

## PRODUCT-DETAILS

# B7D-40-00-05

## B7D-40-00-05 Mini Contactor 220-240VDC with diode



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | B7D-40-00-05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product ID            | GJL1317201R0005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EAN                   | 4013614262883                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Catalog Description   | B7D-40-00-05 Mini Contactor 220-240VDC with diode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Long Description      | <p>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.</p> |

### Ordering

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

### Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0201 |
| Instructions and Manuals          | 2CDC102047M6801 |
| Dimension Diagram                 | GJL1200436F0001 |

## Dimensions

|                            |          |
|----------------------------|----------|
| 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

|                                                    |                                                                                                                                                                                                         |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Poles                                    | 4                                                                                                                                                                                                       |
| Mini Contactor Type                                | Mini Contactor                                                                                                                                                                                          |
| Rated Operational Voltage                          | 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 ( $U_{imp}$ )      | 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                         | 4                                                                                                                                                                                                       |
| 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                    | 0                                                                                                                                                                                                       |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Main Circuit 20 A                                                                                                                                                                                       |
| Rated Control Circuit Voltage ( $U_c$ )            | 220 ... 240 V DC                                                                                                                                                                                        |
| Coil Operating Limits                              | (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55$ °C)                                                                                                                     |
| Degree of Protection                               | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20                                                                                                       |
| Mechanical Durability                              | 10000000 cycle                                                                                                                                                                                          |
| 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                      |
| Connecting Capacity Main Circuit                   | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup> |
| Connecting Capacity Auxiliary Circuit              | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup> |

|                                        |                                                                                                                                                         |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connecting Capacity<br>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                  | Main Circuit 9 mm                                                                                                                                       |
| Tightening Torque                      | 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                                                                    |

## Technical UL/CSA

|                                                 |                                                                                                                                                                                                                        |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Operating<br>Voltage UL/CSA             | Main Circuit 600 V AC                                                                                                                                                                                                  |
| 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 |
| 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  |
| General Use Rating<br>UL/CSA                    | (600 V AC) 16 A                                                                                                                                                                                                        |
| Connecting Capacity Main<br>Circuit UL/CSA      | Stranded 1/2x 22-10 AWG                                                                                                                                                                                                |
| Connecting Capacity<br>Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG                                                                                                                                                                                                |
| Tightening Torque<br>UL/CSA                     | Control Circuit 7 in·lb<br>Main Circuit 7 in·lb                                                                                                                                                                        |

## 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<br>acc. to IEC 60068-2-6 | 5g / 5 ... 150 Hz                                  |
| RoHS Status                                       | Following EU Directive 2011/65/EU                  |

## Certificates and Declarations (Document Number)

|                                    |                     |
|------------------------------------|---------------------|
| BV Certificate                     | 1SAA920000-0204     |
| CB Certificate                     | 1SAA938000-2002     |
| CQC Certificate                    | CQC2003010304064033 |
| cULus Certificate                  | cUL_E191658         |
| Declaration of Conformity<br>- CCC | 2020980304001854    |
| Declaration of Conformity<br>- CE  | 1SAD938516-0001     |

|                           |                 |
|---------------------------|-----------------|
| 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          | 1SAD938516-0001 |

## Container Information

|                                |               |
|--------------------------------|---------------|
| 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       |
| Package Level 1 EAN            | 4013614420153 |

## 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  |
| eClass                     | V11.0 : 27371003                          |
| UNSPSC                     | 39121529                                  |

## Accessories

| Identifier      | Description             | Type     | Quantity | Unit Of Measure |
|-----------------|-------------------------|----------|----------|-----------------|
| GJL1201317R0002 | CA6-11E Minicontattori  | CA6-11E  | 1        | piece           |
| GJL1201317R0003 | CA6-11M Minicontattori  | CA6-11M  | 1        | piece           |
| GJL1201317R0004 | CA6-11N Minicontattori  | CA6-11N  | 1        | piece           |
| GJL1201330R0003 | CAF6-11M Minicontattori | CAF6-11M | 1        | piece           |
| GJL1201330R0006 | CAF6-20E Minicontattori | CAF6-20E | 1        | piece           |
| GJL1201330R0011 | CAF6-02M Minicontattori | CAF6-02M | 1        | piece           |
| GJL1201330R0007 | CAF6-20M Minicontattori | CAF6-20M | 1        | piece           |
| GJL1201330R0012 | CAF6-02N Minicontattori | CAF6-02N | 1        | piece           |
| GJL1201330R0008 | CAF6-20N Minicontattori | CAF6-20N | 1        | piece           |
| GJL1201330R0002 | CAF6-11E Minicontattori | CAF6-11E | 1        | piece           |
| GJL1201330R0004 | CAF6-11N Minicontattori | CAF6-11N | 1        | piece           |
| GJL1201330R0010 | CAF6-02E Minicontattori | CAF6-02E | 1        | piece           |
| GJL1201906R0001 | LT6-B Minicontattori    | LT6-B    | 1        | piece           |
| GJL1201907R0001 | LP6 Minicontattori      | LP6      | 1        | piece           |
| GJL1201904R0001 | BN6 Minicontattori      | BN6      | 1        | piece           |

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Categories

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

