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**PRODUCT-DETAILS**

## AL9-40-00 12V DC

### AL9-40-00 12V DC Contactor




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#### General Information

Extended Product Type	AL9-40-00 12V DC
Product ID	1SBL143201R8000
EAN	3471522270801
Catalog Description	AL9-40-00 12V DC Contactor
Long Description	<p>AL9 4-pole contactors are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces..) and generally for controlling power circuits up to 690 V AC and 440 V DC. The contactors can also be used for many other applications such lighting... The AL... series 4-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 4 N.O. main poles, front and side-mounted add-on auxiliary contact blocks - 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. AL... contactors are fitted with low consumption DC coils and are suitable for a direct control by PLC outputs.</p>

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#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

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#### Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	1SBC101003M5501
Dimension Diagram	FPTE307872

**Dimensions**

Product Net Width	44 mm
Product Net Depth / Length	97 mm
Product Net Height	78 mm
Product Net Weight	0.52 kg

**Technical**

Number of Main Contacts NO	4
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	0
Rated Operational Voltage	Main Circuit 690 V
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 26 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 25 (690 V) 55 °C 22 (690 V) 70 °C 18
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 9 A (440 V) 55 °C 9 A (500 V) 55 °C 9 A (690 V) 55 °C 7 A (380 / 400 V) 55 °C 9 A (220 / 230 / 240 V) 55 °C 9
Rated Operational Power AC-3 (P <sub>e</sub> )	(415 V) 4 kW (440 V) 4 kW (500 V) 5.5 kW (690 V) 5.5 kW (380 / 400 V) 2.5 kW (220 / 230 / 240 V) 2.2 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x I <sub>e</sub> AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x I <sub>e</sub> AC-3
Short-Circuit Protective Devices	gG Type Fuses 25 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 100 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per hour
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	8 kV
Mechanical Durability	10 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	DC Operation 12 V
Coil Consumption	Average Holding Value, from Warm State 3 W Average Pull-in Value, from Cold State 3 W
Operate Time	Between Coil De-energization and NO Contact Opening 10 ... 17 ms Between Coil Energization and NO Contact Closing 50 ... 100 ms

Connecting Capacity Main Circuit	Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup> Rigid Cable 1 ... 4 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup> Rigid Cable 1 ... 4 mm <sup>2</sup>
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
Connecting Terminals (delivered in open position) Main Poles	M 3.5 (+,-) pozidriv 2 screw with cable clamp
Terminal Type	Screw Terminals

## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 Uc) -40 ... +55 °C Near Contactor for Operation in Free Air (Uc) -40 ... +70 °C
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible	3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 20 K40 Closed, Shock Direction: B1 15 K40 Closed, Shock Direction: C1 20 K40 Closed, Shock Direction: C2 14 K40 Open, Shock Direction: A 10 K40 Open, Shock Direction: B1 5 K40 Open, Shock Direction: C1 8 K40 Open, Shock Direction: C2 8 K40 Shock Direction: B2 10 K40
RoHS Status	Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

CQC Certificate	CQC2012010304534830
CSA Certificate	CSA_1041746
Declaration of Conformity - CCC	2020980304001613
Declaration of Conformity - CE	1SBD250804U1000
Environmental Information	1SBD250121E1004
GOST Certificate	GOST_POCCFRME77B07175
Instructions and Manuals	1SBC101003M5501
RoHS Information	1SBD250804U1000
UL Certificate	UL_20160205-E312527-10-2
UL Listing Card	UL_E312527

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	86 mm
Package Level 1 Depth / Length	141 mm
Package Level 1 Height	51 mm
Package Level 1 Gross Weight	0.52 kg
Package Level 1 EAN	3471522270801
Package Level 2 Units	box 28 piece
Package Level 2 Gross Weight	14.56 kg
Package Level 3 Units	336 piece

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## Classifications

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Object Classification	Q
Code	
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
eClass	V11.0 : 27371018
UNSPSC	39121529

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## Categories

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

