

PRODUCT-DETAILS

AF16-40-00-14 AF16-40-00-14 250-500V50/60HZ-DC Contactor



General Information

Extended Product Type	AF16-40-00-14
Product ID	1SBL177201R1400
EAN	3471523115149
Catalog Description	AF16-40-00-14 250-500V50/60HZ-DC Contactor
Long Description	AF16 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 24500 V 50/60 Hz or 20500 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 sidemounted 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

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
UNSPSC	39121529

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Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.31 kg
Package Level 1 EAN	3471523115149
Package Level 2 Units	box 27 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	16.74 kg
Package Level 3 Units	1296 piece

Certificates and Declarations (Document Number)	
ABS Certificate	ABS_15-GE1349500-PDA_90682247
BV Certificate	BV_2634H24898B0
CB Certificate	CB_SE-80869M1
CCC Certificate	CCC_2010010304445624
Declaration of Conformity - CE	1SBD250001U1000
DNV Certificate	DNV-GL_TAE00001AF-3
DNV GL Certificate	DNV-GL_TAE00001AF-3
EAC Certificate	EAC_RU C-FR ME77 B03597
Environmental Information	1SBD250147E1000
GL Certificate	DNV-GL_TAE00001AF-3
GOST Certificate	GOST_POCCFR.ME77.B07175.pdf
Instructions and Manuals	1SBC101027M6801
KC Certificate	KC_HW02016-15008A
LR Certificate	LRS_1300087E1
RINA Certificate	RINA_ELE240318XG
RMRS Certificate	RMRS_1802705280
RoHS Information	1SBD250001U1000
UL Certificate	UL_20120918-E319322-3-1
UL Listing Card	UL_E319322

Technical UL/CSA	
General Use Rating UL/CSA	(600 V AC) 30 A
Tightening Torque UL/CSA	Control Circuit 11 IA Main Circuit 13 IA

Environmental	
Ambient Air	Close to Contactor for Storage -60 +80 °C
Temperature	Near Contactor for Operation in Free Air -40 +70 °C

Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 300 Hz 4 g closed position / 2 g open position
Resistance to Shock acc.	Shock Direction: A 30 K40
to IEC 60068-2-27	Shock Direction: B2 15 K40
	Shock Direction: C1 25 K40
	Shock Direction: C2 25 K40
	Closed, Shock Direction: B1 25 K40
	Open, Shock Direction: B1 5 K40
RoHS Status	Following EU Directive 2011/65/EU

Technical	
Number of Main Contacts NO	
Number of Main Contacts NC	C
Number of Auxiliary Contacts NO	C
Number of Auxiliary Contacts NC	٥
Standards	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N 14
Rated Operational Voltage	Main Circuit 690 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 35 A
Rated Operational Current AC-1 (I _e)	(690 V) 40 ℃ 30 A (690 V) 60 ℃ 30 A (690 V) 70 ℃ 26 A
Rated Operational Current AC-3 (I _e)	(220 / 230 / 240 V) 60 °C 18 A (380 / 400 V) 60 °C 18 A (415 V) 60 °C 18 A (440 V) 60 °C 18 A (500 V) 60 °C 15 A (690 V) 60 °C 10.5 A
Rated Operational Power AC-3 (P _e)	(220 / 230 / 240 V) 4 KWT (380 / 400 V) 7.5 KWT (415 V) 9 KWT (440 V) 9 KWT (500 V) 9 KWT (690 V) 9 KWT (400 V) 7.5 KWT
Rated Short-time Withstand Current (I _{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 1 s -empty- A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 106 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour
Rated Insulation Voltage (U _i)	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U _{imp})	6 kV
, Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U _c)	50 Hz 250 500 V 50 Hz / 60 Hz 250 500 V 60 Hz 250 500 V DC Operation 250 500 V

Operate Time	Between Coil De-energization and NC Contact Closing 13 98 ms 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
Connecting Capacity Main Circuit	Rigid 1/2x 1 6 m² Flexible with Ferrule 1/2x 0.75 6 m² Flexible with Insulated Ferrule 1x 0.75 4 m² Flexible with Insulated Ferrule 2x 0.75 2.5 m²
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 Flexible with Insulated Ferrule 2x 0.75 1.5 m ² Rigid 1/2x 1 2.5 m ²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 10 mm
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
Terminal Type	Screw Terminals

Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	86 mm
Product Net Weight	0.31 kg

Popular Downloads	
Instructions and Manuals	1SBC101027M6801
Ordering	
Minimum Order Quantity	4 - 1
	1 piece

Categories

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

