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 PRODUCT-DETAILS

# BC7-30-01-F-2.4-51

## BC7-30-01-F-2.4-51 Mini Contactor 17 ... 32 V DC - 3 NO - 0 NC - Flat-Pin Connections




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**General Information**

|                       |  |
|-----------------------|--|
| Extended Product Type | BC7-30-01-F-2.4-51   |
| Product ID            | GJL1313003R5011  |
| EAN                   | 4013614192265  |
| Catalog Description   | BC7-30-01-F-2.4-51 Mini Contactor 17 ... 32 V DC - 3 NO - 0 NC - Flat-Pin Connections  |
| Long Description      | The BC7-30-01-F mini contactor is a compact 3 pole contactor with 1 auxiliary contact and flat pin connector. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors are used in residential buildings, commercial buildings and industrial applications for the control of single or three-phase loads up to 5.5 kW (AC-3) and 20 A (AC-1) or switching of control signals. Due to the low coil consumption, this device can be directly controlled by a PLC. Further features are the noiseless and hum-free coil, a switch position indication and the integrated possibility for rail or wall mounting. |

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**Ordering**

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85365080 |

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**Popular Downloads**

|                       |                 |
|-----------------------|-----------------|
| Data Sheet, Technical | 1SBC100214C0202 |
|-----------------------|-----------------|

## Information

|                          |                        |
|--------------------------|------------------------|
| Instructions and Manuals | 2CDC102047M6801        |
| CAD Dimensional Drawing  | 2CDC001079B0201        |
| <b>Dimension Diagram</b> | <b>GJL1200437F0001</b> |

## Dimensions

|                            |         |
|----------------------------|---------|
| Product Net Width          | 52.5 mm |
| Product Net Depth / Length | 46.7 mm |
| Product Net Height         | 57.5 mm |
| Product Net Weight         | 0.17 kg |

## Technical

|  |  |
|--|--|
| Number of Main Contacts NO                         | 3  |
| Number of Main Contacts NC                         | 0  |
| Number of Auxiliary Contacts NO                    | 0  |
| Number of Auxiliary Contacts NC                    | 1  |
| Number of Poles                                    | 3P   |
| Standards  | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>UL 60947-1<br>UL 60947-4-1<br>IEC 60335-2-40 A2L   |
| Rated Operational Voltage                          | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 250 V DC<br>Main Circuit 690 V AC<br>Main Circuit 220 V DC   |
| Rated Frequency (f)                                | Control Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC  |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Main Circuit 20 A  |
| Rated Operational Current AC-1 ( $I_e$ )           | (220 / 240 V) 40 °C 20 A<br>(220 / 240 V) 55 °C 16 A<br>(380 / 440 V) 40 °C 20 A<br>(380 / 440 V) 55 °C 16 A<br>(690 V) 40 °C 6 A<br>(690 V) 55 °C 6 A |
| Rated Operational Current AC-3 ( $I_e$ )           | (230 V) 55°C 12 A<br>(400 V) 55 °C 12 A<br>(500 V) 55 °C 9 A<br>(690 V) NO 55°C 3.5 A  |
| Rated Operational Current AC-15 ( $I_e$ )          | (24 V) 4 A<br>(120 V) 4 A<br>(500 V) 2 A<br>(220 / 240 V) 4 A<br>(380 / 400 V) 3 A   |
| Rated Operational Current DC-13 ( $I_e$ )          | (24 V) 2.5 A<br>(110 V) 0.7 A<br>(220 / 240 V) 0.4 A   |
| Rated Operational Power AC-3 ( $P_e$ )             | (230 V) Three Phase 3 kW<br>(400 V) Three Phase 5.5 kW<br>(500 V) Three Phase 5.5 kW<br>(690 V) Three Phase, NO 3 kW                                   |
| Rated Breaking Capacity AC-3                       | 8 x $I_e$ / AC-3   |
| Rated Making Capacity AC-3                         | 10 x $I_e$ / AC-3  |

|   |  |
|---|--|
| Rated Short-time<br>Withstand Current Low<br>Voltage ( $I_{cw}$ ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A  |
| Rated Insulation Voltage<br>( $U_i$ )                             | 690 V<br>acc. to UL/CSA 600 V  |
| Rated Impulse Withstand<br>Voltage ( $U_{imp}$ )                  | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV  |
| Maximum Electrical<br>Switching Frequency                         | (AC-1) 300 cycles per hour<br>(AC-15) 600 cycles per hour<br>(AC-3) 600 cycles per hour<br>(DC-1) 600 cycles per hour<br>(DC-13) 600 cycles per hour<br>(DC-3) 600 cycles per hour |
| Mechanical Durability   | 10000000 cycle   |
| Minimum Switching<br>Capacity                                     | Auxiliary Circuit 17 V<br>Auxiliary Circuit 5 mA   |
| Coil Operating Limits   | (acc. to IEC 60947-4-1) for DC supply $U_c$ Min. ... $U_c$ Max. (at $\theta \leq 55$ °C)   |
| Rated Control Circuit<br>Voltage ( $U_c$ )                        | 17 ... 32 V DC   |
| Coil Consumption  | Average Holding Value DC 2.4 W<br>Average Pull-in Value DC 2.4 W   |
| Power Loss  | at Rated Operating Conditions AC-1 per Pole 1.4 W  |
| Mounting on DIN Rail  | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715   |
| Degree of Protection  | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20  |
| Terminal Type   | Flat-Pin Connections   |
| Mini Contactor Type   | Interface Mini Contactor   |
| Product Name  | Mini Contactor   |
| Remarks   | No CA6 or CAF6 mountable   |

## Technical UL/CSA

|                                     |  |
|-------------------------------------|--|
| Maximum Operating<br>Voltage UL/CSA | Main Circuit 600 V AC  |
| General Use Rating<br>UL/CSA        | (600 V AC) 16 A  |
| Horsepower Rating<br>UL/CSA         | (115 V AC) Single Phase 0.75 Hp<br>(200 V AC) Three Phase 2 Hp<br>(220 ... 240 V AC) Three Phase 3 Hp<br>(230 V AC) Single Phase 1.5 Hp<br>(440 ... 480 V AC) Three Phase 5 Hp<br>(550 ... 600 V AC) Three Phase 5 Hp  |
| Contact Rating UL/CSA               | A600   |
| Full Load Amps Motor<br>Use         | (115 V AC) Single Phase 13.8 A<br>(200 V AC) Three Phase 7.8 A<br>(220 ... 240 V AC) Three Phase 9.6 A<br>(230 V AC) Single Phase 10 A<br>(440 ... 480 V AC) Three Phase 7.6 A<br>(550 ... 600 V AC) Three Phase 6.1 A |

## Environmental

|   |  |
|---|--|
| Ambient Air Temperature                       | Operation -20 ... +55 °C<br>Storage -40 ... +80 °C |
| Maximum Operating<br>Altitude Permissible     | 2000 m   |
| Resistance to Shock acc.<br>to IEC 60068-2-27 | 11 ms Pulse 15g                                    |
| Resistance to Vibrations                      | 5g 5 ... 150 Hz                                    |

## Material Compliance

|   |  |
|---|--|
| 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)             |

## ABB EcoSolutions

|   |                 |
|---|-----------------|
| End Of Life Disassembling Instructions  | 1SBC100156C0263 |
| Environmental Product Declaration - EPD | 1SAC200409H0001 |

## Certificates and Declarations

|                                  |                     |
|----------------------------------|---------------------|
| A2L Certificate - IEC            | 1SAA938000-4601     |
| BV Certificate                   | 1SAA920000-0204     |
| CB Certificate                   | 1SAA938000-2002     |
| CQC Certificate                  | CQC2003010304064033 |
| cURus Certificate                | cUL_E191658         |
| Declaration of Conformity - CCC  | 2020980304001854    |
| Declaration of Conformity - CE   | 1SAD101100-3101     |
| Declaration of Conformity - UKCA | 1SAD201100-3101     |
| DNV GL Certificate               | 1SAA938000-0306     |
| EAC Certificate                  | 1SAA920000-2702     |
| KC Certificate                   | 1SAA938000-1501     |
| LR Certificate                   | 1SAA938000-0504     |
| RMRS Certificate                 | 1SAA938000-0704     |
| UL Certificate                   | E191658-19880915    |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 10 piece  |
| Package Level 1 Width          | 115 mm        |
| Package Level 1 Depth / Length | 280 mm        |
| Package Level 1 Height         | 54 mm         |
| Package Level 1 Gross Weight   | 1.77 kg       |
| Package Level 1 EAN            | 4013614418563 |

## Classifications

|                                    |  |
|------------------------------------|--|
| Object Classification Code         | Q  |
| ETIM 7                             | EC000066 - Power contactor, AC switching |
| ETIM 8                             | EC000066 - Power contactor, AC switching |
| ETIM 9                             | EC000066 - Power contactor, AC switching |
| eClass                             | V11.0 : 27371003                         |
| UNSPSC                             | 39121529                                 |
| IDEA Granular Category Code (IGCC) | 4763 >> Power contactor, DC switching    |

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## Categories

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

