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PRODUCT-DETAILS

AS09-30-10-20M

AS09-30-10-20M 24V50/60HZ Contactor

General Information

Extended Product Type	AS09-30-10-20M
Product ID	1SBL101001M2010
EAN	3471523044203
Catalog Description	AS09-30-10-20M 24V50/60HZ Contactor
Long Description	AS09 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

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Data Sheet, Technical Information	1SBC100214C0202
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	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 Θ = 40 °C 22 A acc. to IEC 60947-5-1, Θ = 40 °C 10 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 22 A (690 V) 60 °C 18 A (690 V) 70 °C 15 A
Rated Operational Current AC-3 (I_e)	(415 V) 60 °C 9 A (440 V) 60 °C 8 A (500 V) 60 °C 8 A (690 V) 60 °C 5 A (380 / 400 V) 60 °C 9 A (220 / 230 / 240 V) 60 °C 9 A
Rated Operational Current AC-15 (I_e)	(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 Operational Current DC-13 (I_e)	(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 Operational Power AC-3 (P_e)	(400 V) 4 kW (415 V) 4 kW (440 V) 4 kW (500 V) 4 kW (690 V) 4 kW (220 / 230 / 240 V) 2.2 kW
Rated Short-time Withstand Current Low Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 100 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 22 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 50 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 230 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 65 A for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 155 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 90 A
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V

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(U$_i$)	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V
	acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U$_{imp}$)	Auxiliary Circuit 6 kV
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
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U$_c$)	50 Hz 24 V
	60 Hz 24 V
Power Loss	at Rated Operating Conditions AC-1 per Pole 1 W
	at Rated Operating Conditions AC-3 per Pole 0.16 W
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 mm²
	Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²
	Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²
	Rigid 1/2x 0.75 ... 4 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²
	Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²
	Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²
	Rigid 1/2x 0.75 ... 2.5 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²
	Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²
	Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²
	Rigid 1/2x 0.75 ... 2.5 mm²
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
Tightening Torque	Auxiliary Circuit 1 N·m
	Control Circuit 1 N·m
	Main Circuit 1 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 20 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1/3 hp
	(200 ... 208 V AC) Three Phase 2 hp
	(220 ... 240 V AC) Three Phase 2 hp
	(240 V AC) Single Phase 1 hp
	(440 ... 480 V AC) Three Phase 5 hp
	(550 ... 600 V AC) Three Phase 7.5 hp
Tightening Torque UL/CSA	Auxiliary Circuit 9 in·lb
	Control Circuit 9 in·lb
	Main Circuit 9 in·lb
Full Load Amps Motor Use	(120 V AC) Single Phase 7.2 A
	(200 ... 208 V AC) Three Phase 7.8 A
	(220 ... 240 V AC) Three Phase 6.8 A
	(240 V AC) Single Phase 8 A
	(440 ... 480 V AC) Three Phase 7.6 A
	(550 ... 600 V AC) Three Phase 9 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C
	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

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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	box 40 piece
Package Level 1 Width	293 mm
Package Level 1 Depth / Length	167 mm
Package Level 1 Height	250 mm
Package Level 1 Gross Weight	8.8 kg
Package Level 1 EAN	3471523044203
Package Level 2 Units	40 piece
Package Level 2 Width	293 mm
Package Level 2 Depth / Length	167 mm
Package Level 2 Height	250 mm
Package Level 2 Gross Weight	8.8 kg
Package Level 3 Units	960 piece

Classifications

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Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	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 → AS09