

PRODUCT-DETAILS

## AE50-30-11 110V DC AE50-30-11 110V DC Contactor



General Information	
Extended Product Type	AE50-30-11 110V DC
Product ID	1SBL359001R8611
EAN	3471522104861
Catalog Description	AE50-30-11 110V DC Contactor
Long Description	AE50 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC / 1000 V AC or 220 V DC. The contactors can also be used for many other applications such as isolation, capacitor switching, lighting. The AE series 1 -stack 3-pole contactors are of the block type design Main poles and auxiliary contact blocks: 3 main poles and 2 built-in auxiliary contacts, front-mounted add-on auxiliary contact blocks - Control circuit: DC operated with standard double-winding DC coils (with add-on factory-mounted lagging contact for insertion of the "holding" winding) - Accessories: a wide range of accessories is available.

	factory-mounted lagging contact for insertion of the "holding" winding) - Accessories: a wide range of accessories is available.
Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Popular Downloads	
Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	FPTC407700P0003

Product Net Height	Dimensions	
Length   Product Net Height	Product Net Width	94 mm
Technical	Product Net Depth / Length	108 mm
Number of Main Contacts NO	Product Net Height	110 mm
Number of Main Contacts  NO  Number of Main Contacts  NC  Number of Auxiliary Contacts NO  Number of Auxiliary Contacts NO  Number of Auxiliary Contacts NC  Standards  Devices complying with international standards [EC 947-11 - 947-41 - 1 and European standards EN 50 947-11 - 60 947-41 - 1 and European standards EN 50 947-11 - 60 947-41. 1 Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-41. Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-41. No 947-41 - 1 and European standards EN 50 947-11 - 60 947-41. No 947-41.	Product Net Weight	1.24 kg
Number of Main Contacts  NO  Number of Main Contacts  NC  Number of Auxiliary Contacts NO  Number of Auxiliary Contacts NO  Number of Auxiliary Contacts NC  Standards  Devices complying with international standards [EC 947-11 - 947-41 - 1 and European standards EN 50 947-11 - 60 947-41 - 1 and European standards EN 50 947-11 - 60 947-41. 1 Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-41. Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-41. No 947-41 - 1 and European standards EN 50 947-11 - 60 947-41. No 947-41.		
No Number of Main Contacts No	Technical	
Number of Auxiliary Contacts NO Standards Devices complying with international standards IEC 947-1, 1947-4-1 and European standards EN 69 947-1 (69 947-4-1, Electromagnetic compatibility) (EMC) according to amendment A11 to IEC 947-1, EN 69 947-1 and amendment 2 to IEC 947-1. Rated Operational Voltage Rated Frequency (f) Auxiliary Circuit 698 0 V Main Circuit 1000 V Alaxiliary Circuit 698 0 V Main Circuit 1000 V Alaxiliary Circuit 698 0 V Main Circuit 50 / 60 Hz Conventional Free-air Acc. to IEC 60947-4-1, Open Contactors 0 = 40 °C 100 A Rated Operational Current (690 V) 40 °C 100 A (690 V) 55 °C 65 A (690 V) 70 °C 70 A (690 V) 55 °C 65 A (690 V) 70 °C 70 A (690 V) 55 °C 65 A (690 V) 55	Number of Main Contacts NO	3
Contacts NO	Number of Main Contacts NC	0
Devices complying with international standards   EC 947-1   947-4-1 and European standards   EV 947-1   160 947-4-1   160 947-5-1   160 947-	Number of Auxiliary Contacts NO	1
European standards E N 60 947-1   f.00 947-1   f.01 947-1   f.1 Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, Inc. 1000 V Main Circuit 1000 V Main Circuit 50 / 60 Hz Conventional Free-air	Number of Auxiliary Contacts NC	1
Main Circuit 1000 V	Standards	European standards EN 60 947-1 / 60 947-4-1. Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, EN 60 947-1 and
Main Circuit 50 / 60 Hz           Conventional Free-air         acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 10 A           Thermal Current (I <sub>(h</sub> )         acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 10 A           Rated Operational Current         (690 V) 40 °C 100 A           AC-1 (I <sub>e</sub> )         (690 V) 55 °C 85 A           Rated Operational Current         (415 V) 55 °C 50 A           AC-3 (I <sub>e</sub> )         (440 V) 55 °C 50 A           AC-3 (I <sub>e</sub> )         (690 V) 55 °C 50 A           AC-3 (I <sub>e</sub> )         (690 V) 55 °C 50 A           Rated Operational Power         (415 V) 25 kW           AC-3 (P <sub>e</sub> )         (440 V) 25 kW           AC-3 (P <sub>e</sub> )         (440 V) 25 kW           Rated Operational Power         (415 V) 25 kW           AC-3 (P <sub>e</sub> )         (440 V) 25 kW           (890 V) 30 kW         (890 V) 30 kW           (890 V) 30 kW         (890 V) 2 A           (20 / 230 / 240 V) 15 kW         (890 V) 2 A           (AC-3 (P <sub>e</sub> )         8 x le AC-3           Rated Departional Current         (500 V) 2 A           (AC-3 (P <sub>e</sub> )         (690 V) 2 A           (690 V) 2	Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 1000 V
Thermal Current (I <sub>th</sub> )  Rated Operational Current  (690 V) 40 °C 100 A  AC-1 (I <sub>e</sub> )  (690 V) 70 °C 70 A  Rated Operational Current  (415 V) 55 °C 55 A (690 V) 70 °C 70 A  Rated Operational Current  (415 V) 55 °C 50 A (500 V) 55 °C 45 A (500 V) 55 °C 50 A (500 V) 30 kW (220 / 230 / 240 V) 15 kW (220 / 230 / 240 V) 2 A (24 / 127 V) 6 A (25 / 124 V) 4 A (26 / 125 V) 6 V 6 V 6 V 6 V 6 V 6 V 6 V 6 V 6 V	Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
AC-1 (Ie)  Rated Operational Current  (415 V) 55 °C 50 A  (690 V) 70 °C 70 A  Rated Operational Current  (415 V) 55 °C 45 A (500 V) 55 °C 45 A (500 V) 55 °C 45 A (690 V) 75 °C 24 A (690 V) 75 °C 24 A (690 V) 75 °C 24 A (690 V) 55 °C 25 A (1000 V) 55 °C 23 A (1000 V) 55 °C 23 A (220 / 230 / 240 V) 55 °C 53  Rated Operational Power  AC-3 (Pe)  (440 V) 25 kW (500 V) 30 kW (500 V) 30 kW (690 V) 30 kW (1000 V) 30 kW (220 / 230 / 240 V) 15 ** (230 / 240 V) 15 ** (240 / 127 V) 6 ** (240 / 127 V	Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 100 A acc. to IEC 60947-5-1, Θ = 40 °C 16 A
AC-3 (l <sub>e</sub> )  AC-3 (l <sub>e</sub> )  (440 \forall 55 \cold 24  A (500 \forall ) 55 \cold 24 \text{ A (500 \forall ) 55 \cold 24 \text{ A (690 \forall ) 55 \cold 23 \text{ A (1000 \forall ) 55 \cold 23 \text{ A (1000 \forall ) 55 \cold 23 \text{ A (380 \forall 40 \forall ) 55 \cold 23 \text{ A (380 \forall 40 \forall ) 55 \cold 23 \text{ A (240 \forall ) 55 \cold 23 \text{ A (240 \forall ) 55 \cold 23 \text{ A (240 \forall ) 25 \cold C3 \text{ A (240 \forall ) 30 \cold K \text{ (380 \forall 400 \forall ) 22 \cold K \text{ (380 \forall 400 \forall ) 22 \cold K \text{ (380 \forall 400 \forall ) 22 \cold K \text{ (380 \forall 400 \forall ) 22 \cold K \text{ (220 \forall 230 \forall 240 \forall \forall \forall 1 \text{ (380 \forall 400 \forall ) 3 \cold K \text{ (220 \forall 230 \forall 40 \forall \forall 1 \text{ (380 \forall 400 \forall ) 3 \cold K \text{ (220 \forall 240 \forall \forall 1 \forall 4 \forall 2 \text{ (220 \forall 240 \forall \forall 1 \forall 4 \forall 2 \text{ (220 \forall 240 \forall \forall 1 \forall 4 \forall 4 \forall 2 \forall \forall 4 \	Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 100 A (690 V) 55 °C 85 A (690 V) 70 °C 70 A
AC-3 (Pe)  AC-3 (Pe)  (A40 V) 25 kW (500 V) 30 kW (1000 V) 30 kW (300 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW  Rated Breaking Capacity AC-3  Rated Making Capacity 10 x le AC-3  Rated Operational Current AC-15 (Ie) (500 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (24 / 127 V) 6 A (220 / 240 V) 4 A (24 / 127 V) 6 A (220 / 240 V) 4 A (24 / 127 V) 6 A (250 / 240 V) 4 A (250	Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 50 A (440 V) 55 °C 45 A (500 V) 55 °C 45 A (690 V) 55 °C 35 A (1000 V) 55 °C 23 A (380 / 400 V) 55 °C 50 A (220 / 230 / 240 V) 55 °C 50
AC-3  Rated Making Capacity AC-3  Rated Operational Current (500 V) 2 A AC-15 (I <sub>e</sub> ) (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A  Short-Circuit Protective Auxiliary Circuit - gG Type Fuses 10 A Devices GG Type Fuses 10 A Withstand Current Low Voltage (I <sub>cw</sub> ) at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s min 110 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 1 s 1000 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 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A for 0.1 s 140 A for 1 s 100 A	Rated Operational Power AC-3 (P <sub>e</sub> )	
AC-3  Rated Operational Current (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A  Short-Circuit Protective Auxiliary Circuit - gG Type Fuses 10 A Devices  Rated Short-time at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A Withstand Current Low Voltage (I <sub>cw</sub> ) 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 1 s 1000 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 1 s 1000 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 370 A for 0.1 s 140 A for 1 s 100 A	Rated Breaking Capacity AC-3	8 x le AC-3
AC-15 (I <sub>e</sub> )  (690 V) 2 A  (24 / 127 V) 6 A  (220 / 240 V) 4 A  (380 / 400 V) 3 A  Short-Circuit Protective  Devices  Auxiliary Circuit - gG Type Fuses 10 A  gG Type Fuses 10 A  Rated Short-time  at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A  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 1 s 1000 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 1 s 1000 A  at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A  for 0.1 s 140 A  for 1 s 100 A	Rated Making Capacity AC-3	10 x le AC-3
Short-Circuit Protective Devices  Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )  Auxiliary Circuit - gG Type Fuses 10 A  at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A  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 1 s 1000 A  at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 370 A  for 0.1 s 140 A  for 1 s 100 A  Maximum Breaking  Cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1300 A	Rated Operational Current AC-15 (I <sub>e</sub> )	(220 / 240 V) 4 A
Rated Short-time  at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A  Withstand Current Low  Voltage (I <sub>cw</sub> )  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 1 s 1000 A  at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 370 A  for 0.1 s 140 A  for 1 s 100 A  Maximum Breaking  cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1300 A	Short-Circuit Protective Devices	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 100 A
Maximum Breaking cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1300 A	Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A 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 370 A for 0.1 s 140 A
	Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1300 A

Manifestore Electrical	(AQ 4) 200 stales as a keyr
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Rated Operational Current DC-13 (I <sub>e</sub> )	(24 V) 6 / 144 A (48 V) 2.8 / 134 A (72 V) 1 / 72 A (125 V) 0.55 / 69 A (250 V) 0.3 / 75 W
Rated Insulation Voltage $(U_i)$	acc. to IEC 60947-4-1 1000 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	8 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	DC Operation 110 V
Coil Consumption	Average Holding Value, from Warm State 4 W Average Pull-in Value, from Cold State 200 W Pull-in at Max. Rated Control Circuit Voltage DC 200 W
Operate Time	Between Coil De-energization and NC Contact Closing 8 18 ms Between Coil De-energization and NO Contact Opening 5 15 ms Between Coil Energization and NC Contact Opening 10 27 ms Between Coil Energization and NO Contact Closing 30 30 ms
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M6 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Cable End 6 16 mm² Rigid Cable 6 25 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 2.5 mm² Rigid Cable 1 4 mm²
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Connecting Terminals (delivered in open position) Main Poles	M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connector
Terminal Type	Screw Terminals
Technical UL/CSA	
General Use Rating UL/CSA	(600 V AC) 80 A
Horsepower Rating UL/CSA	(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
Environmental	
Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 55 °C Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 °C Close to Contactor without Thermal O/L Relay (Uc) -40 70 °C Close to Contactor for Storage -60 +80 °C
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible	Without Derating 3000 m

## Certificates and Declarations

RoHS Status

Following EU Directive 2011/65/EU

ASEFA Certificate	ASEFA_10801-10901
CB Certificate	CB_CN45323
CCC Certificate	CCC_2018010304129269
CQC Certificate	CQC2018010304129269
Declaration of Conformity - CCC	2020980304001621
Declaration of Conformity - CE	1SBD250806U1000
Declaration of Conformity - UKCA	1SBD250823U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
GOST Certificate	GOST_POCCFRME77B07175
LOVAG Certificate	LOVAG_FR01002
RMRS Certificate	RMRS_0507015250
UL Certificate	UL-US-L312527-1101-21215991-6 UL-CA-2139468-4
UL Listing Card	UL_E312527

Container Information	
Package Level 1 Units	1 piece
Package Level 1 Width	140 mm
Package Level 1 Depth / Length	146 mm
Package Level 1 Height	96 mm
Package Level 1 Gross Weight	1.24 kg
Package Level 1 EAN	3471522104861
Package Level 2 Units	box 20 piece
Package Level 2 Width	503 mm
Package Level 2 Depth / Length	153 mm
Package Level 2 Height	307 mm
Package Level 2 Gross Weight	24.8 kg
Package Level 3 Units	160 piece

Classifications Object Classification Code	
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529

## Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors$ 

