

# KBP series

## 10 Amp Dual Coil Latching Relay

⚡ File E29244

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### Features

- Dual coil latching relay accepts a momentary impulse to one coil to latch and a second impulse to the other coil to release.
- Enclosed in a clear polycarbonate dust cover.
- AC or DC coils.
- Contacts up to 5PDT.
- Mounts in 11 or 20-pin octal-type plugs.

### Contact Data @ +25°C

**Arrangements:** From 2 Form C (DPDT) to 5 Form C (5PDT), (3PDT each coil).

**Ratings:** 10 amps @ 120VAC.

**Materials: 10 amp models:** Silver-cadmium oxide.

**Expected Life:** 500,000 operations, mechanical; 50,000 operations minimum at rated loads.

### Coil Data

|                                    | Nominal Voltage            | Resistance in Ohms<br>±10% @ 25°C                             | Nominal Current<br>Milliamperes |
|------------------------------------|----------------------------|---|---------------------------------|
| <b>DC Coils</b><br><br>(to 5 pole) | 12                         | 52.0  | 230                             |
|                                    | 24                         | 230   | 104                             |
|                                    | 48                         | 850   | 56.5                            |
|                                    | 110                        | 4560  | 24                              |
|                                    | 220                        | Use 110 volt relay with 5000 Ohms, 5 watt resistor in series. |                                 |
|                                    | Nominal Voltage            | Resistance in Ohms<br>±15% @ 25°C                             | Nominal Current<br>Milliamperes |
| <b>AC Coils</b>                    | <b>Up to 4 Pole Relays</b> |   |                                 |
|                                    | 24                         | 42  | 210                             |
|                                    | 120                        | 1030  | 44                              |
|                                    | 240                        | 4100  | 22                              |
|                                    | <b>For 5 Pole Relays</b>   |   |                                 |
|                                    | 24                         | 27  | 325                             |
|                                    | 120                        | 700   | 68                              |

### Operate Data @ +25°C

#### Must-Operate Voltage:

**DC:** 75% of nominal voltage.

**AC:** 85% of nominal voltage.

**Operate Time:** 25 milliseconds excluding bounce.

### Initial Dielectric Strength

**Between Open Contacts:** 500V rms.

**Between Adjacent Contacts:** 1,000V rms.

**Between Contacts and Coil:** 1,000V rms.

### Environmental Data

#### Temperature Range:

**Storage:** 105°C.

**Operating:** -45°C to +85°C.

### Coil Data @ +25°C

#### Nominal Power:

**DC Coils:** 2.7W.

**AC Coils:** 5.3VA to 4 pole; 7.8VA to 5 pole.

**Maximum Power:** DC coils - 4.0W.

**Duty Cycle:** Intermittent.

**Initial Insulation Resistance:** 100 megohms.

### Mechanical Data

**Termination:** See terminals table on next page.

**Enclosures:** Plastic dust cover standard. Hermetically sealed metal case available on special order.

**Weight:** 10.8 oz. (306g) approximately.

Ordering Information

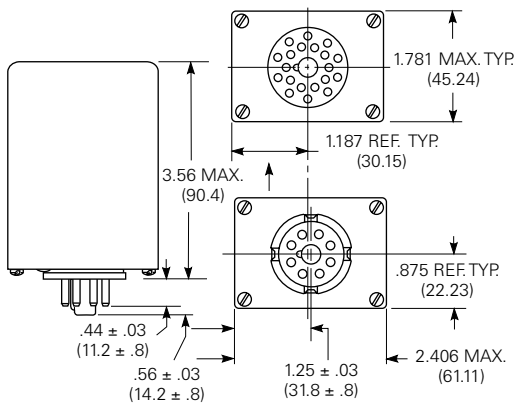
|  |  |   |  |            |            |          |          |            |
|--|--|---|--|------------|------------|----------|----------|------------|
|  |  | Typical Part Number ▶   |  | <b>KBP</b> | <b>-11</b> | <b>A</b> | <b>G</b> | <b>-24</b> |
| <b>1. Type:</b><br>KBP = Enclosed, dual coil latching relay.      KB = Open, dual coil latching relay. |  |   |  |            |            |          |          |            |
| <b>2. Contact Arrangement:</b><br>11 = 2 Form C (DPDT)<br>17 = 4 Form C (4PDT)<br>20 = 5 Form C (5PDT) |  |   |  |            |            |          |          |            |
| <b>3. Coil Input:</b><br>A = AC<br>D = DC  |  |   |  |            |            |          |          |            |
| <b>4. Contact Rating:</b><br>G = 10 amps @ 120VAC, 80% PF.   |  |   |  |            |            |          |          |            |
| <b>5. Coil Voltage:</b><br>12, 24, 48, 110VDC<br>24, 120, 240VAC                                       |  | Specify the same latch and release coil voltage for standard KBP relays. Unlike coils available on special order. |  |            |            |          |          |            |

Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.

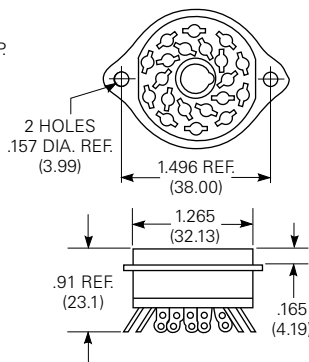
|             |              |              |
|-------------|--------------|--------------|
| KB-17AG-120 | KBP-11AG-120 | KBP-11DG-110 |
| KB-17DG-12  | KBP-11DG-24  | KBP-20AG-120 |

Outline Dimensions

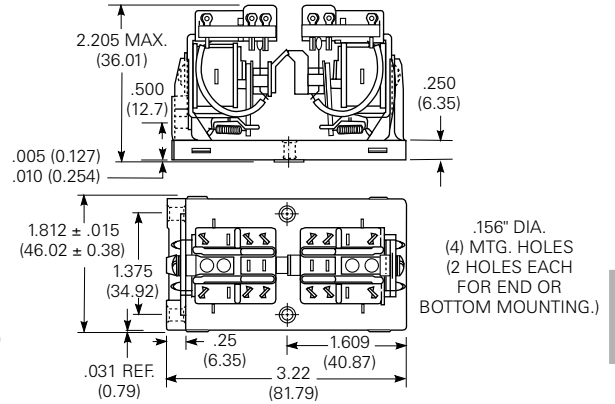
Dust Cover



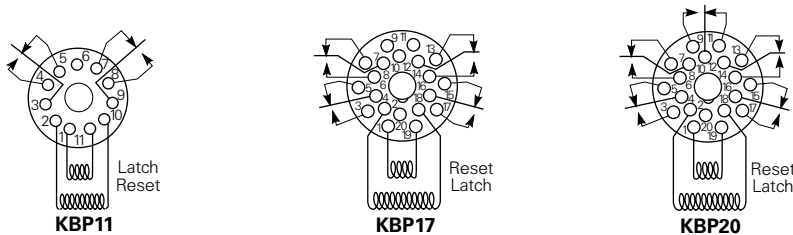
27E928 Socket



KB-Open Style



Wiring Diagrams (Bottom Views)



Note: Shown with reset coil energized last.