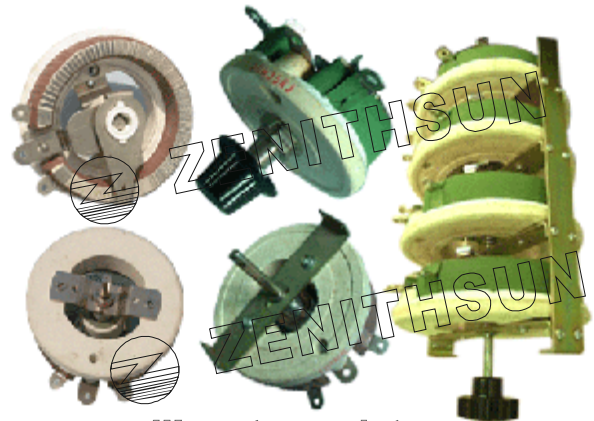


# Variable Power Wirewound Resistors, Adjustable Resistors, Rheostats

TYPE A: BC1 Series  
TYPE B: BCD Series (with knob )  
Power Rating: 25W-3000W  
Resistance Value: 1Ω-10KΩ  
Resistance Tolerance: ±5%, ±10%



[www.topresistor.com](http://www.topresistor.com)

## ● Construction:

1. BC1 ceramic tray variable series are wound with chromium-alloy wire as a resistor element.
2. The entire component is coated non-flammable and high-temperature resin except for the slide contact surface.
3. After cooling and drying, insulation is applied through a high-temperature process. Installed centered rotating adjuster component slides along the resistance element to vary the resistance to the desired value.
4. Can provide the knob with customer requirements.

## ● Features:

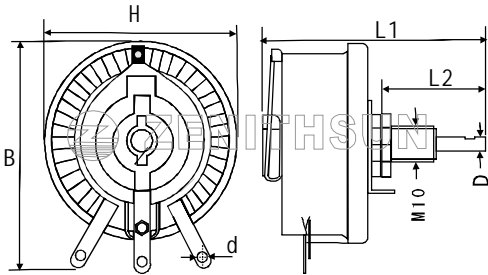
1. Variable resistors are often called potentiometers in books and catalogues. Variable BCI may be used as a rheostat with two connections, (the wiper and just one end of the track) or as a potentiometer with all three connections in use.
2. On one resistor, can have the different resistance requirement (flat and round wire can be in the same rheostat).
3. High power rating, resistance to humidity, resistance value in great adjustable range.
4. Motor controller also use BCI series as rheostat or potentiometer to control the speed of a motor by limiting the flow of current through them.
5. For non-standard technical requirements and custom special applications, please contact us to discuss the details.
6. Delivery: 7-10 days.

## ● Applications:

Widely used in blenders, mixers, fans, power tools, educational modeling, load simulations, industrial machinery RPM adjustment, voltage and current adjustment, instruments, and automated control installations, etc.

## ● Dimensions

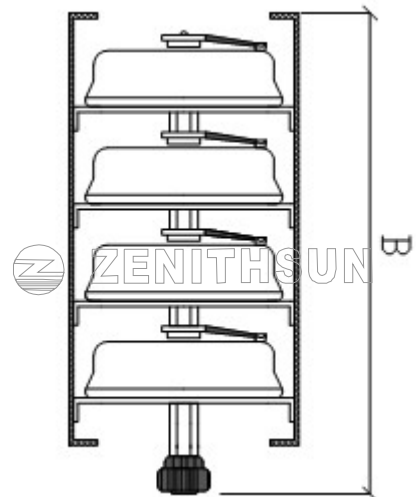
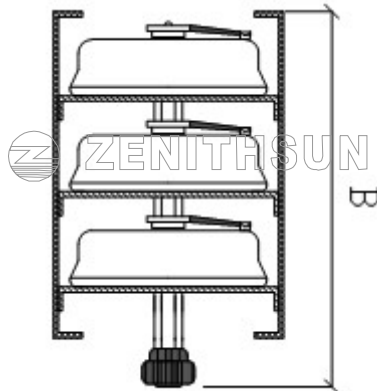
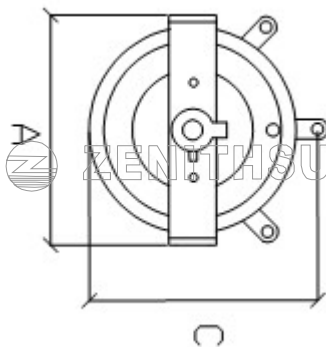
Power Rating:25W-500W



Power Rating	Dimensions (mm)						Resistance (Ω)
	H±3	L1±5	L2±3	B±3	D±0.5	d±0.3	
25W	44	60	25	50	6	2	1~3K
50W	64	64	25	70	6	2	1~5K
100W	81	64	35	92	6	4	1~5K
150W	104	70	30	120	6	4	1~5K
300W	155	115	55	170	10	4	1~5K
500W	205	120	60	215	10	4	1~5K

Power Rating:1000W-3000W

1. Single resistor with power rating 500W
2. 1000W (two resistors series connection or parallel)
3. 1500W (three resistors series connection or parallel)
4. 2000W (four resistors series connection or parallel)
5. 2500W (five resistors series connection or parallel)
6. 3000W (six resistors series connection or parallel)
7. TYPE BC1-N series with the knob in the bottom



Power Rating	Dimensions (mm)		
	A±3	B±5	C±3
1000W	216	198	214
1500W	216	298	214
2000W	216	396	214
2500W	216	496	214
3000W	216	595	214

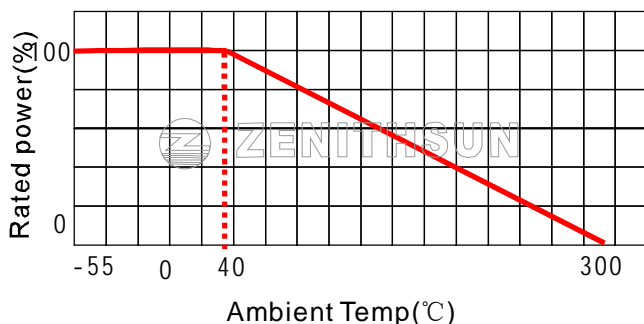
### ● Application Notes:

1. wattage is proportional to this adjusted resistance value.
2. adjustability is 10% to 90% of full resistance value.
3. at the end resistance value is rated power wattage.
4. resistance value means maximum resistance value (end resistance value).
5. resistance tolerance means precision range of end resistance value.

### ● Performance Specifications

Test item	Test condition	Specifications
Resistance tolerance	JIS-C-5261 5-1	Resistance tolerance $\pm 5\%$ , $\pm 10\%$
Insulation resistance	JIS-C-5261 6-1 500V DC	100 M $\Omega$ Min
Dielectric withstanding voltage	JIS-C-5261 7-1 1000V DC 60s Between terminal and axis	Free or appearance or structural irregularity
Terminal strength	JIS-C-5261 6-5 3kg 30s	Free or appearance or structural irregularity $\Delta R \leq \pm(2\%+0.1\Omega)$
Vibration	JIS-C-5261 6-6 1.5m/m	Free or appearance or structural
	10-50-10 HZ/min 2H each	irregularity $\Delta R \leq \pm(2\%+0.1\Omega)$
Load life	JIS-C-5261 7-7	Free or appearance or structural
		irregularity $\Delta R \leq \pm(5\%+0.1\Omega)$
Full gyration angle	JIS-C-5261 6-1	300 $\pm 5^\circ$ C
Flame retardation	100%-600% rated power load	US UL-94 flame retardation
		test V-0 grade noncombustible

### ● Derating



### ● How To Order

BC 1	25W	50 $\Omega$	J
①	②	③	④

- ① Type: BC 1 ,BCD
- ② Rated Power(W):25W-3000W
- ③ Resistance Value( $\Omega$ ):1 $\Omega$ -5K $\Omega$
- ④ Tolerance(%): $\pm 5\%$ , $\pm 10\%$