

General Information

 Extended Product Type:
 AF30-30-00-14

 Product ID:
 1SBL277001R1400

 EAN:
 3471523111240

Catalog Description: AF30-30-00-14 250-500V50/60HZ-DC Contactor

Long Description: AF30 contactors are used for controlling power circuits up to 690 V AC and 220 V DC. They

are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. 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 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, front and side-mounted add-on auxiliary contact blocks (mechanically-linked auxiliary 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:
 3471523111240

Dimensions

Product Net Depth: 86 mm
Product Net Height: 86 mm
Product Net Weight: 0.350 kg
Product Net Width: 45 mm

Container Information

Package Level 1 Width: 87 mm Package Level 1 Length: 87 mm Package Level 1 Height: 47 mm Package Level 1 Gross Weight: 0.35 kg Package Level 1 EAN: 3471523111240 Package Level 2 Units: 45 piece 250 mm Package Level 2 Width: Package Level 2 Length: 300 mm Package Level 2 Height: 315 mm Package Level 3 Units: 1080 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: 0

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 acc. to IEC 60947-4-1, Open Contactors $q = 40 \,^{\circ}\text{C}$ 50 A

Current (I_{th}):

Rated Operational Current AC-1 (I $_{\rm e}$): (690 V) 40 °C 50 A

(690 V) 60 °C 42 A (690 V) 70 °C 37 A

Rated Operational Current AC-3 (I_e): (220 / 230 / 240 V) 60 °C 33 A

(380 / 400 V) 60 °C 32 A (415 V) 60 °C 32 A (440 V) 60 °C 32 A (500 V) 60 °C 28 A (690 V) 60 °C 21 A

Rated Operational Power AC-3 (P_e): (220 / 230 / 240 V) 9 kW

(380 / 400 V) 15 kW

(400 V) 15 kW (415 V) 15 kW (440 V) 18.5 kW (500 V) 18.5 kW (690 V) 18.5 kW

Rated Short-time Withstand Current at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A

(I_{cw}):

at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 50 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 700 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A

Maximum Breaking Capacity: cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 500 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 200 A

Maximum Electrical Switching

Frequency:

AC-1 600 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 1200 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 (U_c):

 $50~\text{Hz}~250~\dots~500~\text{V}$ 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...10 mm²

Flexible with Insulated Ferrule 2x 1.5...4 mm² Flexible with Ferrule 1/2x 1.5...10 mm²

Rigid 1/2x 2.5...10 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

Control Circuit 10 mm Wire Stripping Length:

Main Circuit 14 mm

acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 Degree of Protection:

acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20

Screw Terminals **Terminal Type:**

Number of Main Contacts NO:

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

Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C

Technical UL/CSA

General Use Rating UL/CSA: (600 V AC) 50 A

Horsepower Rating UL/CSA: (120 V AC) Single Phase 2 Hp

(240 V AC) Single Phase 5 Hp (200 ... 208 V AC) Three Phase 10 Hp (220 ... 240 V AC) Three Phase 10 Hp (440 ... 480 V AC) Three Phase 20 Hp (550 ... 600 V AC) Three Phase 25 Hp

Control Circuit 11 in·lb Tightening Torque UL/CSA: Main Circuit 22 in·lb

Certificates and Declarations (Document Number)

Instructions and Manuals:

1SBC101027M6801

ABS Certificate: ABS_15-GE1349500-PDA_90682247

 CB Certificate:
 CB_SE_70856M1

 CCC Certificate:
 CCC_2010010304445623

 Data Sheet, Technical Information:
 1SBC101411D0201

 Declaration of Conformity - CE:
 1SBD250000U1000

 DNV Certificate:
 DNV-GL_E13871

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:
 1SBD251012E1000

 UL Certificate:
 UL_20140305-E312527_7_1

UL Listing Card: E312527

Classifications

E-nummer:	3211383
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

