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) DC: approximately 1.5W
Insulation Resistance	100MΩ minimum (with 500V DC megger)
Dielectric Strength	Between live and dead parts: 1,500V AC, 1 minute Between contact circuit and opposite coil: 1,500V AC, 1 minute 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) 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.	Coil Voltage:
RR2KP-U	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 Voltage		Rated Current ±15% at 20°C 60Hz	50Hz	Coil Resistance ±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 Nominal	UL	CSA	Inductive 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 ø = 0.3, L/R = 7ms.
3. UL/CSA motor load rating 1/4 HP at 120V AC and 1/3 HP at 240V AC.

Applicable Sockets

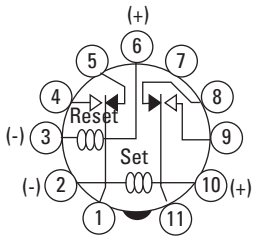
Part Numbers: Sockets

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

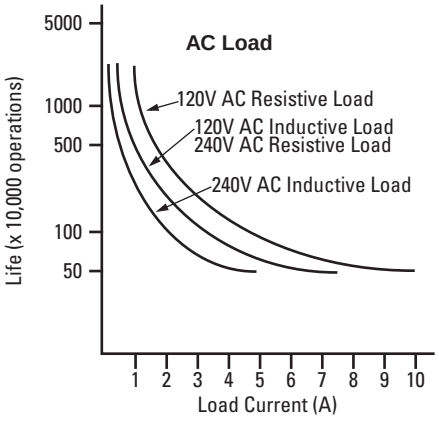
RR2KP Series

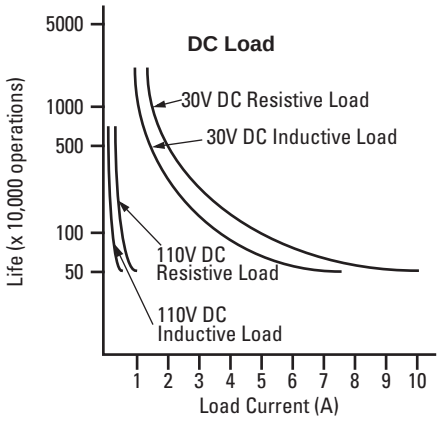


Bottom View

Shown in reset (unlatched) position.

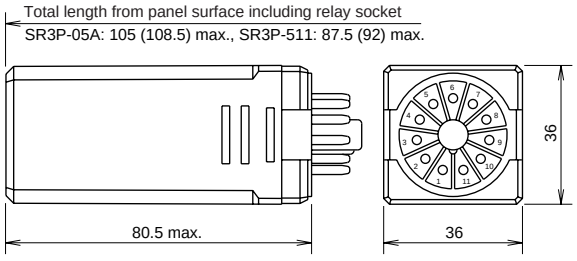
Electrical Life Curves





Dimensions

Plug-in
RR2KP



All dimensions in mm.