ABB

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PRODUCT-DETAILS

ASL09-30-01-80

ASL09-30-01-80 12VDC Contactor

General Information

Extended Product Type	ASL09-30-01-80
Product ID	1SBL103001R8001
EAN	3471523059306
Catalog Description	ASL09-30-01-80 12VDC Contactor
Long Description	ASL09 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 ASL... 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: DC operated with solid core magnet circuit. The polarity on the coil terminals (A1+ and A2-) must be respected - Accessories: a wide range of accessories is available. ASL... contactors are fitted with low consumption DC coils and are suitable for a direct control by PLC outputs.

Ordering

Minimum Order Quantity	40 piece
Customs Tariff Number	85364900

Popular Downloads

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	0.28 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_{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 (U_i)	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_{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)	DC Operation 12 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 15 ... 20 ms
	Between Coil De-energization and NO Contact Opening 13 ... 17 ms
	Between Coil Energization and NC Contact Opening 31 ... 53 ms
	Between Coil Energization and NO Contact Closing 36 ... 59 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	Auxiliary Circuit 9 in·lb
UL/CSA	Control Circuit 9 in·lb
	Main Circuit 9 in·lb
Full Load Amps Motor	(120 V AC) Single Phase 7.2 A
Use	(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	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C
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

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 1 piece

2024/11/25   Subject to change without notice

Package Level 1 Width	78 mm
Package Level 1 Depth / Length	80 mm
Package Level 1 Height	48 mm
Package Level 1 Gross Weight	0.28 kg
Package Level 1 EAN	3471523059306
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	11.2 kg
Package Level 3 Units	960 piece

Classifications

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC002552 - Power contactor, DC switching
ETIM 9	EC002552 - Power contactor, DC switching
eClass	V11.0 : 27371018
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AS Contactors → ASL09