

Variable Power Wirewound Resistors, Adjustable Resistors, Rheostat

TYPE: BC 1 series
TYPE: BC1-N series
TYPE: BC1-DZ series

Power Rating: 25W-3000W
Resistance Value: 1 Ω -10k Ω
Resistance Tolerance: $\pm 5\%$, $\pm 10\%$



● 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 customers requirement.

● Features:

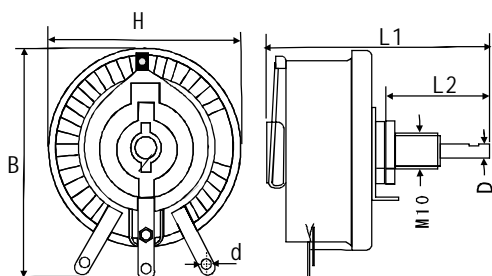
1. Variable resistors are often called potentiometers in books and catalogues. Variable BCI may be used as a rheostat with two connections, (the wiper and just one end of the track) or as a potentiometer with all three connections in use.
2. On one resistor, can have the different resistance requirement (flat and round wire can be in the same rheostat).
2. High power rating, resistance to humidity, resistance value in great adjustable range.
3. 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.
4. Delivery: 7-10 days.
5. Conforms to the ROHS standard and the LEAD-FREE non-lead standard.

● 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

TYPE:BC1 25W-500W single resistor power rating
 TYPE:BC1-N 25W-500W single resistor power rating (with knob)
 TYPE:BC1-DZ 25W-500W single resistor (with multi-resistance value)

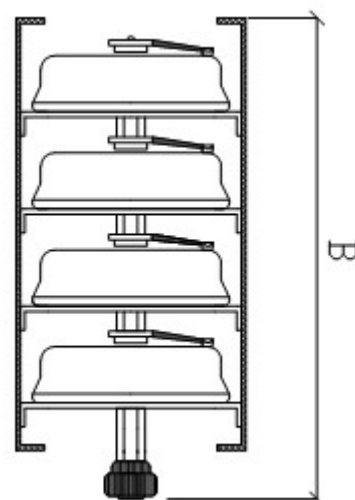
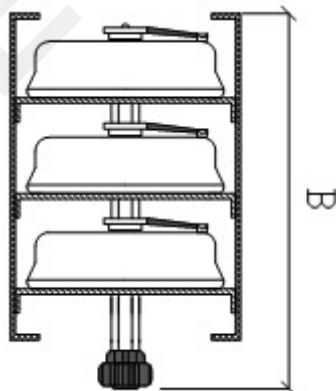
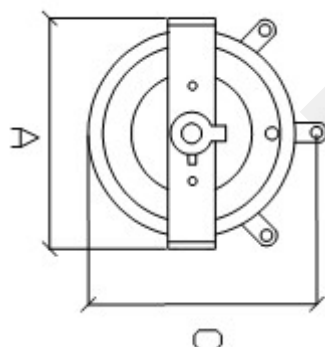


| Power rating | Dimensions (mm) | | | | | | Resistorance (Ω) |
|--------------|-----------------|------|------|-----|-------|-------|------------------|
| | H±3 | L1±5 | L2±3 | B±3 | D±0.5 | d±0.3 | |
| 25W | 44 | 60 | 25 | 50 | 6 | 2 | 1~3K |
| 50W | 64 | 64 | 25 | 70 | 6 | 2 | 1~5K |
| 100W | 81 | 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 |

TYPE:BC1 1000W-3000W
 TYPE:BC1-N 1000W-3000W

Note:

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(for 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 | 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 |

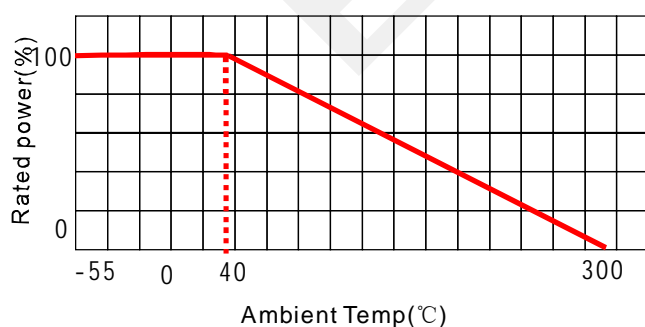
● Application Notes:

- 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.reisistance value means maximum resistance value(end resistance value).
- 5.resistance tolerance mean 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 Ω 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 10-50-10 HZ/min 2H each | Free or appearance or structural 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 $\pm 5^\circ$ |
| Flame retardation | 100%-600% rated power load | US UL-94 flame retardation test V-0 grade noncombustible |

● Derating



● How to order

| | | | |
|------|-----|-----|---|
| BC 1 | 25W | 50R | J |
|------|-----|-----|---|

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