



PRODUCT-DETAILS

# AS12-30-10-20

## AS12-30-10-20 24V50/60HZ Contactor



| General Information    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type  | AS12-30-10-20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product ID             | 1SBL111001R2010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EAN                    | 3471523034204                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Catalog Description    | AS12-30-10-20 24V50/60HZ Contactor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Long Description       | AS12 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 AS... 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: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available. |
| Ordering               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Minimum Order Quantity | 1 piece                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Customs Tariff Number  | 85364900                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### Popular Downloads

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

Dimensions

|                               |         |
|-------------------------------|---------|
| Product Net Width             | 45 mm   |
| Product Net Depth /<br>Length | 72.5 mm |
| Product Net Height            | 68 mm   |
| Product Net Weight            | 0.22 kg |

Technical

|                                                                         |                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts<br>NO                                           | 3                                                                                                                                                                                                                                                                                                                                                                                   |
| Number of Main Contacts<br>NC                                           | 0                                                                                                                                                                                                                                                                                                                                                                                   |
| Number of Auxiliary<br>Contacts NO                                      | 1                                                                                                                                                                                                                                                                                                                                                                                   |
| Number of Auxiliary<br>Contacts NC                                      | 0                                                                                                                                                                                                                                                                                                                                                                                   |
| Standards                                                               | IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N°<br>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<br>Thermal Current (I <sub>th</sub> )             | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ }^{\circ}\text{C}$ 25 A<br>acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 10 A                                                                                                                                                                                                                              |
| Rated Operational Current<br>AC-1 (I <sub>e</sub> )                     | (690 V) 40 °C 24 A<br>(690 V) 60 °C 20 A<br>(690 V) 70 °C 16 A                                                                                                                                                                                                                                                                                                                      |
| Rated Operational Current<br>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<br>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<br>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<br>Withstand Current Low<br>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 24 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<br>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<br>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<br>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<br>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                                                                                                                                                                                                                                                                                                                     |

|                                                     |                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | (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> )     | 50 Hz 24 V<br>60 Hz 24 V                                                                                                                                                                                                                                           |
| Operate Time                                        | Between Coil De-energization and NC Contact Closing 7 ... 22 ms<br>Between Coil De-energization and NO Contact Opening 5 ... 19 ms<br>Between Coil Energization and NC Contact Opening 6 ... 18 ms<br>Between Coil Energization and NO Contact Closing 9 ... 24 ms |
| Connecting Capacity Main Circuit                    | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 0.75 ... 4 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 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 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 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 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 9 mm<br>Control Circuit 9 mm<br>Main Circuit 9 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                                                                  |
| 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<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 |
| Tightening Torque UL/CSA  | Auxiliary Circuit 9 in-lb<br>Control Circuit 9 in-lb<br>Main Circuit 9 in-lb                                                                                                                                                    |

Environmental

|                                            |                                                                                                                                                                                                                                                                     |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                    | Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C<br>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 Altitude Permissible     | Without Derating 3000 m                                                                                                                                                                                                                                             |
| Resistance to Shock acc. 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                                                                                                                                                                                                                  |

|                                             |                                                                        |
|---------------------------------------------|------------------------------------------------------------------------|
| <b>Material Compliance</b>                  |                                                                        |
| Conflict Minerals Reporting Template (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 Control Act - TSCA         | 2CMT2023-006525                                                        |
| WEEE B2C / B2B                              | Business To Business                                                   |
| WEEE Category                               | 5. Small Equipment (No External Dimension More Than 50 cm)             |

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Certificates and Declarations</b> |                           |
| 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           |
| GOST Certificate                     | GOST_POCCCNME77B07822.pdf |
| UL Certificate                       | UL_20120917_E312527_1_1   |
| UL Listing Card                      | UL_E312527                |

|                                |               |
|--------------------------------|---------------|
| <b>Container Information</b>   |               |
| 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   | 0.22 kg       |
| Package Level 1 EAN            | 3471523034204 |
| 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   | 8.8 kg        |
| Package Level 3 Units          | 960 piece     |

|                            |                                           |
|----------------------------|-------------------------------------------|
| <b>Classifications</b>     |                                           |
| 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 : 27371003                          |
| UNSPSC                     | 39121529                                  |
| IDEA Granular Category     | 4761 >> Magnet contactor, AC-switching    |

Code (IGCC)

E-Number (Sweden)

3210510

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AS Contactors → AS12

