



Descriptors

Alternate Catalog No. AF38-40-00-11 Catalog No. 1SBL297201R1100

Description: AF38-40-00-11 24-60V50/60HZ 20-60VDC Contactor

UPC No 3471523115316

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AF38 4-pole contactors are used for controlling power circuits up to 690 V AC and 440 V DC. They are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces...). AF... contactors include an electronic coil interface accepting a wide control voltage Uc min. ... Uc max. Only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC. AF contactors can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. AF contactors have built-in surge protection and do not require additional surge suppressors. The AF... series 4-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 4 N.O. main poles, front and side-mounted add-on auxiliary contact blocks (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1. N.C. mirror contacts compliant with Annex F of IEC 60947-4-1) - Control circuit: AC or DC operated - Accessories: a wide range of accessories is available. Note: - AF..-..-11 not suitable for a direct control by PLC-output. - AF..-.-.-11 type available in some countries: please consult your ABB representative.

Category	AF Contactors	
Block Contactor Type	4-Pole Contactor	
Specifications		
Product Type	AF	
General Use Rating UL/CSA	(600 V AC) 55 A	
Object Classification Code	Q	
Terminal Type	Screw Terminals	
Rated Control Circuit Voltage	50 Hz /60 Hz 24 60 V DC Operation 20 60 V	
Number of Main Contacts NO	4	
Number of Main Contacts NC	0	
Climatic Withstand	Category B according to IEC 60947-1 Annex Q	
Resistance to Vibrations acc. to IEC 60068-2-6	5 300 Hz 4 g closed position / 2 g open position	
Number of Auxiliary Contacts NO	0	
RoHS Status	Following EU Directive 2011/65/EU	
Reference Ambient Air Temperature	Close to Contactor for Storage -60 +80 °C Near Contactor for Operation in Free Air -40 +70 °C	
Rated Operational Voltage	Main Circuit 690 V	
Number of Auxiliary Contacts NC	0	
Tightening Torque UL/CSA	Control Circuit 11 IA Main Circuit 22 IA	
Maximum Operating Altitude Permissible	3000 m	
Rated Operational Current AC-1	(690 V) 40 °C 55 A (690 V) 60 °C 45 A (690 V) 70 °C 37 A	
Standards	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N°14	
Rated Operational Power AC-3	(220 / 230 / 240 V) 5.5 KWT (415 V) 11 KWT (440 V) 11 KWT (500 V) 11 KWT (690 V) 9 KWT	

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(400 V) 11 KWT

Conventional Free-air Thermal Current	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 55 A
Rated Frequency	Main Circuit 50Hz
Rated Short-time Withstand Current	Main Circuit 60 Hz at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 55 at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 450 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A for 1 s - A
Rated Operational Current AC-3	(220 / 230 / 240 V) 60 °C 23.2 A (380 / 400 V) 60 °C 22 A (415 V) 60 °C 21.2 A (440 V) 60 °C 20 A (500 V) 60 °C 17.6 A (690 V) 60 °C 10.5 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour
Rated Insulation Voltage	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Maximum Mechanical Switching Frequency	3600 cycles per hour
Operate Time	Between Coil De-energization and NC Contact Closing 13 98 m Between Coil De-energization and NO Contact Opening 11 95 ms Between Coil Energization and NC Contact Opening 38 90 ms Between Coil Energization and NO Contact Closing 40 95 ms
Secondary Rated Impulse Withstand Voltage	6 kV
Connecting Capacity Main Circuit	Rigid 1/2x 1.5 16 m ² Flexible with Ferrule 1/2x 1.5 16 m ² Flexible with Insulated Ferrule 1x 1.5 16 m ² /2x 1.5 16 m ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 2.5 m ² Flexible with Insulated Ferrule 1x 0.75 2.5 m ² /2x 0.75 1.5 m ² Rigid 1/2x 1 2.5 m 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 IP20
Wire Stripping Length	Control Circuit 10 mm Main Circuit 12 mm
Classifications	
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 6.0	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 5.0	EC000066 - Magnet contactor, AC-switching

Dimensions	
Product Net Weight	0.36 kg
Product Net Depth / Length	101 mm
Product Net Width	45 mm
Product Net Height	86 mm

Package Information		
Package Level 1 Width	87 mm	
Package Level 1 Height	47 mm	
Package Level 1 Depth / Length	103 mm	
Package Level 1 EAN	3471523115316	
Package Level 1 Units	box 1 piece	
Package Level 2 Height	315 mm	
Package Level 1 Gross Weight	0.36 kg	
Package Level 2 Units	18 piece	

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Package Information		
Package Level 3 Units	864 piece	
Package Level 2 Depth / Length	300 mm	
Package Level 2 Gross Weight	12.96 kg	
Ordering		

Ordering	
Minimum Order Quantity	1
Customs Tariff Number	85364900

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