

PRODUCT-DETAILS

AF750-30-11-70 AF750-30-11 100-250V 50/60Hz / 100-250V DC Contactor



Extended Product Type	AF750-30-11-70
Product ID	1SFL637001R7011
EAN	7320500217702
Catalog Description	AF750-30-11 100-250V 50/60Hz / 100-250V DC Contactor
Long Description	The AF750-30-11-70 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, 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. 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
Customs Tariff Number	8536

Popular Downloads

© 2023 ABB. All rights reserved.

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	1SFC380023-en
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	53540919-60

Dimensions	
Product Net Width	210 mm
Product Net Depth / Length	242 mm
Product Net Height	283 mm
Product Net Weight	13.6 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	1
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 Θ = 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 650 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	8 x le AC-3
Rated Making Capacity AC-3	10 x le AC-3
Short-Circuit Protective Devices	gG Type Fuses 1000 A

© 2023 ABB. All rights reserved.

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 le > 100 A) at 440 V 7500 A cos phi=0.45 (cos phi=0.35 for le > 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	3 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 $\theta \le 70$ °C)
Rated Control Circuit Voltage (U _c)	50 Hz 100250 V 60 Hz 100250 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 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 3x185 mm² Rigid Cu-Cable 300 mm²
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 1 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	
NEMA Size	7
Horsepower Rating NEMA	(230 V AC) Three Phase 300 Hp (460 V AC) Three Phase 600 Hp (575 V AC) Three Phase 600 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 1000 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
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
Resistance to Shock acc. to IEC 60068-2-27	Shock Direction: A 5 g Shock Direction: B1 5 g Shock Direction: B2 5 g
RoHS Status	Shock Direction: C2 5 g
RoHS Status	Shock Direction: C2 5 g
Certificates and Declarations	Shock Direction: C1 5 g Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Certificates and Declarations	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA
Certificates and Declarations ABS Certificate BV Certificate	Shock Direction: C2 5 g
Certificates and Declarations ABS Certificate BV Certificate CB Certificate	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863
Certificates and Declarations	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate CSA Certificate Declaration of Conformity - CCC Declaration of Conformity	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001301 2020980304001301
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate CSA Certificate Declaration of Conformity	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001301
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CQC Certificate CQC Certificate CSA Certificate Declaration of Conformity - CCC Declaration of Conformity - CE Declaration of Conformity - UKCA	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001301 202098030400145 202098030400145
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate CSA Certificate Declaration of Conformity - CCC Declaration of Conformity - CE Declaration of Conformity - UKCA DNV Certificate	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001301 202098030400145 2CMT2019-005796 2CMT2020-006118
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate CSA Certificate Declaration of Conformity - CCC Declaration of Conformity - CE Declaration of Conformity	Shock Direction: C2 5 g Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001301 2020980304001305 2CMT2019-005796 2CMT2020-006118 DNV_E-10966
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate CSA Certificate Declaration of Conformity - CCC Declaration of Conformity - CE Declaration of Conformity - UKCA DNV Certificate DNV GL Certificate	Shock Direction: C2 5 c Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001301 202098030400145 2CMT2019-005796 2CMT2020-006118 DNV_E-10966 TAE00001W1
Certificates and Declarations ABS Certificate BV Certificate CB Certificate CCS Certificate CQC Certificate CSA Certificate Declaration of Conformity - CCC Declaration of Conformity - CE Declaration of Conformity - UKCA DNV Certificate EAC Certificate EAC Certificate	Shock Direction: C2 5 c Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 15-LD1408622-PDA BV_13409-C0BV SE-82863 GB14T00030 CQC2007010304256684 CQC2012010304540080 306712-1 2020980304001304 2020980304001304 202098030400146 2020712019-005796 2020712020-006118 DNV_E-10966 TAE00001W1 9AKK107046A8618

© 2023 ABB. All rights reserved.

RINA Certificate

Subject to change without notice

ELE060313XG_002

RMRS Certificate	9AKK107045A6978
UL Certificate	UL_20111101-E36588
UL Listing Card	UL_E36588

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	15 kg
Package Level 1 EAN	7320500217702

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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4758 >> lec Contactors
E-Number (Finland)	3709335
E-Number (Norway)	4115300
E-Number (Sweden)	3228366

Categories

Low Voltage Products and Systems \rightarrow Control Products \rightarrow Contactors \rightarrow Block Contactors

