



PRODUCT-DETAILS

# ASL12-30-10S-81

## ASL12-30-10S-81 24VDC Contactor



| General Information    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type  | ASL12-30-10S-81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product ID             | 1SBL113004R8110                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| EAN                    | 3471523060012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Catalog Description    | ASL12-30-10S-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...S contactors are the spring terminal version of the ASL... range. 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

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101020M9701 |
| CAD Dimensional Drawing  | 2CDC001079B0201 |

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                                   | 1                                                                                                                                                                                                                                                                            |
| Number of Auxiliary Contacts NC                                   | 0                                                                                                                                                                                                                                                                            |
| 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<br>Main Circuit 690 V                                                                                                                                                                                                                                |
| Rated Frequency (f)                                               | Auxiliary Circuit 50 / 60 Hz<br>Main Circuit 50 / 60 Hz                                                                                                                                                                                                                      |
| Conventional Free-air Thermal Current (I <sub>th</sub> )          | acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 22 A<br>acc. to IEC 60947-5-1, $\Theta$ = 40 °C 10 A                                                                                                                                                                 |
| Rated Operational Current AC-1 (I <sub>e</sub> )                  | (690 V) 40 °C 22 A<br>(690 V) 60 °C 17 A<br>(690 V) 70 °C 14 A                                                                                                                                                                                                               |
| Rated Operational Current AC-3 (I <sub>e</sub> )                  | (415 V) 60 °C 12 A<br>(440 V) 60 °C 11 A<br>(500 V) 60 °C 11 A<br>(690 V) 60 °C 7 A<br>(380 / 400 V) 60 °C 12 A<br>(220 / 230 / 240 V) 60 °C 12 A                                                                                                                            |
| Rated Operational Power AC-3 (P <sub>e</sub> )                    | (400 V) 5.5 kW<br>(415 V) 5.5 kW<br>(440 V) 5.5 kW<br>(500 V) 5.5 kW<br>(690 V) 5.5 kW<br>(220 / 230 / 240 V) 3 kW                                                                                                                                                           |
| Rated Operational Current AC-15 (I <sub>e</sub> )                 | (500 V) NC 2<br>(500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(400 / 440 V) 3 A                                                                                                                                                                     |
| Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 124 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 22 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 55 A<br>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<br>for 0.1 s 140 A<br>for 1 s 100 A                                                                                                                                                                    |
| Maximum Breaking Capacity                           | cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 155 A<br>cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 90 A                                                                                                                          |
| Maximum Electrical Switching Frequency              | (AC-1) 600 cycles per hour<br>(AC-15) 1200 cycles per hour<br>(AC-2 / AC-4) 300 cycles per hour<br>(AC-3) 1200 cycles per hour<br>(DC-13) 900 cycles per hour                                                                                                          |
| Rated Operational Current DC-13 (I <sub>e</sub> )   | (24 V) 6 A / 144 W<br>(48 V) 2.8 A / 134 W<br>(72 V) 1 A / 72 W<br>(110 V) 0.55 A / 60 W<br>(125 V) 0.55 A / 69 W<br>(220 V) 0.27 A / 60 W<br>(250 V) 0.27 A / 68 W                                                                                                    |
| Rated Insulation Voltage (U <sub>i</sub> )          | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V<br>acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V<br>acc. to UL/CSA 600 V                                                                                                                                           |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ) | Auxiliary Circuit 6 kV                                                                                                                                                                                                                                                 |
| Maximum Mechanical Switching Frequency              | 3600 cycles per hour                                                                                                                                                                                                                                                   |
| Rated Control Circuit Voltage (U <sub>c</sub> )     | DC Operation 24 V                                                                                                                                                                                                                                                      |
| Operate Time                                        | Between Coil De-energization and NC Contact Closing 15 ... 20 ms<br>Between Coil De-energization and NO Contact Opening 13 ... 17 ms<br>Between Coil Energization and NC Contact Opening 31 ... 53 ms<br>Between Coil Energization and NO Contact Closing 36 ... 59 ms |
| Connecting Capacity Main Circuit                    | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>                                                                                                |
| Connecting Capacity Auxiliary Circuit               | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>                                                                                                |
| Connecting Capacity Control Circuit                 | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>                                                                                                |
| Wire Stripping Length                               | Auxiliary Circuit 10 mm<br>Control Circuit 10 mm<br>Main Circuit 10 mm                                                                                                                                                                                                 |
| Degree of Protection                                | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20<br>IP20                                                              |
| Terminal Type                                       | Spring Terminals                                                                                                                                                                                                                                                       |

## Technical UL/CSA

|                           |                                                                                                                                                                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Use Rating UL/CSA | (600 V AC) 12 A                                                                                                                                                                                                                 |
| Horsepower Rating UL/CSA  | (120 V AC) Single Phase 1/2 hp<br>(200 ... 208 V AC) Three Phase 2 hp<br>(220 ... 240 V AC) Three Phase 3 hp<br>(240 V AC) Single Phase 1.5 hp<br>(440 ... 480 V AC) Three Phase 7.5 hp<br>(550 ... 600 V AC) Three Phase 10 hp |

## 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<br>Close to Contactor for Storage -60 ... +80 °C                                                                                                                                                         |
| Climatic Withstand                            | Category B according to IEC 60947-1 Annex Q                                                                                                                                                                                                                         |
| Maximum Operating<br>Altitude Permissible     | Without Derating 3000 m                                                                                                                                                                                                                                             |
| Resistance to Shock acc.<br>to IEC 60068-2-27 | Closed, Shock Direction: B1 10 g<br>Closed, Shock Direction: C1 20 g<br>Closed, Shock Direction: C2 20 g<br>Open, Shock Direction: B1 5 g<br>Open, Shock Direction: C1 9 g<br>Open, Shock Direction: C2 14 g<br>Shock Direction: A 20 g<br>Shock Direction: B2 15 g |
| Resistance to Vibrations                      | 3g Closed Position & 2g Open Position 5 ... 300 Hz                                                                                                                                                                                                                  |

Material Compliance

|                                                   |                                                                        |
|---------------------------------------------------|------------------------------------------------------------------------|
| Conflict Minerals<br>Reporting Template<br>(CMRT) | 9AKK108467A5658                                                        |
| 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<br>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<br>Conformity - CCC  | 2020980304001224          |
| Declaration of<br>Conformity - CE   | 1SBD250014U1000           |
| Declaration of<br>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             | 1 piece       |
| Package Level 1 Width             | 78 mm         |
| Package Level 1 Depth /<br>Length | 80 mm         |
| Package Level 1 Height            | 48 mm         |
| Package Level 1 Gross<br>Weight   | 0.28 kg       |
| Package Level 1 EAN               | 3471523060012 |
| Package Level 2 Units             | 40 piece      |
| Package Level 2 Width             | 250 mm        |
| Package Level 2 Depth /<br>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  |
| eClass                             | V11.0 : 27371018                          |
| UNSPSC                             | 39121529                                  |
| IDEA Granular Category Code (IGCC) | 4763 >> Power contactor, DC switching     |

Accessories

| Identifier      | Description             | Type   | Quantity | Unit Of Measure |
|-----------------|-------------------------|--------|----------|-----------------|
| 1SBN050010R1000 | RV5/50 Surge Suppressor | RV5/50 | 1        | piece           |
| 1SBN050020R1000 | RT5/32 Surge Suppressor | RT5/32 | 1        | piece           |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AS Contactors → ASL12

