



PRODUCT-DETAILS

# AS16-30-01-23

## AS16-30-01-23 110V50/60HZ Contactor



General Information	
Extended Product Type	AS16-30-01-23
Product ID	1SBL121001R2301
EAN	3471523037236
Catalog Description	AS16-30-01-23 110V50/60HZ Contactor
Long Description	AS16 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC or 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads. The AS... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, 1 built-in auxiliary contact, front-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 with laminated magnet circuit - Accessories: a wide range of accessories is available.

Ordering	
Minimum Order Quantity	40 piece
Customs Tariff Number	85364900

Popular Downloads	
Instructions and Manuals	1SBC101020M9701

Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	72.5 mm
Product Net Height	68 mm
Product Net Weight	0.22 kg

Technical	
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	1
Standards	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 25 A acc. to IEC 60947-5-1, $\Theta$ = 40 °C 10 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 24 A (690 V) 60 °C 20 A (690 V) 70 °C 16 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 60 °C 15.5 A (440 V) 60 °C 13.6 A (500 V) 60 °C 12.5 A (690 V) 60 °C 9 A (380 / 400 V) 60 °C 15.5 A (220 / 230 / 240 V) 60 °C 15.7 A
Rated Operational Power AC-3 (P <sub>e</sub> )	(400 V) 7.5 kW (415 V) 7.5 kW (440 V) 7.5 kW (500 V) 7.5 kW (690 V) 7.5 kW (220 / 230 / 240 V) 4 kW
Rated Operational Current AC-15 (I <sub>e</sub> )	(500 V) NC 2 (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 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 124 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 24 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 55 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 75 A for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 155 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 90 A
Maximum Electrical	(AC-1) 600 cycles per hour

Switching Frequency	(AC-15) 1200 cycles per hour (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Rated Operational Current DC-13 (I <sub>e</sub> )	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V 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> )	Auxiliary Circuit 6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 110 V 60 Hz 110 V
Operate Time	Between Coil De-energization and NC Contact Closing 7 ... 22 ms Between Coil De-energization and NO Contact Opening 5 ... 19 ms Between Coil Energization and NC Contact Opening 6 ... 18 ms Between Coil Energization and NO Contact Closing 9 ... 24 ms
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 4 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 9 mm Control Circuit 9 mm Main Circuit 9 mm
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 IP20 IP20
Terminal Type	Screw Terminals

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 20 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 3/4 hp (200 ... 208 V AC) Three Phase 3 hp (220 ... 240 V AC) Three Phase 5 hp (240 V AC) Single Phase 2 hp (440 ... 480 V AC) Three Phase 10 hp (550 ... 600 V AC) Three Phase 10 hp
Tightening Torque UL/CSA	Auxiliary Circuit 9 in-lb Control Circuit 9 in-lb Main Circuit 9 in-lb

## Environmental

Ambient Air	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C
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Temperature	Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 10 g Closed, Shock Direction: C1 20 g Closed, Shock Direction: C2 20 g Open, Shock Direction: B1 5 g Open, Shock Direction: C1 9 g Open, Shock Direction: C2 14 g Shock Direction: A 20 g Shock Direction: B2 15 g
Resistance to Vibrations	3g Closed Position & 2g Open Position 5 ... 300 Hz

## Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## Certificates and Declarations

CB Certificate	CB_CN13475-M1
CCC Certificate	CCC_2007010309251577
CQC Certificate	CQC2007010309251577
Declaration of Conformity - CCC	2020980304001224
Declaration of Conformity - CE	1SBD250014U1000
Declaration of Conformity - UKCA	1SBD250049U1000
GOST Certificate	GOST_POCCCNME77B07822.pdf
UL Certificate	UL_20120917_E312527_1_1
UL Listing Card	UL_E312527

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	78 mm
Package Level 1 Depth / Length	80 mm
Package Level 1 Height	48 mm
Package Level 1 Gross Weight	0.22 kg
Package Level 1 EAN	3471523037236
Package Level 2 Units	40 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	195 mm

Package Level 2 Height	315 mm
Package Level 2 Gross Weight	8.8 kg
Package Level 3 Units	960 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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AS Contactors → AS16

