

PRODUCT-DETAILS

AE50-30-11 24V DC AE50-30-11 24V DC Contactor



Extended Product Type	AE50-30-11 24V DC
Product ID	1SBL359001R8111
EAN	3471522104816
Catalog Description	AE50-30-11 24V DC Contacto
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

	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.
Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Popular Downloads	
Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	FPTC407700P0003

Dimensions	
Product Net Width	94 mm
Product Net Depth / Length	108 mm
Product Net Height	110 mm
Product Net Weight	1.24 kg
Technical	
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Standards	Devices complying with international standards IEC 947-1 / 947-4-1 and 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 amendment 2 to IEC 947-4-1
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 1000 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Fhermal Current (I _{th})	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 100 A acc. to IEC 60947-5-1, Θ = 40 °C 16 A
Rated Operational Current AC-1 (I _e)	(690 V) 40 °C 100 A (690 V) 55 °C 85 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (I _e)	(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 53
Rated Operational Power AC-3 (P _e)	(415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 kW (1000 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW
Rated Breaking Capacity AC-3	8 x le AC-3
Rated Making Capacity AC-3	10 x le AC-3
Rated Operational Current AC-15 (I _e)	(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 Devices	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 100 A
Rated Short-time Withstand Current Low Voltage (I _{cw})	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 3 s 370 A for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1300 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 630 A

Switching Frequency (AC-21 AC-41 180 goldes per hot (AC-3) 300 cycles		
DC-13 (I _E) Rated Insulation Voltage (U) Rated Insulation Volta		(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Rated Impulse Withstand Voltage (U _{mp}) Mechanical Durability S millic Maximum Mechanical Switching Frequency Rated Control Circuit Maximum Mechanical Switching Frequency Rated Control Circuit DC Operation 24 Voltage (U _c) Coil Consumption Average Holding Value, from Warm State 4 Values of the Control Circuit Coil Consumption Average Publin Value, from Coid State 200 Voltage (U _c) Operate Time Between Coil De-energization and NC Contact Closing 8 15 m Between Coil De-energization and NC Contact Closing 8 15 m Between Coil De-energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Between Coil Energization and NC Contact Closing 8 15 m Mounting Pail acc. to IEC 6071 TH75-25 (7s x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (7s x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (7s x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (7s x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (7s x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (7s x 25 mm Mounting Rail) acc. to IEC 6072 IEC 60947-1, IEC 60529 IEC 60		(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
Voltage (U _{mp}) Mechanical Durability 5 million Maximum Mechanical 3600 cycles per hor Switching Frequency DC Operation 24 Rated Control Circuit DC Operation 24 Voltage (U _c) Average Holding Value, from Warm State 40 of North Circuit Voltage DC 26 Operate Time Between Coil De-energization and NC Contact Closing 818 m Between Coil De-energization and NC Contact Closing 818 m Between Coil De-energization and NC Contact Opening 1027 m Between Coil Energization and NC Contact Opening 1027 m Between Coil Energization and NC Contact Closing 3030 m Between Coil Energization And School		acc. to IEC 60947-4-1 1000 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Maximum Mechanical Switching Frequency Rated Control Circuit Voltage (U_) Coil Consumption Average Holding Value, from Warm State 41 Average Pull-in Value, from Coid State 200 Pull-in at Max. Rated Control Circuit Voltage (D_) Operate Time Between Coil De-energization and NC Contact Closing 8 18 in Between Coil De-energization and NC Contact Closing 8 18 in Between Coil De-energization and NC Contact Closing 8 18 in Between Coil De-energization and NC Contact Closing 8 18 in Between Coil De-energization and NC Contact Closing 8 18 in Between Coil Energ		8 kV
Switching Frequency Voltage (U_c) Coil Consumption Average Piolin Value, from Warm State 4 Navarage Piolin Value, from Coil State 200. Pull-in at Max. Rated Control Circuit Voltage DC 200. Operate Time Between Coil De-energization and NC Contact Closing 81 for Between Coil De-energization and NC Contact Closing 81 for Between Coil Energization and NC Contact Closing 81 for Between Coil Energization and NC Contact Closing 81 for Between Coil Energization and NC Contact Closing 81 for Between Coil Energization and NC Contact Closing 83 for Between Coil Energization and NC Contact Closing 83 for Between Coil Energization and NC Contact Closing 83 for Mounting Not NC Contact Closing 83 for Mounting Ratil) acc. to IEC 6071 Mounting on DIN Ratil Mounting by Screws (not supplied) Connecting Capacity Main Flexible with Cable End 616 fm Rigid Cable 525 fm Rigid Cable 625 fm Rigid Cable 625 fm Rigid Cable 625 fm Auxiliary Circuit Connecting Capacity Flexible with Cable End 6.7.52.5 fm Auxiliary Circuit Degree of Protection acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IPC	Mechanical Durability	5 million
Voltage (U_c)		3600 cycles per hour
Average Pull-in Value, from Cold State 200		DC Operation 24 V
Between Coil De-energization and NO Contact Opening 5 15 n Between Coil Energization and NO Contact Closing 30 30 n Between Coil Energization and NO Contact Closing 30 30 n Mounting on DIN Rail TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 6071 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 6071 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 6071 Mounting by Screws (not supplied) Connecting Capacity Main Circuit Plexible with Cable End 6 16 mm Circuit Rigid Cable 6 25 mm Rigid Cable 6 25 mm Rigid Cable 1 4 mm Pegree of Protection acc. to IEC 60529, IEC 60047-1, EN 60529 Auxiliary Terminals IP2 acc. to IEC 60529, IEC 60047-1, EN 60529 Auxiliary Terminals IP3 Connecting Terminals (delivered in open position) Main Poles Terminal Type Screw Terminal Technical UL/CSA General Use Rating UL/CSA Ciose to Contactor Fitted with Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 55 of Close to Contactor without Thermal O/L Relay -25 50 of Close to Contactor without Thermal O/L Relay -25 50 of Close to Contactor without Thermal O/L Relay -25 50 of Close to Contactor without Thermal O/L Relay -25 50 of Close to Contactor without Thermal O/L Relay -25 50 of Close to Contactor without Thermal O/L Relay -25 50 of Close to Contactor without Thermal O	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
TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 6071 Supplied	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
Supplied) Connecting Capacity Main Circuit Connecting Capacity Connecting Capacity Flexible with Cable End 6 16 mr. Rigid Cable 6 25 mm Auxiliary Circuit Degree of Protection Connecting Terminals Connecting Terminals (delivered in open position) Main Poles Terminal Type Technical UL/CSA General Use Rating UL/CSA General Use Rating UL/CSA Horsepower Rating UL/CSA General Use Rating UL/CSA Connecting Terminals Connecting Terminals Connecting Terminals (acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP2 Connecting Terminals (delivered in open position) Main Poles Terminal Type Screw Terminal (600 V AC) 80 UL/CSA Horsepower Rating UL/CSA General Use Rating UL/CSA Horsepower Rating UL/CSA Connecting Terminals (200 208 V AC) Three Phase 15 to 10 to 220 240 V AC) Three Phase 20 to 10 to 20 to	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
Circuit Connecting Capacity Auxiliary Circuit Degree of Protection Connecting Terminals (delivered in open position) Main Poles Terminal Type Technical UL/CSA General Use Rating UL/CSA General Use Rating UL/CSA Connecting C		2 x M6 screws placed diagonally
Auxiliary Circuit Rigid Cable 1 4 mm Degree of Protection acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP2 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP2 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP1 connecting Terminals (delivered in open position) Main Poles M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connect (delivered in open position) Main Poles Screw Terminal Type Screw		Flexible with Cable End 6 16 mm² Rigid Cable 6 25 mm²
Connecting Terminals P1		Flexible with Cable End 0.75 2.5 mm² Rigid Cable 1 4 mm²
Close to Contactor Without Thermal O/L Relay -25 55 Close to Contactor Without Thermal O/L Relay -25 55 Close to Contactor without Thermal O/L Relay -25 55 Close to Contactor without Thermal O/L Relay -25 50 Close to Contactor for Storage -60 +80 Climatic Withstand Amximum Operating Altitude Permissible Amximum Operating 3000 of Altitude Permissible Acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Amximum Operating Altitude Permissible Acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Amximum Operating Altitude Permissible Acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Amximum Operating Altitude Permissible Acc. to IEC 60068-2-30 and 6006	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
Technical UL/CSA General Use Rating UL/CSA Horsepower Rating UL/CSA Horsepower Rating UL/CSA (200 208 V AC) Three Phase 15 h (220 240 V AC) Three Phase 20 h (240 480 V AC) Three Phase 20 h (550 600 V AC) Three Phase 50 h Environmental Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Climatic Withstand acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Maximum Operating Altitude Permissible	(delivered in open	M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connector
General Use Rating UL/CSA Horsepower Rating UL/CSA (200 208 V AC) Three Phase 15 h (220 240 V AC) Three Phase 20 h (440 480 V AC) Three Phase 20 h (550 600 V AC) Three Phase 20 h (550 600 V AC) Three Phase 50 h Environmental Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Climatic Withstand acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Maximum Operating Altitude Permissible	Terminal Type	Screw Terminals
General Use Rating UL/CSA Horsepower Rating UL/CSA (200 208 V AC) Three Phase 15 h (220 240 V AC) Three Phase 20 h (440 480 V AC) Three Phase 20 h (550 600 V AC) Three Phase 20 h (550 600 V AC) Three Phase 50 h Environmental Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Climatic Withstand acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Maximum Operating Altitude Permissible		
UL/CSA Horsepower Rating UL/CSA (200 208 V AC) Three Phase 15 h (220 240 V AC) Three Phase 20 h (440 480 V AC) Three Phase 40 h (550 600 V AC) Three Phase 50 h Environmental Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay -25	Technical UL/CSA	
UL/CSA (220 240 V AC) Three Phase 20 h (440 480 V AC) Three Phase 40 h (550 600 V AC) Three Phase 50 h Environmental Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Climatic Withstand acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Maximum Operating Altitude Permissible		(600 V AC) 80 A
Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Close to Contactor f		(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
Ambient Air Temperature Close to Contactor Fitted with Thermal O/L Relay -25 55 ° Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Close to Contactor f		
Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 55 ° Close to Contactor without Thermal O/L Relay (Uc) -40 70 ° Close to Contactor for Storage -60 +80 ° Climatic Withstand Azc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification Maximum Operating Altitude Permissible	Environmental	
Maximum Operating Without Derating 3000 Altitude Permissible	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
Altitude Permissible	Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
RoHS Status Following EU Directive 2011/65/E		Without Derating 3000 m
	RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations	
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	3471522104816
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

 $\label{eq:low-Voltage-Products} \begin{tabular}{ll} Low Voltage Products and Systems \rightarrow Control Products \rightarrow Contactors \rightarrow Block Contactors \rightarrow Mining Solutions \rightarrow Underground Mining Solutions \rightarrow Electric Trucks \rightarrow Contactors \rightarrow Contactor$

