

## PRODUCT-DETAILS

# AL16-30-10 24V DC

## AL16-30-10 24V DC Contactor



### Información General

|                       |                             |
|-----------------------|-----------------------------|
| Extended Product Type | AL16-30-10 24V DC           |
| Product ID            | 1SBL183001R8110             |
| EAN                   | 3471522276810               |
| Catalog Description   | AL16-30-10 24V DC Contactor |

#### Long Description

AL16 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.

### Clasificaciones

|                            |                                           |
|----------------------------|-------------------------------------------|
| 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  |
| UNSPSC                     | 39121529                                  |

### Información de Embalaje

|                                |               |
|--------------------------------|---------------|
| 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            | 3471522276810 |
| Package Level 2 Units          | box 28 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   | 14.56 kg      |
| Package Level 3 Units          | 336 piece     |

## Certificados y Declaraciones (Número de Documento)

|                                |                          |
|--------------------------------|--------------------------|
| ASEFA Certificate              | ASEFA_05203BT            |
| CB Certificate                 | CB_FR_617239A            |
| CCC Certificate                | CCC_2012010304534830     |
| CSA Certificate                | CSA_1041746              |
| Declaration of Conformity - CE | 1SBD250804U1000          |
| DNV Certificate                | DNV_GL_TAE00001UN-1      |
| DNV GL Certificate             | DNV_GL_TAE00001UN-1      |
| Environmental Information      | 1SBD250121E1004          |
| GL Certificate                 | GL_26144_05HH            |
| GOST Certificate               | GOST_POCCFRME77B07175    |
| Instructions and Manuals       | 1SBC101003M5501          |
| LOVAG Certificate              | LOVAG_FR03023-FR03029    |
| RoHS Information               | 1SBD250804U1000          |
| UL Certificate                 | UL_20160205-E312527-10-2 |
| UL Listing Card                | UL_E312527               |

## Ambiente

|                                            |                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                    | Close to Contactor for Storage -60 ... +80 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +55 °C<br>Close to Contactor Fitted with Thermal O/L Relay -25 ... +55 °C<br>Close to Contactor without Thermal O/L Relay (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 | Shock Direction: B2 10 K40<br>Closed, Shock Direction: A 20 K40<br>Closed, Shock Direction: B1 15 K40<br>Closed, Shock Direction: C1 20 K40<br>Closed, Shock Direction: C2 14 K40<br>Open, Shock Direction: A 10 K40<br>Open, Shock Direction: B1 5 K40<br>Open, Shock Direction: C1 8 K40<br>Open, Shock Direction: C2 8 K40 |
| RoHS Status                                | Following EU Directive 2011/65/EU                                                                                                                                                                                                                                                                                             |

## 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                                                                                                                                                                                                                                |
| Rated Operational Voltage                          | Auxiliary Circuit 690 V<br>Main Circuit 690 V                                                                                                                                                                                    |
| Rated Frequency (f)                                | Supply Circuit 50 60 Hz                                                                                                                                                                                                          |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-5-1, $q = 40^\circ\text{C}$ 16 A<br>acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 30 A                                                                                                         |
| Rated Operational Current AC-1 ( $I_e$ )           | (690 V) $40^\circ\text{C}$ 30 A<br>(690 V) $55^\circ\text{C}$ 27 A<br>(690 V) $70^\circ\text{C}$ 23 A                                                                                                                            |
| Rated Operational Current AC-3 ( $I_e$ )           | (220 / 230 / 240 V) $55^\circ\text{C}$ 17 A<br>(380 / 400 V) $55^\circ\text{C}$ 17 A<br>(415 V) $55^\circ\text{C}$ 17 A<br>(440 V) $55^\circ\text{C}$ 16 A<br>(500 V) $55^\circ\text{C}$ 14 A<br>(690 V) $55^\circ\text{C}$ 10 A |
| Rated Operational Power AC-3 ( $P_e$ )             | (220 / 230 / 240 V) 4 kW<br>(380 / 400 V) 7.5 kW<br>(415 V) 9 kW<br>(440 V) 9 kW<br>(500 V) 9 kW<br>(690 V) 9 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 ( $I_e$ )          | (220 / 240 V) 4 A<br>(24 / 127 V) 6 A<br>(380 / 440 V) 3 A<br>(500 V) 2 A<br>(690 V) 2 A                                                                                                                                         |
| Short-Circuit Protective Devices                   | Auxiliary Circuit - gG Type Fuses 10 A<br>gG Type Fuses 32 A                                                                                                                                                                     |
| Maximum Breaking Capacity                          | $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 250 A<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 100 A                                                                           |
| Maximum Electrical Switching Frequency             | AC-1 600 cycles per hour<br>AC-2 / AC-4 300 cycles per hour<br>AC-3 1200 cycles per hour                                                                                                                                         |
| Rated Operational Current DC-13 ( $I_e$ )          | (125 V) 1.1 / 138 A<br>(24 V) 6 / 144 A<br>(250 V) 0.55 / 138 A<br>(48 V) 2.8 / 134 A<br>(72 V) 2 / 144 A                                                                                                                        |
| Rated Insulation Voltage ( $U_i$ )                 | acc. to UL/CSA 600 V<br>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 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 W<br>Average Pull-in Value, from Cold State 3 W                                                                                                                                         |
| Operate Time                                       | Between Coil De-energization and NC Contact Closing 16 ... 27 ms<br>Between Coil De-energization and NO Contact Opening 10 ... 17 ms<br>Between Coil Energization and NO Contact Closing 50 ... 100 ms                           |
| Connecting Capacity Main Circuit                   | Flexible with Cable End 0.75 ... 2.5 m <sup>2</sup><br>Rigid Cable 1 ... 4 m <sup>2</sup>                                                                                                                                        |

|                                                                    |                                                              |
|--------------------------------------------------------------------|--------------------------------------------------------------|
| Connecting Capacity                                                | Flexible with Cable End 0.75 ... 2.5 mm²                     |
| Auxiliary Circuit                                                  | Rigid Cable 1 ... 4 m²                                       |
| Degree of Protection                                               | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 |
| Connecting Terminals<br>(delivered in open<br>position) Main Poles | M 3.5 (+,-) pozidriv 2 screw with cable clamp                |
| Terminal Type                                                      | Screw Terminals                                              |

Dimensiones

|                               |         |
|-------------------------------|---------|
| Product Net Width             | 44 mm   |
| Product Net Depth /<br>Length | 97 mm   |
| Product Net Height            | 78 mm   |
| Product Net Weight            | 0.52 kg |

Descargas Populares

|                                      |                      |
|--------------------------------------|----------------------|
| Data Sheet, Technical<br>Information | 1SBC100122C0202_Ch02 |
| Instructions and<br>Manuals          | 1SBC101003M5501      |
| Dimension Diagram                    | FPTE307872           |

Clasificación

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

Categorías

Productos y sistemas de baja tensión → Aparatos de control → Contactores → Contactores

