



**Electric Automation**  
Automation specialists

Reference: AF80-40-00-14

Code: 1SBL397201R1400

AF80-40-00-14 250-500V50/60HZ-DC Contactor

Buy it at Electric Automation Network

AF80 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.

## Ordering

EAN:	3471523133747
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085

## Dimensions

Product Net Width:	90 mm
Product Net Depth:	116 mm
Product Net Height:	125.5 mm
Product Net Weight:	1.44 kg

## Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	150 mm
Package Level 1 Length:	150 mm

Package Level 1 Height:	103 mm
Package Level 1 Gross Weight:	1.57 kg
Package Level 1 EAN:	3471523133747

## Technical

Number of Main Contacts NO:	4
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Auxiliary Contacts NC:	0
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 125 A
Rated Operational Current AC-1 ( $I_e$ ):	(690 V) 40 °C 125 A (690 V) 60 °C 105 A (690 V) 70 °C 90 A
Rated Operational Current AC-3 ( $I_e$ ):	(220 / 230 / 240 V) 60 °C 80 A (380 / 400 V) 60 °C 80 A (415 V) 60 °C 80 A (440 V) 60 °C 80 A (500 V) 60 °C 65 A (690 V) 60 °C 49 A
Rated Operational Power AC-3 ( $P_e$ ):	(220 / 230 / 240 V) 22 kW (380 / 400 V) 37 kW (415 V) 45 kW (440 V) 45 kW (500 V) 45 kW (690 V) 45 kW
Rated Short-time Withstand Current ( $I_{cw}$ ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 780 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 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) 1000 V
Rated Impulse Withstand Voltage ( $U_{imp}$ ):	8 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ ):	50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1/2x 6...50 mm <sup>2</sup> Rigid 1x 6...70 mm <sup>2</sup> Rigid 2x 6...50 mm <sup>2</sup>

Connecting Capacity-Control Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1...2.5 mm <sup>2</sup>
Wire Stripping Length:	Main Circuit 17 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 IP10
Terminal Type:	Screw Terminals

## Environmental

Ambient Air Temperature:	Close to Contactor for Storage -60...+80 °C Near Contactor for Operation in Free Air -40 ... +70 °C
Maximum Operating Altitude Permissible:	3000 m

## Technical UL/CSA

General Use Rating UL/CSA:	(600 V AC) 105 A
Horsepower Rating UL/CSA:	(120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 15 Hp (200 ... 208 V AC) Three Phase 25 Hp (220 ... 240 V AC) Three Phase 30 Hp (440 ... 480 V AC) Three Phase 60 Hp (550 ... 600 V AC) Three Phase 75 Hp

## Certificates and Declarations (Document Number)

ABS Certificate:	ABS_15-GE1349500-PDA_90682247
CB Certificate:	CB_SE_77417
Declaration of Conformity - CE:	1SBD250182C1000
LR Certificate:	LRS_1300087E1
RMRS Certificate:	RMRS_1400682124

## Classifications

ETIM 5:	EC000066 - Magnet contactor, AC-switching
UNSPSC:	39121529