

General Information

Extended Product Type:	AF96-30-00-41
Product ID:	1SBL407001R4100
EAN:	3471523133204
Catalog Description:	AF96-30-00-41 24-60V50/60HZ Contactor
Long Description:	AF96 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 24500 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. miror 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:	3471523133204
Dimensions	
Product Net Depth:	116 mm
Product Net Height:	125.5 mm
Product Net Weight:	1.220 kg
Product Net Width:	70 mm
Container Information	
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:	3471523133204
Package Level 2 Units:	8 piece
Package Level 2 Width:	250 mm
Package Level 2 Length:	300 mm
Package Level 2 Height:	300 mm
Package Level 3 Units:	192 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
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 °C 130 A
Rated Operational Current AC-1 (I _e):	(690 V) 40 °C 130 A (690 V) 60 °C 105 A (690 V) 70 °C 90 A
Rated Operational Current AC-3 (I _e):	(380 / 400 V) 60 °C 96 A (415 V) 60 °C 96 A (440 V) 60 °C 96 A (500 V) 60 °C 80 A (690 V) 60 °C 57 A (1000 V) 60 °C 30 A
Rated Operational Power AC-3 (P _e):	(220 / 230 / 240 V) 25 kW (380 / 400 V) 45 kW (400 V) 45 kW

	(415 V) 55 kW
	(440 V) 55 kW (500 V) 55 kW (690 V) 55 kW
Rated Short-time Withstand Current (I _{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 780 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1150 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 750 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) 1000 V
Rated Impulse Withstand Voltage (U _{imp}):	8 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U _c):	50 Hz 24 60 V 60 Hz 24 60 V
Operate Time: Connecting Capacity Main Circuit:	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 Flexible with Insulated Ferrule 1/2x 650 mm ²
connecting objacity main oncert.	Flexible with Ferrule 1/2x 650 mm ² Rigid 1x 670 mm ² Rigid 2x 650 mm ²
Connecting Capacity Control Circuit	: Flexible with Ferrule 1/2x 0.75 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 1.5 mm ² Rigid 1/2x 1 2.5 mm ²
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
Number of Main Contacts NO:	3
Environmental	
	Category B according to IEC 60947-1 Annex Q 3000 m
Environmental Climatic Withstand: Maximum Operating Altitude Permissible:	Category B according to IEC 60947-1 Annex Q
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC	Category B according to IEC 60947-1 Annex Q 3000 m
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: C1 25 g
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: B1 5 g Close to Contactor for Storage -60+80 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-7:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: B1 5 g Close to Contactor for Storage -60+80 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: B1 5 g Close to Contactor for Storage -60+80 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor Fitted with Thermal O/L Relay -40 +70 °C (120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 20 Hp (200 208 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 30 Hp (440 480 V AC) Three Phase 60 Hp
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature: Technical UL/CSA Horsepower Rating UL/CSA:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position Closed, Shock Direction: A 25 g Closed, Shock Direction: B1 25 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 Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor without Thermal O/L Relay -40 +70 °C (120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 30 Hp (200 208 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 30 Hp (240 480 V AC) Three Phase 75 Hp Control Circuit 11 in·lb Main Circuit 53 in·lb
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature: Technical UL/CSA Horsepower Rating UL/CSA:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position Closed, Shock Direction: A 25 g Closed, Shock Direction: B1 25 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 Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor without Thermal O/L Relay -40 +70 °C (120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 30 Hp (200 208 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 30 Hp (240 480 V AC) Three Phase 75 Hp Control Circuit 11 in·lb Main Circuit 53 in·lb
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature: <u>Technical UL/CSA</u> Horsepower Rating UL/CSA: Tightening Torque UL/CSA: <u>Certificates and Declarations (Docession</u>)	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: B1 5 g 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 (120 V AC) Single Phase 7-1/2 Hp (200 208 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 60 Hp (550 600 V AC) Three Phase 75 Hp Control Circuit 11 in·lb Main Circuit 53 in·lb Document Number)
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature: <u>Technical UL/CSA</u> Horsepower Rating UL/CSA: Tightening Torque UL/CSA: <u>Certificates and Declarations (Doc</u> Instructions and Manuals:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: C1 25 g 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 (120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 7-1/2 Hp (220 208 V AC) Three Phase 30 Hp (220 208 V AC) Three Phase 30 Hp (220 208 V AC) Three Phase 30 Hp (240 480 V AC) Three Phase 75 Hp Control Circuit 11 in-Ib Main Circuit 53 in-Ib Document Number) 1SBC101036M6801
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature: <u>Technical UL/CSA</u> Horsepower Rating UL/CSA: Tightening Torque UL/CSA: <u>Certificates and Declarations (Doclarations (Doclarations and Manuals:</u> ABS Certificate:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position Closed, Shock Direction: A 25 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: B1 5 g Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C Close to Contactor without Thermal O/L Relay -40 +70 °C (120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 20 Hp (200 208 V AC) Three Phase 30 Hp (200 208 V AC) Three Phase 30 Hp (200 400 V AC) Three Phase 30 Hp (200 400 V AC) Three Phase 30 Hp (200 400 V AC) Three Phase 30 Hp (200 208 V AC) Three Phase 30 Hp
Environmental Climatic Withstand: Maximum Operating Altitude Permissible: Resistance to Vibrations acc. to IEC 60068-2-6: Resistance to Shock acc. to IEC 60068-2-27: Ambient Air Temperature: <u>Technical UL/CSA</u> Horsepower Rating UL/CSA: Tightening Torque UL/CSA: <u>Certificates and Declarations (Doc</u> Instructions and Manuals: ABS Certificate: BV Certificate:	Category B according to IEC 60947-1 Annex Q 3000 m 5 300 Hz 3 g closed position / 3 g open position 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: C1 25 g Close to Contactor for Storage -60+80 °C 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 -25 +60 °C Close to Contactor without Thermal O/L Relay -40 +70 °C (120 V AC) Single Phase 7-1/2 Hp (240 V AC) Single Phase 20 Hp (200 208 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 30 Hp (220 240 V AC) Three Phase 30 Hp (240 480 V AC) Three Phase 60 Hp (550 600 V AC) Three Phase 75 Hp Control Circuit 11 in Ib Main Circuit 53 in Ib bcument Number) 1SBC101036M6801 ABS_15-GE1349500-PDA_90682247 BV_2634H36994A

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 Certificate:	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

