

## RR2KP Series — Magnetic Latching Relays

Key features of the RR2KP series include:

- Standard octal base (11-pin) termination
- Operates by pulse input and maintains condition even during power failure
- Coils rated for continuous duty
- High vibration and shock resistance
- Excellent self-holding performance (magnetic latch)
- Optional manual check button for circuit testing
- DIN rail, surface, and panel mount sockets available for a wide range of mounting applications



|                |                                                    |                                                                                                                                                                                                     |
|----------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specifications | Contact Material                                   | Silver                                                                                                                                                                                              |
|                | Contact Resistance                                 | 30mΩ maximum (initial value)                                                                                                                                                                        |
|                | Minimum Applicable Load                            | 5V DC, 100mA                                                                                                                                                                                        |
|                | Operating Time                                     | 25ms maximum                                                                                                                                                                                        |
|                | Maximum Continuous Applied Voltage (AC/DC) at 20°C | 110% of the rated voltage without overheating                                                                                                                                                       |
|                | Minimum Set and Reset Voltage at 20°C              | 80% of the rated voltage                                                                                                                                                                            |
|                | Power Consumption                                  | AC: approximately 2.4VA (50Hz), 2.2VA (60Hz)<br>DC: approximately 1.5W                                                                                                                              |
|                | Insulation Resistance                              | 100MΩ minimum (with 500V DC megger)                                                                                                                                                                 |
|                | Dielectric Strength                                | Between live and dead parts: 1,500V AC, 1 minute<br>Between contact circuit and opposite coil: 1,500V AC, 1 minute<br>Between contact circuits: 1,500V AC, 1 minute (1,000V between NO-NC contacts) |
|                | Frequency Response                                 | 1,800 operations/hour                                                                                                                                                                               |
|                | Temperature Rise                                   | Coil: 85°C maximum; Contact: 65°C maximum                                                                                                                                                           |
|                | Vibration Resistance                               | 0 to 6G (55Hz maximum)                                                                                                                                                                              |
|                | Shock Resistance                                   | 100N (approximately 10G)                                                                                                                                                                            |
|                | Life Expectancy                                    | Electrical: over 500,000 operations (120V, 10A)<br>Mechanical: over 5,000,000 operations                                                                                                            |
|                | Operating Temperature                              | –30 to +70°C                                                                                                                                                                                        |
|                | Weight                                             | 170g (approximately)                                                                                                                                                                                |



UL Recognized  
File No. E66043



CSA Certified  
File No. LR35144

### Ordering Information

Order standard voltages for fastest delivery. Allow extra delivery time for non-standard voltages.

Basic Part No.

RR2KP-U

Coil Voltage:

AC120V

## Part Numbers

## Part Numbers: RR2KP Series

| Termination | Contact Configuration | Standard | With Check Button |
|-------------|-----------------------|----------|-------------------|
| P: 11-Pin   | DPDT                  | RR2KP-U  | RR2KP-UC          |

## Ratings

## Coil Ratings

|               |      | Rated Current $\pm 15\%$ at 20°C |        |                                    |
|---------------|------|----------------------------------|--------|------------------------------------|
| Rated Voltage |      | 60Hz                             | 50Hz   | Coil Resistance $\pm 10\%$ at 20°C |
| AC            | 6V   | 429mA                            | 467mA  | 3.5Ω                               |
|               | 12V  | 184mA                            | 200mA  | 23.8Ω                              |
|               | 24V  | 92mA                             | 100mA  | 95Ω                                |
|               | 120V | 22mA                             | 24mA   | 2,200Ω                             |
|               | 240V | 10.6mA                           | 11.5mA | 9,190Ω                             |
| DC            | 6V   | 240mA                            |        | 25Ω                                |
|               | 12V  | 120mA                            |        | 100Ω                               |
|               | 24V  | 60mA                             |        | 400Ω                               |
|               | 48V  | 30mA                             |        | 1,600Ω                             |
|               | 110V | 13.8mA                           |        | 7,960Ω                             |

## Contact Ratings

| Voltage | Resistive |     |     | Inductive |      |      |
|---------|-----------|-----|-----|-----------|------|------|
|         | Nominal   | UL  | CSA | Nominal   | UL   | CSA  |
| 30V DC  | 10A       | 10A | 10A | 7.5A      | 7A   | 7.5A |
| 100V DC | 0.5A      | —   | —   | 0.5A      | —    | 0.5A |
| 120V AC | 10A       | 10A | 10A | 7.5A      | 7.5A | 7.5A |
| 240V AC | 7.5A      | 10A | 10A | 5A        | 7A   | 7A   |



2. Inductive load  $\cos \phi = 0.3$ ,  $L/R = 7\text{ms}$ .

3. UL/CSA motor load rating 1/4 HP at 120V AC and 1/3 HP at 240V AC.

## Applicable Sockets

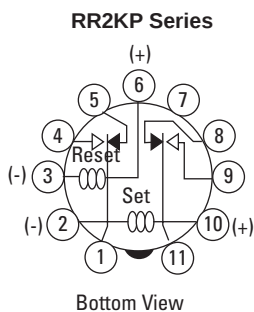
## Part Numbers: Sockets

| Relay | Snap DIN Rail Mount | Finger-Safe DIN Rail Mount | Panel   | Springs (optional)     |
|-------|---------------------|----------------------------|---------|------------------------|
| RR2KP | SR3P-05<br>SR3P-06  | SR3P-05C                   | SR3P-51 | SR3P-06F3<br>SR3P-51F3 |



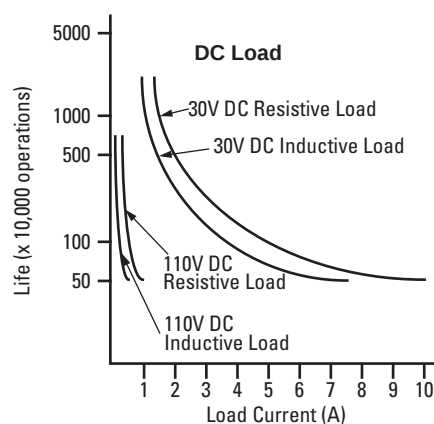
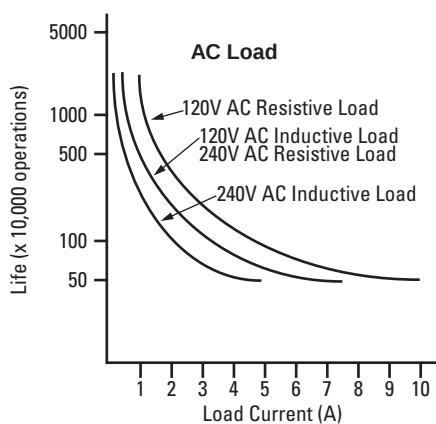
1. See Section F for details on sockets. All DIN rail mount sockets shown above can be mounted using DIN rail BNDN1000.

## Internal Circuit



Shown in reset (unlatched) position.

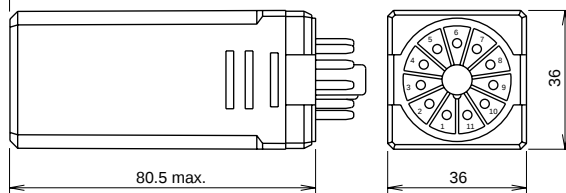
## Electrical Life Curves



## Dimensions

**Plug-in  
RR2KP**

Total length from panel surface including relay socket  
SR3P-05A: 105 (108.5) max., SR3P-511: 87.5 (92) max.



All dimensions in mm.