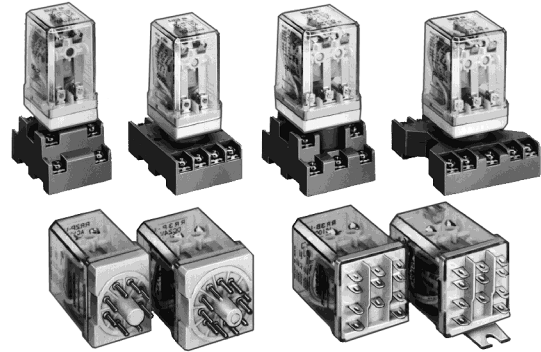


RR Series — General Purpose Power Relays

Key features of the RR series include:

- High reliability and long service life
- Available in octal (8- and 11-pin) or square (11-blade) base
- Options include check button for test operation, indicator light, and side flange (contact IDEC for diodes)
- DIN rail, surface and panel type sockets available for a wide range of mounting applications



Specifications	Contact Material	Silver
	Contact Resistance	30mΩ maximum (initial value)
	Minimum Applicable Load	24V DC/10mA, 5V DC/20mA (reference value)
	Operating Time	25ms maximum
	Release Time	25ms maximum
	Maximum Continuous Applied Voltage (AC/DC) at 20°C	110% of the rated voltage
	Minimum Operating Voltage (AC/DC) at 20°C	80% of the rated voltage
	Drop-Out Voltage (AC) at 20°C	30% of the rated voltage
	Drop-Out Voltage (DC) at 20°C	15% of the rated voltage
	Power Consumption	AC: approximately 3VA (50Hz), 2.5VA (60Hz) DC: approximately 1.5W
	Insulation Resistance	100MΩ minimum (measured with 500V DC megger)
	Dielectric Strength	Pin (RR2P, RR3PA) Between live and dead parts: 1,500V AC, 1 minute Between contact circuit and operating coil: 1,500V AC, 1 minute Between contact circuits: 1,500V AC, 1 minute (1,000V AC between NO-NC contacts)
		Blade (RR1BA, RR2BA, RR3B) Between live and dead parts: 2,000V AC, 1 minute Between contact circuit and operating coil: 2,000V AC, 1 minute Between contact circuits: 2,000V AC, 1 minute Between contacts of same polarity: 1,000V AC, 1 minute
	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, 50/60Hz, 10A) Mechanical: over 10,000,000 operations	
Operating Temperature	-30 to +70°C	
Weight	RR2P: 90g, RR3PA: 96g (approximately) RR1BA/RR2BA/RR3B: 82g (approximately)	



UL Recognized
File No. E66043



CSA Certified
File No. LR35144



File No. B020813332452*
* Pin Style Only
(does not apply to blade style)



* Pin Style Only

Ordering Information

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

Basic Part No.

RR3PA-U

Coil Voltage:

AC120V

Part Numbers

Part Numbers: RR Series with Options

Termination	Contact Configuration	Basic Part No.	Indicator Light	Check Button	Light and Check Button	Side Flange
P, PA (pin)	DPDT	RR2P-U	RR2P-UL	RR2P-UC	RR2P-ULC	—
	3PDT	RR3PA-U	RR3PA-UL	RR3PA-UC	RR3PA-ULC	—
B, BA (blade)	SPDT	RR1BA-U	RR1BA-UL	RR1BA-UC	RR1BA-ULC	RR1BA-US
	DPDT	RR2BA-U	RR2BA-UL	RR2BA-UC	RR2BA-ULC	RR2BA-US
	3PDT	RR3B-U	RR3B-UL	RR3B-UC	RR3B-ULC	RR3B-US



1. RR1BA, RR2BA, and RR3PA are U.S. standard terminal arrangements.
2. For diode option on DC coils please consult factory.

Ratings

Coil Ratings

Rated Voltage	Rated Current $\pm 15\%$ at 20°C		Coil Resistance $\pm 10\%$ at 20°C	Inrush Current	Inductance		
	60Hz	50Hz			Energizing	De-Energizing	
AC	6V	420mA	490mA	4.9 Ω	720mA	0.04H	0.02H
	12V	210mA	245mA	18 Ω	365mA	0.15H	0.08H
	24V	105mA	121mA	79 Ω	182mA	0.57H	0.32H
	120V	20.5mA	24mA	2100 Ω	35mA	15H	8.2H
	240V	10.5mA	12.1mA	8330 Ω	18mA	57H	32H
DC	6V	240mA		25 Ω	N/A		
	12V	120mA		100 Ω			
	24V	60mA		400 Ω			
	48V	30mA		1600 Ω			
	110V	13mA		8460 Ω			

Contact Ratings

Voltage	Resistive			Inductive			Motor Load
	Nominal	UL	CSA	Nominal	UL	CSA	UL
30V DC	10A	10A	10A	7.5A	7A	7.5A	—
110V DC	0.5A	—	—	0.3A	—	0.5A	—
120V AC	10A	10A	10A	7.5A	7.5A	7.5A	1/4 hp
240V AC	7.5A	10A	10A	5A	7A	7A	1/3 hp



Inductive load:
 $\cos \phi = 0.3$, $L/R = 7ms$.

Applicable Sockets

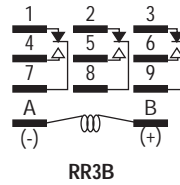
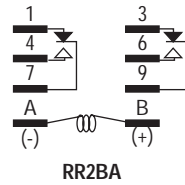
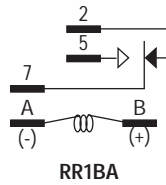
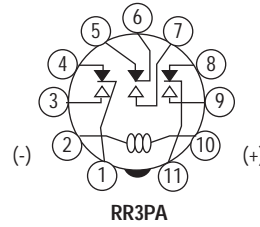
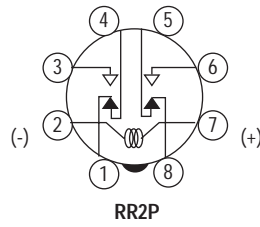
Part Numbers: Sockets

Relays	Standard DIN Rail Mount	Finger-Safe DIN Rail Mount	Panel Mount	Springs & Clips (optional)	
				Part Numbers	Use With Socket
RR2P	SR2P-05 SR2P-06	SR2P-05C	SR2P-51	SR2B-02F1	SR2P-05, -05C, -06
				SR3P-01F1	SR2P-51, SR3P-51
RR3PA	SR3P-05 SR3P-06	SR3P-05C	SR3P-51	SR3B-02F1	SR3P-05, -05C, -06 SR3B-05, -51
				SR3P-01F1	SR3P-51
RR1BA RR2BA RR3B	SR3B-05	—	SR3B-51	SR3B-02F1	SR3B-05 SR3B-51

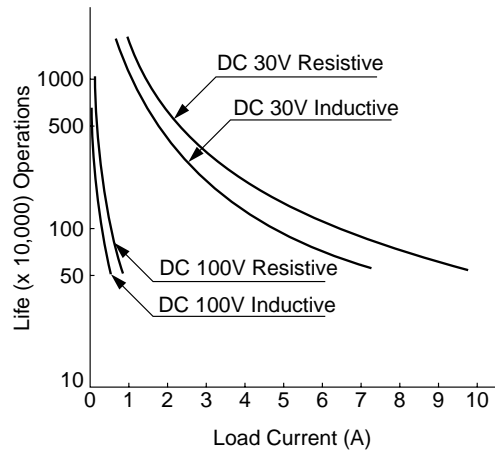
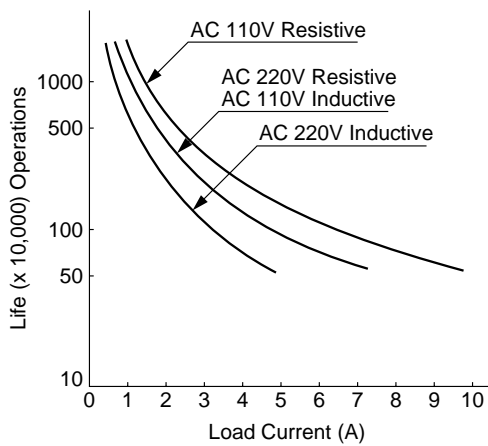


See Section F for details on sockets. All DIN rail mount sockets listed can be mounted using DIN rail BNDN1000.

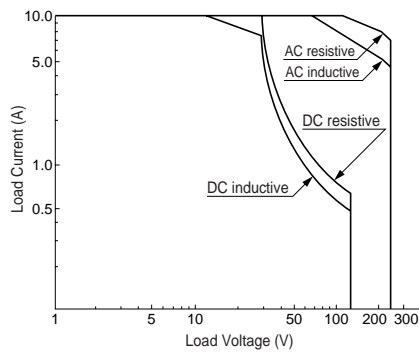
Internal Circuit



Electrical Life Curves

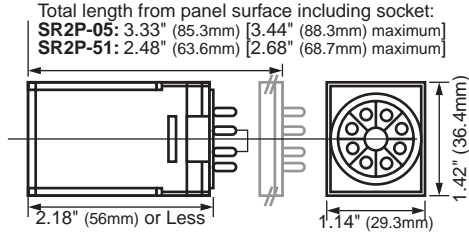


Maximum Switching Capacity

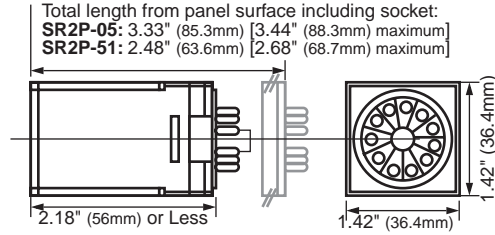


Dimensions

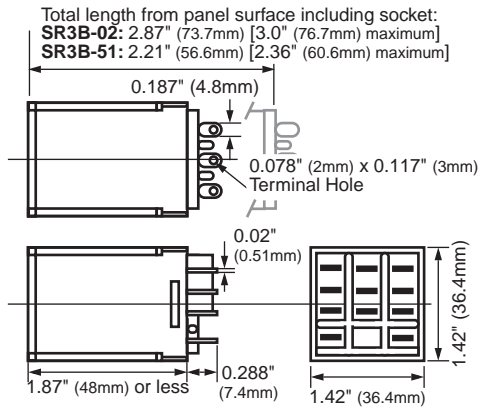
8-Pin
RR2P



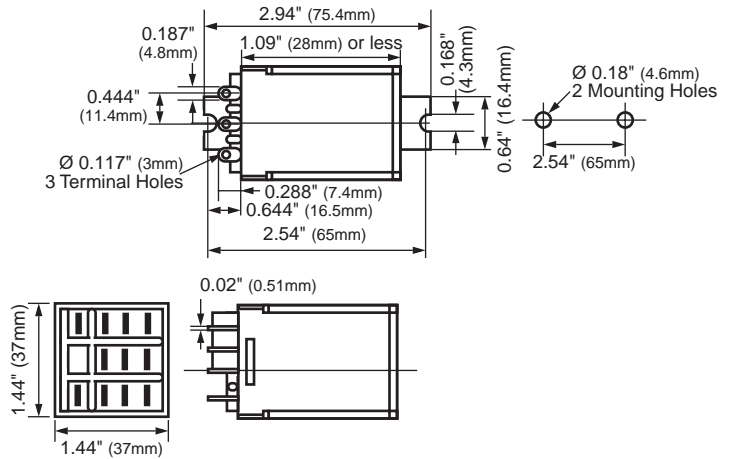
11-Pin
RR3PA



Blade
RR1BA, RR2BA, RR3B



Side Flange
RR1BA-US, RR2BA-US, RR3B-US



Note: Dimensions in [] include hold-down spring.