


Representative Image

# Alternate Catalog No. B7D-40-01
# Catalog No. GJL1317201R0001

**Description: B7D-40-00-01 Mini Contactor 24VDC with diode**

**UPC No 4013614262876**

**Home > Contactors & Starters > UL Listed IEC Contactors > AF Contactors**

The B7D-40-00 mini contactor is a compact 4 pole contactor with 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 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 / 690 V (AC-1) or switching of control signals. The mini contactor has a build-in surge suppressor diode. Further features are the noiseless and hum-free coil, the integrated overvoltage protection, a switch position indication and the integrated possibility for rail or wall mounting.

## Descriptors

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|---|---|
| Category | AF Contactors |

## Specifications

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|---|---|
| Product Type | Mini Contactors (B6, B7) |
| General Use Rating UL/CSA | (600 V AC) 16 A |
| Object Classification Code | Q |
| Terminal Type | Screw Terminals |
| Rated Control Circuit Voltage | 24 V DC |
| Number of Main Contacts NO | 4 |
| Connecting Capacity Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 american wire gauge |
| Number of Main Contacts NC | 0 |
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V AC |
| Connecting Capacity Main Circuit UL/CSA | Stranded 1/2x 22-10 american wire gauge |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5g / 5 ... 150 Hz |
| Number of Auxiliary Contacts NO | 0 |
| Connecting Capacity Main Circuit UL/CSA | Stranded 1/2x 22-10 american wire gauge |
| RoHS Status | Following EU Directive 2011/65/EU |
| Reference Ambient Air Temperature | Operation -20 ... +55 °C |
| Rated Operational Voltage | Main Circuit 12 ... 690 V AC / DC<br>Main Circuit 690 V AC |
| Resistance to Shock acc. to IEC 60068-2-27 | 11 ms Pulse 15g |
| Number of Auxiliary Contacts NC | 0 |
| Tightening Torque UL/CSA | Control Circuit 7 in-lb (pound inch)<br>Main Circuit 7 in-lb (pound inch) |
| Maximum Operating Altitude Permissible | 2000 m |
| Rated Operational Current AC-1 | (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 |
| 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 |

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## Specifications

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|---|---|
| Rated Operational Power AC-3 | (220 / 230 / 240 V) 3 kW<br>(400 V) 5.5 kW<br>(400 V) Three Phase 5.5 kW<br>(440 V) 5.5 kW<br>(500 V) 5.5 kW<br>(690 V) 3 kW |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x Ie / AC-3 |
| Horsepower Rating UL/CSA | (208 V AC) Three Phase 3 hp<br>(220 ... 240 V AC) Single Phase 1.5 hp<br>(220 ... 240 V AC) Three Phase 3 hp<br>(440 ... 480 V AC) Three Phase 5 hp<br>(550 ... 600 V AC) Three Phase 5 hp |
| Conventional Free-air Thermal Current | Main Circuit 20 A |
| Rated Frequency | Control Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50Hz<br>Main Circuit DC |
| Rated Short-time Withstand Current | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A |
| Rated Operational Current AC-3 | (220 / 230 / 240 V) 55 °C 11.3 A<br>(380 / 400 V) 55 °C 11.5 A<br>(440 V) 55 °C 10.1 A<br>(500 V) 55 °C 9.2 A<br>(690 V) 55 °C 3.8 A |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1 | 10 x Ie / AC-3 |
| Maximum Electrical Switching Frequency | AC-1 300 cycles per hour<br>AC-15 360 cycles per hour<br>AC-3 600 cycles per hour<br>DC-1 600 cycles per hour<br>DC-13 360 cycles per hour<br>DC-3 600 cycles per hour |
| Short-Circuit Protective Devices | gG Type Fuses Type 1&2 25 A |
| Rated Insulation Voltage | 690 V<br>acc. to UL/CSA 600 V |
| Mechanical Durability | 10000000 cycle |
| Coil Operating Limits | (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x Uc (at θ ≤ 55 ° C) |
| Secondary Rated Impulse Withstand Voltage | Main Circuit 6 kV |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 square mm<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 square mm<br>Flexible 1/2x 1 ... 2.5 square mm<br>Rigid 1/2x 1 ... 4 square mm |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 square mm<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 square mm<br>Flexible 1/2x 1 ... 2.5 square mm<br>Rigid 1/2x 1 ... 4 square mm |
| Coil Consumption | Average Holding Value 50 Hz 3.5 V - A<br>Average Pull-in Value 50 Hz 3.5 V - A |
| Degree of Protection | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20 |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 square millimetre<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 square millimetre<br>Flexible 1/2x 1 ... 2.5 square millimetre<br>Rigid 1/2x 1 ... 4 square millimetre |
| 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 |
| Screw Terminal Type | Screw Terminals |
| Wire Stripping Length | Main Circuit 9 mm |

## Classifications

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|---|---|
| ETIM 4 | EC000066 - Magnet contactor, AC-switching |
| ETIM 6.0 | EC000066 - Power contactor, AC switching |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 5.0 | EC000066 - Magnet contactor, AC-switching |
| eClass | 7.0 27371003 |

## Dimensions

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

## Package Information

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| Package Level 1 Width | 115 mm |
| Package Level 1 Height | 54 mm |
| Package Level 1 Depth / Length | 280 mm |
| Package Level 1 EAN | 4013614420146 |
| Package Level 1 Units | 10 piece |
| Package Level 1 Gross Weight | 1.82 kg |

## Ordering

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