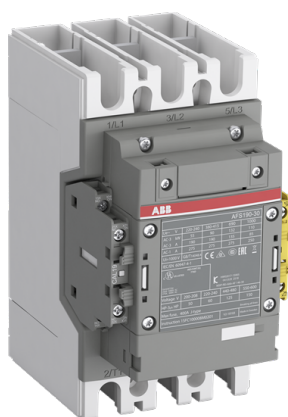


PRODUCT-DETAILS

AFS190-30-12-11

AFS190-30-12-11



General Information

Extended Product Type	AFS190-30-12-11
Product ID	1SFL487082R1112
EAN	7320500540503
Catalog Description	AFS190-30-12-11
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 20-60V DC and 24-60V AC 50/60 Hz

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100208C02__
Instructions and Manuals	1SFC100008M0201

Dimensions

Product Net Width	105 mm
Product Net Depth /	152 mm

Length	
Product Net Height	196 mm
Product Net Weight	2.4 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 $q = 40^\circ\text{C}$ 275 A
Rated Operational Current AC-1 (I_e)	(1000 V) 40°C 250 A (1000 V) 60°C 225 A (1000 V) 70°C 185 A (690 V) 40°C 275 A (690 V) 60°C 250 A (690 V) 70°C 200 A
Rated Operational Current AC-3 (I_e)	(415 V) 60°C 190 A (440 V) 60°C 190 A (500 V) 60°C 135 A (690 V) 60°C 135 A (1000 V) 60°C 85 A (380 / 400 V) 60°C 190 A (220 / 230 / 240 V) 60°C 190 A
Rated Operational Power AC-3 (P_e)	(415 V) 90 kW (440 V) 110 kW (500 V) 90 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 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 355 A
Rated Short-time Withstand Current (I_{cw})	at 40°C Ambient Temp, in Free Air, from a Cold State 10 s 1520 A at 40°C Ambient Temp, in Free Air, from a Cold State 15 min 275 A at 40°C Ambient Temp, in Free Air, from a Cold State 1 min 621 A at 40°C Ambient Temp, in Free Air, from a Cold State 1 s 1900 A at 40°C Ambient Temp, in Free Air, from a Cold State 30 s 878 A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 3300 A $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 2200 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 Operational Current DC-1 (I_e)	(110 V) 2 Poles in Series, 40°C 250 A (220 V) 3 Poles in Series, 40°C 250 A
Rated Operational Current DC-3 (I_e)	(110 V) 2 Poles in Series, 40°C 250 A (220 V) 3 Poles in Series, 40°C 250 A
Rated Operational Current DC-5 (I_e)	(110 V) 2 Poles in Series, 40°C 250 A (220 V) 3 Poles in Series, 40°C 250 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 $\theta \leq 70^\circ\text{C}$)
Rated Control Circuit Voltage (U_c)	50 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 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 2.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 165 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 165 V·A Pull-in at Max. Rated Control Circuit Voltage DC 205 W
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 2 x 50 ... 95 mm ² Rigid Al-Cable 1 x 95 ... 185 mm ² Rigid Cu-Cable 1 x 6 ... 150 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 2x0.75 ... 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	Main Circuit: Bars

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 250 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 50 hp (208 V AC) Three Phase 50 hp (220 ... 240 V AC) Three Phase 60 hp (440 ... 480 V AC) Three Phase 125 hp (550 ... 600 V AC) Three Phase 150 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	SE-82315
CCC Certificate	CQC_2014010304676685
CQC Certificate	CQC2014010304676685
cUL Certificate	20121023-E36588
Declaration of Conformity - CCC	2020980304001306
Declaration of Conformity - CE	2CMT2018-005695
EAC Certificate	1SFC101360D1101
Instructions and Manuals	1SFC100008M0201
RoHS Information	2CMT2018-005695
SUVA Certificate	2CMT2019-005857

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	160 mm
Package Level 1 Depth / Length	258 mm
Package Level 1 Height	235 mm
Package Level 1 Gross Weight	3 kg
Package Level 1 EAN	7320500540503

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)	3709002

Categories

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

