PRODUCT-DETAILS

# B7S-30-10-2.8-72

# B7S-30-10-2.8-72 Mini Contactor 17-32VDC, 2.8W




## General Information

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|---|---|
| Extended Product Type | B7S-30-10-2.8-72 |
| Product ID | GJL1313001R7102 |
| EAN | 4013614150609 |
| Catalog Description | B7S-30-10-2.8-72 Mini Contactor 17-32VDC, 2.8W |
| Long Description | The B7S-30-10 mini contactor is a compact 3 pole contactor with 1 auxiliary contact and screw terminals. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors are used in residential buldings, commercial buildings and industrial applications for the control of single or three-phase loads up to 5.5 kW (AC-3) and 20 A / 690 V (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, the integrated protective circuit with diodes and additional overvoltage protection, a switch position indication and the integrated possibility for rail or wall mounting. Auxiliary contacts, |

## Ordering

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

## Popular Downloads

| | |
|---|---|
| Data Sheet, Technical Information | 1SBC100214C0201 |

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|---|---|
| Instructions and Manuals | 2CDC102047M6801 |
| Dimension Diagram | GJL1200436F0001 |

## Dimensions

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| Product Net Width | 52.5 mm |
| Product Net Height | 57.5 mm |
| Product Net Depth / Length | 46.5 mm |
| Product Net Weight | 0.175 kg |

## Technical

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| Number of Poles | 3 |
| Mini Contactor Type | Interface Mini Contactor |
| 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 |
| Rated Impulse Withstand Voltage ($U_{imp}$) | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV |
| Rated Insulation Voltage ($U_i$) | 690 V<br>acc. to UL/CSA 600 V |
| Number of Main Contacts NC | 0 |
| Number of Main Contacts NO | 3 |
| 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 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 Short-time Withstand Current ($I_{cw}$) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A |
| Number of Auxiliary Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 1 |
| 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 |
| Conventional Free-air | Main Circuit 20 A |

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| Thermal Current ($I_{th}$) | |
| Rated Control Circuit Voltage ($U_c$) | 17 ... 32 V DC |
| Coil Operating Limits | (acc. to IEC 60947-4-1) for DC supply Uc Min. ... Uc Max. (at θ ≤ 55 °C) |
| Degree of Protection | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20 |
| Mechanical Durability | 10000000 cycle |
| Minimum Switching Capacity | Auxiliary Circuit 17 V<br>Auxiliary Circuit 5 mA |
| Maximum Electrical 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 |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Wire Stripping Length | Auxiliary Circuit 9 mm<br>Main Circuit 9 mm |
| Tightening Torque | Auxiliary Circuit 0.8 ... 1.1 N·m<br>Control Circuit 0.8 ... 1.1 N·m<br>Main Circuit 0.8 ... 1.1 N·m |
| Mounting on DIN Rail | TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715<br>TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 |
| Power Loss | at Rated Operating Conditions per Pole 2 W |
| 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 |
| Remarks | No CA6 or CAF6 mountable |

## Technical UL/CSA

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|---|---|
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V AC |
| Full Load Amps Motor 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 |
| Horsepower Rating 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 |
| General Use Rating | (600 V AC) 16 A |

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| UL/CSA | |
| Connecting Capacity Main Circuit UL/CSA | Stranded 1/2x 22-10 AWG |
| Connecting Capacity Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG |
| Tightening Torque UL/CSA | Auxiliary Circuit 7 in·lb<br>Control Circuit 7 in·lb<br>Main Circuit 7 in·lb |

## Environmental

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| Ambient Air Temperature | Operation -20 ... +55 °C<br>Storage -40 ... +80 °C |
| Maximum Operating Altitude Permissible | 2000 m |
| Resistance to Shock acc. to IEC 60068-2-27 | 11 ms Pulse 15g |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5g / 5 ... 150 Hz |
| RoHS Status | Following EU Directive 2011/65/EU |

## Certificates and Declarations (Document Number)

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|---|---|
| BV Certificate | 1SAA920000-0204 |
| CB Certificate | 1SAA938000-2002 |
| CQC Certificate | CQC2003010304064033 |
| cULus Certificate | cUL_E191658 |
| Declaration of Conformity - CCC | 2020980304001854 |
| Declaration of Conformity - CE | 1SAD938517-0001 |
| Declaration of Conformity - UKCA | 1SAD938500-1001 |
| DNV GL Certificate | 1SAA938000-0306 |
| EAC Certificate | 1SAA920000-2702 |
| Environmental Information | 1SAC200068H0009 |
| Instructions and Manuals | 2CDC102047M6801 |
| KC Certificate | 1SAA938000-1501 |
| LR Certificate | 1SAA938000-0504 |
| RMRS Certificate | 1SAA938000-0704 |
| RoHS Information | 1SAD938517-0001 |

## Container Information

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|---|---|
| Package Level 1 Units | 10 piece |
| Package Level 1 Width | 115 mm |
| Package Level 1 Height | 54 mm |
| Package Level 1 Depth / Length | 280 mm |
| Package Level 1 Gross Weight | 1.82 kg |

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| Package Level 1 EAN | 4013614418396 |

## 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 |

## Categories

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

