



# Electric Automation

Reference: AF30-30-00-13 Code: 1SBL277001R1300

AF30-30-00-13 100-250V50/60HZ-DC Contactor

Buy it at Electric Automation Network



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 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:	3471523111233
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085

#### Dimensions

Product Net Width:	45 mm
Product Net Depth:	86 mm

Product Net Height:	86 mm
Product Net Weight:	0.310 kg

### **Container Information**

Package Level 1 Units:	1 piece
Package Level 1 Width:	87 mm
Package Level 1 Length:	87 mm
Package Level 1 Height:	47 mm
Package Level 1 Gross Weight:	0.31 kg
Package Level 1 EAN:	3471523111233
Package Level 2 Units:	45 piece
Package Level 2 Width:	250 mm
Package Level 2 Length:	300 mm
Package Level 2 Height:	315 mm
Package Level 3 Units:	1080 piece

#### Technical

Number of Main Contacts NO:	3
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 Current (I <sub>th</sub> ):	acc. to IEC 60947-4-1, Open Contactors q = 40 $^{\circ}$ C 50 A
Rated Operational Current AC-1 (I <sub>e</sub> ):	(690 V) 40 °C 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(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 <sub>e</sub> ):	(220 / 230 / 240 V) 9 kW (380 / 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 (I <sub>cw</sub> ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A 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 (U <sub>i</sub> ):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> ):	6 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> ):	50 Hz 100 250 V 60 Hz 100 250 V DC Operation 100 250 V
Operate Time:	Between Coil De-energization and NC Contact Closing 1398 ms Between Coil De-energization and NO Contact Opening 1195 ms Between Coil Energization and NC Contact Opening 3890 ms Between Coil Energization and NO Contact Closing 4095 ms
Connecting Capacity-Main Circuit:	Flexible with Insulated Ferrule 1x 1.510 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 1.54 mm <sup>2</sup> Flexible with Ferrule 1/2x 1.510 mm <sup>2</sup> Rigid 1/2x 2.510 mm <sup>2</sup>
Connecting Capacity-Control Circuit:	Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.752.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.751.5 mm <sup>2</sup> Rigid 1/2x 12.5 mm <sup>2</sup>
Wire Stripping Length:	Control Circuit 10 mm Main Circuit 14 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

### Environmental

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
--------------------------	--

Maximum Operating Altitude Permissible:	3000 m
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
Resistance to Vibrations acc. to IEC 60068-2-6:	5300 Hz 4 g closed position / 2 g open position
RoHS Status:	Planned to follow EU Directive 2002/95/EC August 18, 2005 and amendment after 2008 Q1

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

# Certificates and Declarations (Document Number)

ABS Certificate:	ABS_15-GE1349500-PDA_90682247
CB Certificate:	CB_SE_70856M1
CCC Certificate:	CCC_2010010304445623
cUL Certificate:	UL_20091124-E312527-7-1
Declaration of Conformity - CE:	1SBD250165C1000
DNV Certificate:	DNV-GL_E13871
EAC Certificate:	EAC_RU C-FR ME77 B01010
GL Certificate:	DNV-GL_E13871
GOST Certificate:	GOST_POCCFR.ME77.B07175.pdf
LR Certificate:	LRS_1300087E1
RINA Certificate:	RINA_ELE084013XG
RMRS Certificate:	RMRS_1400682124
RoHS Information:	1SBD251012E1000

## Classifications

E-nummer:	3211382
ETIM 5:	EC000066 - Magnet contactor, AC-switching
UNSPSC:	39121529