



**Descriptors** 

## Alternate Catalog No. B7-22-00-02 Catalog No. GJL1311501R0002

Description: B7-22-00-02 Mini Contactor 42V 40-450Hz

UPC No 4013614263774

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The B7-22-00 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 buldings, commercial buildings and industrial applications for the control of single or three-phase loads up to  $5.5 \, \text{kW}$  (AC-3) and  $20 \, \text{A}$  /  $690 \, \text{V}$  (AC-1) or switching of control signals. Further features are the silent coil, a switch position indication and the integrated possibility for rail or wall mounting.

| Category                                       | AF Contactors  |
|--|--|
| Specifications                                 |  |
| 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                  | 42 V AC  |
| Number of Main Contacts NO                     | 2  |
| Connecting Capacity Auxiliary Circuit UL/CSA   | Stranded 1/2x 22-10 american wire gauge  |
| Number of Main Contacts NC                     | 2  |
| 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 -25 +55 °C   |
| Rated Operational Voltage                      | Main Circuit 12 690 V AC / DC 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)  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                                     |   |
|--|---|
| 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 le / 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 400 Hz Control Circuit 50 Hz Control Circuit 60 Hz Main Circuit 60 Hz Main Circuit 50Hz Main Circuit 50Hz 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 le / AC-3  |
| Maximum Electrical Switching Frequency             | AC-1 300 cycles per hour AC-15 360 cycles per hour AC-3 600 cycles per hour DC-1 600 cycles per hour DC-13 360 cycles per hour 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 AC supply 0.85 1.1 x Uc (at $\theta \le 55$ °   |
| Secondary Rated Impulse Withstand Voltage          | C) Main Circuit 6 kV  |
| Connecting Capacity Main Circuit                   | Flexible with Ferrule 1/2x 1 2.5 square mm Flexible with Insulated Ferrule 1/2x 1 2.5 square mm Flexible 1/2x 1 2.5 square mm Rigid 1/2x 1 4 square mm  |
| Connecting Capacity Control Circuit                | Flexible with Ferrule 1/2x 1 2.5 square mm Flexible with Insulated Ferrule 1/2x 1 2.5 square mm Flexible 1/2x 1 2.5 square mm 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                               | Control Circuit Terminals IP20  |
| Connecting Capacity Auxiliary Circuit              | Main Circuit Terminals IP20  Flexible with Ferrule 1/2x 1 2.5 square millimetre Flexible with Insulated Ferrule 1/2x 1 2.5 square millimetre Flexible 1/2x 1 2.5 square millimetre Rigid 1/2x 1 4 square millimetre |
| Mounting on DIN Rail                               | TH35-7.5 (35 $\times$ 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 $\times$ 15 mm Mounting Rail) acc. to IEC 60715   |
| Screw Terminal Type                                | Screw Terminals   |
| Wire Stripping Length                              | Main Circuit 9 mm   |

| Classifications |   |
|-----------------|---|
| 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 |

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| eClass | 7.0 27371003 |
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| ecidss | 7.0 27371003 |

| Dimensions                 |          |
|----------------------------|----------|
| 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            |               |
|--------------------------------|---------------|
| Package Level 1 Width          | 115 mm        |
| Package Level 1 Height         | 54 mm         |
| Package Level 1 Depth / Length | 280 mm        |
| Package Level 1 EAN            | 4013614417214 |
| Package Level 1 Units          | 10 piece      |
| Package Level 1 Gross Weight   | 1.82 kg       |

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

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