

General Information

AF52-30-00-41 **Extended Product Type:** 1SBL367001R4100 **Product ID:** EAN: 3471523132306

Catalog Description: AF52-30-00-41 24-60V50/60HZ Contactor

Long Description: AF52 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. 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 L of IEC 60947-5-1. N.C. mirror contacts compliant with Annex F of IEC 60947-4-1) - Control circuit: AC 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: 3471523132306

Dimensions

Product Net Depth: 111 mm 125.5 mm **Product Net Height: Product Net Weight:** 0.970 kg **Product Net Width:** 55 mm

Container Information

Package Level 1 Units:

150 mm Package Level 1 Width: Package Level 1 Length: 150 mm Package Level 1 Height: 97 mm Package Level 1 Gross Weight: 0.97 kg Package Level 1 EAN: 3471523132306 Package Level 2 Units: 10 piece 250 mm Package Level 2 Width: Package Level 2 Length: 300 mm Package Level 2 Height: 300 mm Package Level 3 Units: 240 piece

Technical

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

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

Conventional Free-air Thermal

Current (Ith):

acc. to IEC 60947-4-1, Open Contactors q = 40 °C 105 A

Rated Operational Current AC-1 (Ie): (690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A

1 piece

Rated Operational Current AC-3 (I_B): (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

Rated Operational Power AC-3 (Pe): (220 / 230 / 240 V) 15 kW

(380 / 400 V) 22 kW (400 V) 22 kW (415 V) 30 kW

(440 V) 30 kW (500 V) 30 kW (690 V) 30 kW

Rated Short-time Withstand Current at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 A

(I_{cw}):

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

Maximum Breaking Capacity: cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 950 A

cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 600 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 (Uc):

50 Hz 24 ... 60 V 60 Hz 24 ... 60 V

Operate Time:

Between Coil De-energization and NC Contact Closing 19 ... 105 ms Between Coil De-energization and NO Contact Opening 17 ... 100 ms Between Coil Energization and NC Contact Opening 38 ... 95 ms Between Coil Energization and NO Contact Closing 42 ... 100 ms

Connecting Capacity Main Circuit:

Flexible with Insulated Ferrule 1/2x 4...35 mm²

Flexible with Ferrule 1/2x 4...35 mm²

Rigid 1/2x 6...35 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: Main Circuit 16 mm

Degree of Protection: acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10

Terminal Type: Screw Terminals

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 3 g closed position / 3 g open position

60068-2-6:

Resistance to Shock acc. to IEC

60068-2-27:

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

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

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) 80 A

(120 V AC) Single Phase 3 Hp Horsepower Rating UL/CSA: (240 V AC) Single Phase 10 Hp

(200 ... 208 V AC) Three Phase 15 Hp (220 ... 240 V AC) Three Phase 20 Hp (440 ... 480 V AC) Three Phase 40 Hp (550 ... 600 V AC) Three Phase 50 Hp

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

Main Circuit 35 in·lb

Certificates and Declarations (Document Number)

Instructions and Manuals: 1SBC101036M6801

ABS Certificate: ABS 15-GE1349500-PDA 90682247

BV Certificate: BV 2634H36994A **CB Certificate:** CB SE 77418

CCC Certificate: CCC_2012010304589737 Data Sheet, Technical Information: 1SBC100173C0201

Declaration of Conformity - CE: 1SBD250000U1000 **DNV Certificate:** DNV-GL_E13871

EAC Certificate: EAC_RU C-FR ME77 B01010

 GL Certificate:
 DNV-GL_E13871

 LR Certificate:
 LRS_1300087E1

 RINA Certificate:
 RINA_ELE084013XG

 RMRS Certificate:
 RMRS_1400682124

 RoHS Information:
 1SBD251021E1000

UL_20130926-E312527_14_1

UL Listing Card: UL_E312527

Classifications

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

