

PRODUCT-DETAILS

AL40-30-10 24V DC

AL40-30-10 24V DC Contactor



General Information

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| Extended Product Type | AL40-30-10 24V DC |
| Product ID | 1SBL323001R8110 |
| EAN | 3471522289810 |
| Catalog Description | AL40-30-10 24V DC Contactor |

Long Description

AL40 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC or 220 V DC. The contactors can also be used for many other applications such as isolation, capacitor switching, lighting. The AL... 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 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.

Ordering

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|------------------------|----------|
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85364900 |

Popular Downloads

| | |
|-----------------------------------|----------------------|
| Data Sheet, Technical Information | 1SBC100122C0202_Ch02 |
| Instructions and Manuals | 1SBC101007M5501 |
| Instructions and | 1SBC101008M5501 |

Manuals (Part 2)

Dimension Diagram

FPTE307864

Dimensions

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| Product Net Width | 54 mm |
| Product Net Depth / Length | 125.3 mm |
| Product Net Height | 90 mm |
| Product Net Weight | 0.85 kg |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 1 |
| Number of Auxiliary Contacts NC | 0 |
| Rated Operational Voltage | Auxiliary Circuit 690 V Main Circuit 690 V |
| Rated Frequency (f) | Supply Circuit 50 / 60 Hz |
| Conventional Free-air Thermal Current (I _{th}) | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 65 A acc. to IEC 60947-5-1, q = 40 °C 16 A |
| Rated Operational Current AC-1 (I _e) | (690 V) 40 °C 60 (690 V) 55 °C 60 (690 V) 70 °C 42 |
| Rated Operational Current AC-3 (I _e) | (415 V) 55 °C 37 A (440 V) 55 °C 37 A (500 V) 55 °C 33 A (690 V) 55 °C 21 A (380 / 400 V) 55 °C 37 A (220 / 230 / 240 V) 55 °C 40 |
| Rated Operational Power AC-3 (P _e) | (415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 18.5 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x I _e AC-3 |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1 | 10 x I _e AC-3 |
| Rated Operational Current AC-15 (I _e) | (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A |
| Short-Circuit Protective Devices | Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 63 A |
| Maximum Breaking Capacity | cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 470 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 175 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 Operational Current DC-13 (I _e) | (24 V) 6 / 144 A (48 V) 2.8 / 134 A (72 V) 2 / 144 A (125 V) 1.1 / 138 A (250 V) 0.55 / 138 A |
| Rated Insulation Voltage | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V |

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| (U _i) | acc. to UL/CSA 600 V |
| Rated Impulse Withstand Voltage (U _{imp}) | 8 kV |
| Mechanical Durability | 10 million |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour |
| Rated Control Circuit Voltage (U _c) | DC Operation 24 V |
| Coil Consumption | Average Holding Value, from Warm State 3.5 W Average Pull-in Value, from Cold State 3.5 W |
| Operate Time | Between Coil De-energization and NO Contact Opening 12 ... 18 ms Between Coil Energization and NO Contact Closing 55 ... 110 ms |
| Connecting Capacity Main Circuit | Flexible with Cable End 2.5 ... 10 mm ² Rigid Cable 2.5 ... 16 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Cable End 0.75 ... 2.5 mm ² Rigid Cable 1 ... 4 mm ² |
| 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 |
| Connecting Terminals (delivered in open position) Main Poles | M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector |
| Terminal Type | Screw Terminals |

Technical UL/CSA

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|------------------------------|-----------------|
| General Use Rating UL/CSA | (600 V AC) 60 A |
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Environmental

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| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U _c) -40 ... 55 °C Close to Contactor without Thermal O/L Relay (U _c) -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C |
| Climatic Withstand | acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II |
| Maximum Operating Altitude Permissible | Without Derating 3000 m |
| Resistance to Shock acc. to IEC 60068-2-27 | Closed, Shock Direction: A 20 g Closed, Shock Direction: B1 15 g Closed, Shock Direction: C1 20 g Closed, Shock Direction: C2 14 g Open, Shock Direction: A 10 g Open, Shock Direction: B1 5 g Open, Shock Direction: C1 8 g Open, Shock Direction: C2 8 g Shock Direction: B2 10 g |
| RoHS Status | Following EU Directive 2011/65/EU |

Certificates and Declarations (Document Number)

| | |
|------------------------------------|---------------------------|
| ASEFA Certificate | ASEFA_05703BT |
| CB Certificate | CB_FR3193_60016914_509747 |
| CCC Certificate | CCC_2004010304112235 |
| CQC Certificate | CQC2004010304112235 |
| CSA Certificate | CSA_1033838_LR056745 |
| Declaration of Conformity - CCC | 2020980304001612 |
| Declaration of Conformity - CE | 1SBD250804U1000 |
| DNV Certificate | DNV_GL_TAE00001UN-1 |

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|-----------------------------------|-----------------------|
| DNV GL Certificate | DNV_GL_TAE00001UN-1 |
| Environmental Information | 1SBD250122E1002 |
| GL Certificate | GL_26144_05HH |
| GOST Certificate | GOST_POCCFRME77B07175 |
| Instructions and Manuals | 1SBC101007M5501 |
| Instructions and Manuals (Part 2) | 1SBC101008M5501 |
| LOVAG Certificate | LOVAG_FR03026-FR03034 |
| RoHS Information | 1SBD250804U1000 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Units | 1 piece |
| Package Level 1 Width | 100 mm |
| Package Level 1 Depth / Length | 134 mm |
| Package Level 1 Height | 62 mm |
| Package Level 1 Gross Weight | 0.85 kg |
| Package Level 1 EAN | 3471522289810 |
| Package Level 2 Units | box 20 piece |
| Package Level 2 Width | 300 mm |
| Package Level 2 Depth / Length | 245 mm |
| Package Level 2 Height | 308 mm |
| Package Level 2 Gross Weight | 17 kg |
| Package Level 3 Units | 384 piece |

Classifications

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|----------------------------|---|
| 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 |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| E-Number (Finland) | 3709181 |

Categories

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

