



**Electric Automation**  
Automation specialists

Riferimento: AF80-30-00-41  
Codice: 1SBL397001R4100

AF80-30-00-41 24-60V50 / 60 HZ  
contattore

Acquista da Electric Automation Network



AF80 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  $U_c \text{ min.} \dots U_c \text{ max.}$  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.

### Ordering

EAN:	3471523132900
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085

### Dimensions

Product Net Width:	70 mm
Product Net Depth:	116 mm

Product Net Height:	125.5 mm
Product Net Weight:	1.220 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:	1.22 kg
Package Level 1 EAN:	3471523132900
Package Level 2 Units:	10 piece
Package Level 2 Width:	300 mm
Package Level 2 Length:	320 mm
Package Level 2 Height:	500 mm
Package Level 3 Units:	1296 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
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 $q = 40\text{ °C}$ 130 A
Rated Operational Current AC-1 ( $I_e$ ):	(690 V) $40\text{ °C}$ 125 A (690 V) $60\text{ °C}$ 100 A (690 V) $70\text{ °C}$ 85 A
Rated Operational Current AC-3 ( $I_e$ ):	(220 / 230 / 240 V) $60\text{ °C}$ 80 A (380 / 400 V) $60\text{ °C}$ 80 A (415 V) $60\text{ °C}$ 80 A (440 V) $60\text{ °C}$ 80 A (500 V) $60\text{ °C}$ 65 A (690 V) $60\text{ °C}$ 49 A (1000 V) $60\text{ °C}$ 25 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 ( $I_{cw}$ ):	<p>at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 780 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A</p>
Maximum Breaking Capacity:	<p>cos phi=0.45 (cos phi=0.35 for <math>I_e &gt; 100</math> A) at 440 V 1150 A</p> <p>cos phi=0.45 (cos phi=0.35 for <math>I_e &gt; 100</math> A) at 690 V 750 A</p>
Maximum Electrical Switching Frequency:	<p>AC-1 600 cycles per hour</p> <p>AC-2 / AC-4 150 cycles per hour</p> <p>AC-3 1200 cycles per hour</p>
Rated Insulation Voltage ( $U_i$ ):	<p>acc. to UL/CSA 600 V</p> <p>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V</p>
Rated Impulse Withstand Voltage ( $U_{imp}$ ):	8 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ ):	<p>50 Hz 24 ... 60 V</p> <p>60 Hz 24 ... 60 V</p>
Operate Time:	<p>Between Coil De-energization and NC Contact Closing 19 ... 105 ms</p> <p>Between Coil De-energization and NO Contact Opening 17 ... 100 ms</p> <p>Between Coil Energization and NC Contact Opening 38 ... 95 ms</p> <p>Between Coil Energization and NO Contact Closing 42 ... 100 ms</p>
Connecting Capacity-Main Circuit:	<p>Flexible with Insulated Ferrule 1/2x 6...50 mm<sup>2</sup></p> <p>Flexible with Ferrule 1/2x 6...50 mm<sup>2</sup></p> <p>Rigid 1x 6...70 mm<sup>2</sup></p> <p>Rigid 2x 6...50 mm<sup>2</sup></p>
Connecting Capacity-Control Circuit:	<p>Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup></p> <p>Flexible with Insulated Ferrule 1x 0.75...2.5 mm<sup>2</sup></p> <p>Flexible with Insulated Ferrule 2x 0.75...1.5 mm<sup>2</sup></p> <p>Rigid 1/2x 1...2.5 mm<sup>2</sup></p>
Wire Stripping Length:	Main Circuit 17 mm
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Terminal Type:	Screw Terminals

## Environmental

Ambient Air Temperature:	<p>Close to Contactor for Storage -60...+80 °C</p> <p>Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C</p> <p>Close to Contactor without Thermal O/L Relay -40 ... +70 °C</p>
Maximum Operating Altitude Permissible:	3000 m

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
Resistance to Vibrations acc. to IEC 60068-2-6:	5...300 Hz 3 g closed position / 3 g open position

## 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
Tightening Torque UL/CSA:	Control Circuit 11 in·lb Main Circuit 53 in·lb

## Certificates and Declarations (Document Number)

ABS Certificate:	ABS_15-GE1349500-PDA_90682247
BV Certificate:	BV_2634H36994A
CB Certificate:	CB_SE_77417
CCC Certificate:	CCC_2013010304646569
cUL Certificate:	UL_20130926-E312527_14_1
Declaration of Conformity - CE:	1SBD250176C3000
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

## Classifications

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