



Representative Image

Alternate Catalog No. AF52-40-00-14 Catalog No. 1SBL367201R1400

Description: AF52-40-00-14 250-500V50/60HZ-DC Contactor

UPC No 3471523133648

Home > Contactors & Starters > UL Listed IEC Contactors > AF Contactors

AF52 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 $U_c \text{ min.} \dots U_c \text{ max.}$ 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.

Descriptors

Category	AF Contactors
Block Contactor Type	4-Pole Contactor

Specifications

Product Type	AF
General Use Rating UL/CSA	(600 V AC) 80 A
Object Classification Code	Q
Terminal Type	Screw Terminals
Rated Control Circuit Voltage	50 Hz /60 Hz DC Operation 250 ... 500 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 3 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
Maximum Operating Altitude Permissible	3000 m
Rated Operational Current AC-1	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A (220 / 230 / 240 V) 15 KWT (380 / 400 V) 22 KWT
Rated Operational Power AC-3	(415 V) 30 KWT (440 V) 30 KWT (500 V) 30 KWT (690 V) 30 KWT
Horsepower Rating UL/CSA	(220 ... 240 V AC) Three Phase 20 hp (440 ... 480 V AC) Three Phase 40 hp (550 ... 600 V AC) Three Phase 50 hp (120 V AC) Single Phase 3 hp (200 ... 208 V AC) Three Phase 15 hp (240 V AC) Single Phase 10 hp


by ABB

Specifications

Conventional Free-air Thermal Current	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C } 105\text{ A}$
Rated Frequency	Main Circuit 50Hz Main Circuit 60 Hz
Rated Short-time Withstand Current	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A for 1 s - A
Rated Operational Current AC-3	(220 / 230 / 240 V) 60 °C 53 A (380 / 400 V) 60 °C 53 A (415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 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 Breaking Capacity	$\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100\text{ A}$) at 440 V 950 A $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100\text{ A}$) at 690 V 600 A
Maximum Mechanical Switching Frequency	3600 cycles per hour
Secondary Rated Impulse Withstand Voltage	6 kV
Connecting Capacity Main Circuit	Rigid 1/2x 6 ... 3 5 m ² Flexible with Ferrule 1/2x 4 ... 35 m ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 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 IP10
Screw Terminal Type	Screw Terminals
Wire Stripping Length	Main Circuit 16 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	1.16kg
Product Net Depth / Length	113.5 mm
Product Net Width	70 mm
Product Net Height	125.5 mm

Package Information

Package Level 1 Width	150 mm
Package Level 1 Height	103 mm
Package Level 1 Depth / Length	150 mm
Package Level 1 EAN	3471523133648
Package Level 1 Units	box 1 piece
Package Level 2 Width	250 mm
Package Level 2 Height	300 mm
Package Level 1 Gross Weight	1.27 kg
Package Level 2 Units	box 8 piece
Package Level 3 Units	192 piece

Package Information

Package Level 2 Depth / Length	300 mm
Package Level 2 Gross Weight	10.16 kg

Ordering

Minimum Order Quantity	1
Customs Tariff Number	85364900