

General Information

AF38-40-00-14 **Extended Product Type:** 1SBL297201R1400 Product ID: EAN: 3471523115347

Catalog Description: AF38-40-00-14 250-500V50/60HZ-DC Contactor

Long Description: 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.

Categories

Products » Low Voltage Products and Systems » Control Products » Contactors » Block Contactors

Ordering

Minimum Order Quantity: 1 piece **Customs Tariff Number:** 85369085 EAN: 3471523115347

Dimensions

Product Net Depth: 101 mm 86 mm **Product Net Height: Product Net Weight:** $0.400 \, \text{kg}$ **Product Net Width:** 45 mm

Container Information

87 mm Package Level 1 Width: Package Level 1 Length: 103 mm Package Level 1 Height: 47 mm Package Level 1 Gross Weight: 0.4 kg Package Level 1 EAN: 3471523115347 Package Level 2 Units: 36 piece 250 mm Package Level 2 Width: Package Level 2 Length: 300 mm Package Level 2 Height: 315 mm Package Level 3 Units: 864 piece Package Level 1 Units: 1 piece

Technical

Number of Main Contacts NC: 0 **Number of Auxiliary Contacts NO:** 0 **Number of Auxiliary Contacts NC:**

IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N°14 Standards:

Main Circuit 690 V Rated Operational Voltage: Rated Frequency (f): Main Circuit 50 / 60 Hz

Conventional Free-air Thermal acc. to IEC 60947-4-1, Open Contactors q = 40 °C 55 A

Current (Ith):

Rated Operational Current AC-1 (Ie): (690 V) 40 $^{\circ}$ C 55 A

(690 V) 60 °C 45 A (690 V) 70 °C 37 A

Rated Operational Current AC-3 (I_e): (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

Rated Operational Power AC-3 (Pe): (220 / 230 / 240 V) 5.5 kW

(400 V) 11 kW

(415 V) 11 kW (440 V) 11 kW (500 V) 11 kW (690 V) 9 kW

Rated Short-time Withstand Current at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 300 A

 (I_{cw}) :

at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 55 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A 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 1 s 450 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A

Maximum Electrical Switching

Frequency:

AC-1 600 cycles per hour

Rated Insulation Voltage (Ui): 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 (Uc): 50 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: Flexible with Insulated Ferrule 1x 1.5...16 mm²

Flexible with Insulated Ferrule 2x 1.5...16 mm²

Flexible with Ferrule 1/2x 1.5...16 mm²

Rigid 1/2x 1.5...16 mm²

Connecting Capacity Control Circuit: Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²

Rigid 1/2x 1 ... 2.5 mm²

Wire Stripping Length: Control Circuit 10 mm

Main Circuit 12 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

Number of Main Contacts NO: 4

Environmental

Climatic Withstand: Category B according to IEC 60947-1 Annex Q

Maximum Operating Altitude

Permissible:

3000 m

Resistance to Vibrations acc. to IEC 5 ... 300 Hz 4 g closed position / 2 g open position

60068-2-6:

Resistance to Shock acc. to IEC

60068-2-27:

Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g

RoHS Status: Planned to follow EU Directive 2002/95/EC August 18, 2005 and amendment after 2008 Q1

Ambient Air Temperature: Close to Contactor for Storage -60...+80 °C

Near Contactor for Operation in Free Air -40 ... +70 °C

Technical UL/CSA

DNV Certificate:

General Use Rating UL/CSA: (600 V AC) 55 A **Tightening Torque UL/CSA:** Control Circuit 11 in·lb

Main Circuit 22 in·lb

DNV-GL_E13871

Certificates and Declarations (Document Number)

Instructions and Manuals: 1SBC101027M6801

ABS Certificate: ABS 15-GE1349500-PDA 90682247

 CB Certificate:
 CB_SE_70858M1

 CCC Certificate:
 CCC_2010010304445623

 Data Sheet, Technical Information:
 1SBC101424D0201

 Declaration of Conformity - CE:
 1SBD250001U1000

EAC Certificate: EAC RU C-FR ME77 B01010

GL Certificate: DNV-GL_E13871

GOST_POCCFR.ME77.B07175.pdf

 LR Certificate:
 LRS_1300087E1

 RINA Certificate:
 RINA_ELE084013XG

 RMRS Certificate:
 RMRS_1400682124

 RoHS Information:
 1SBD251015E1000

 UL Certificate:
 UL_20120918-E319322-3-1

 UL Listing Card:
 UL_E319322

Classifications

E-nummer:	3211521
ETIM 4:	EC000066 - Magnet contactor, AC-switching
ETIM 5:	EC000066 - Magnet contactor, AC-switching
ETIM 6:	EC000066 - Power contactor, AC switching
UNSPSC:	39121529
Object Classification Code:	Q

