PRODUCT-DETAILS

ASL12-30-01-81

ASL12-30-01-81 24VDC Contactor



General Information

Extended Product Type	ASL12-30-01-81
Product ID	1SBL113001R8101
EAN	3471523059511
Catalog Description	ASL12-30-01-81 24VDC Contactor
Long Description	ASL12 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	1 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	0.28 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 q = 40 °C 25 A acc. to IEC 60947-5-1, q = 40 °C 10 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 24 A (690 V) 60 °C 20 A (690 V) 70 °C 16 A
Rated Operational Current AC-3 (I_e)	(415 V) 60 °C 12 A (440 V) 60 °C 11 A (500 V) 60 °C 11 A (690 V) 60 °C 7 A (380 / 400 V) 60 °C 12 A (220 / 230 / 240 V) 60 °C 12 A
Rated Operational Power AC-3 (P_e)	(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 (220 / 230 / 240 V) 3 kW
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 Short-time Withstand Current Low Voltage (I_{cw})	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 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
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)	(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_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 Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 24 V
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 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 1/2 hp (200 ... 208 V AC) Three Phase 2 hp (220 ... 240 V AC) Three Phase 3 hp (240 V AC) Single Phase 1.5 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 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
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

Certificates and Declarations (Document Number)

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
Environmental Information	1SBD250155E1000
GOST Certificate	GOST_POCCCNME77B07822.pdf
Instructions and Manuals	1SBC101020M9701
RoHS Information	1SBD251001E1001
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	0.28 kg
Package Level 1 EAN	3471523059511
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 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
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Sweden)	3210524

Categories

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

