact blocks with Main Circuit Bars connections, controlling motors up to 400 kW / 400 V AC (AC-3) or 600 hp / 480 V UL and switching power circuits up to 1050 A (AC-1) or 900 A UL general use. AFS contactors can be easily integrated in machine manufacturer's systems complying with main standards EN ISO 13849 and EN 62061 - guaranteeing the safe use of your machinery and equipment. An easily identifiable yellow low energy auxiliary contact block ensures the status feedback circuits required in machine safety applications. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100208C02__

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 (690 V) 55 °C 875 (690 V) 70 °C 720
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
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 Ie AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x Ie AC-3
Short-Circuit Protective Devices	gG Type Fuses 1000 A
Rated Short-time Withstand Current Low Voltage (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 Ie > 100 A) at 440 V 7500 A cos phi=0.45 (cos phi=0.35 for Ie > 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 DC-1 (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-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 Uc Min. ... 1.1 x Uc Max. (at θ ≤ 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 mm² Rigid Al-Cable 300 mm² Rigid Cu-Cable 300 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm² Flexible 1x0.75 ... 2.5 mm² Solid 2 x 1 ... 4 mm² Stranded 2 x 1 .... 4 mm²
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 ... 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

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	Without Derating 3000 m
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Certificates and Declarations (Document Number)

CB Certificate	SE-82863
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

Container Information

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

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)	3709052

Categories

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