

PRODUCT-DETAILS

# AS12-30-10-20

## AS12-30-10-20 24V50/60HZ Contactor



### General Information

Extended Product Type	AS12-30-10-20
Product ID	1SBL111001R2010
EAN	3471523034204
Catalog Description	AS12-30-10-20 24V50/60HZ Contactor

Long Description	<p>AS12 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.</p>
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### 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
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Sweden)	3210510

## 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	3471523034204
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

## Certificates and Declarations (Document Number)

CB Certificate	CB_CN13475-M1
CCC Certificate	CCC_2007010309251577
Declaration of Conformity - CE	1SBD250014U1000
Environmental Information	1SBD250154E1000
GOST Certificate	GOST_POCCCNME77B07822.pdf
Instructions and Manuals	1SBC101020M9701
RoHS Information	1SBD251000E1001
UL Certificate	UL_20120917-E312527-1-1
UL Listing Card	UL_E312527

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 20 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1/2 Hp (240 V AC) Single Phase 1.5 Hp (200 ... 208 V AC) Three Phase 2 Hp (220 ... 240 V AC) Three Phase 3 Hp (440 ... 480 V AC) Three Phase 7.5 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 Temperature	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
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 3 g Closed position / 2 g Open position
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

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## Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	0
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 ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 25 A acc. to IEC 60947-5-1, $q = 40\text{ °C}$ 10 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) $40\text{ °C}$ 24 A (690 V) $60\text{ °C}$ 20 A (690 V) $70\text{ °C}$ 16 A
Rated Operational Current AC-3 ( $I_e$ )	(220 / 230 / 240 V) $60\text{ °C}$ 12 A (380 / 400 V) $60\text{ °C}$ 12 A (415 V) $60\text{ °C}$ 12 A (440 V) $60\text{ °C}$ 11 A (500 V) $60\text{ °C}$ 11 A (690 V) $60\text{ °C}$ 7 A
Rated Operational Power AC-3 ( $P_e$ )	(220 / 230 / 240 V) 3 kW (400 V) 5.5 kW (415 V) 5.5 kW (440 V) 5.5 kW (500 V) 5.5 kW (690 V) 5.5 kW
Rated Operational Current AC-15 ( $I_e$ )	(220 / 240 V) 4 A (24 / 127 V) 6 A (400 / 440 V) 3 A (500 V) 2 A (690 V) 2 A
Rated Short-time Withstand Current ( $I_{cw}$ )	at $40\text{ °C}$ Ambient Temp, in Free Air, from a Cold State 10 s 124 A at $40\text{ °C}$ Ambient Temp, in Free Air, from a Cold State 15 min 24 A at $40\text{ °C}$ Ambient Temp, in Free Air, from a Cold State 1 min 55 A at $40\text{ °C}$ Ambient Temp, in Free Air, from a Cold State 1 s 250 A at $40\text{ °C}$ 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 $I_e > 100\text{ A}$ ) at 440 V 155 A $\cos\phi=0.45$ ( $\cos\phi=0.35$ for $I_e > 100\text{ A}$ ) at 690 V 90 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour 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 ( $I_e$ )	(110 V) 0.55 A / 60 W (220 V) 0.27 A / 60 W (125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W
Rated Insulation Voltage ( $U_i$ )	acc. to UL/CSA 600 V 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

Rated Impulse Withstand Voltage (U <sub>imp</sub> )	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 24 V 60 Hz 24 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 Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Flexible with Ferrule 1/2x 0.75 ... 2.5 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
Terminal Type	Screw Terminals

## Dimensions

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

## Popular Downloads

Data Sheet, Technical Information	1SBC100173C0201
Instructions and Manuals	1SBC101020M9701

## Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

## Categories

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

