

PRODUCT-DETAILS

# AE50-30-11 24V DC

## AE50-30-11 24V DC Contactor



### General Information

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

Long Description	<p>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.</p>
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### 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	Main Circuit 1000 V
Rated Frequency (f)	Supply Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 100 A acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 100 (690 V) 55 °C 85 (690 V) 70 °C 70
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 53
Rated Operational Power AC-3 (P <sub>e</sub> )	(415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x I <sub>e</sub> AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x I <sub>e</sub> AC-3
Rated Operational Current AC-15 (I <sub>e</sub> )	(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
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 1300 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 630 A
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 A
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V

(U <sub>i</sub> )	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	DC Operation 24 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
Connecting Capacity Main Circuit	Flexible with Cable End 6 ... 16 mm <sup>2</sup> Rigid Cable 6 ... 25 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup> Rigid Cable 1 ... 4 mm <sup>2</sup>
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
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## 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 U <sub>c</sub> ) -40 ... 55 °C Close to Contactor without Thermal O/L Relay (U <sub>c</sub> ) -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
RoHS Status	Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

ASEFA Certificate	ASEFA_10801-10901
CB Certificate	CB_CN45323
CCC Certificate	CCC_2018010304129269
CQC Certificate	CQC2018010304129269
CSA Certificate	CSA_1033838_LR056745
Declaration of Conformity - CCC	2020980304001621
Declaration of Conformity - CE	1SBD250804U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
Environmental Information	1SBD250017E1003
GOST Certificate	GOST_POCCFRME77B07175
Instructions and Manuals	FPTC407700P0003

LOVAG Certificate	LOVAG_FR01002
RMRS Certificate	RMRS_0507015250
RoHS Information	1SBD250804U1000
UL Certificate	UL_20120830-E312527-10-1
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	Q
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529

### Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors  
 Mining Solutions → Underground Mining Solutions → Electric Trucks

