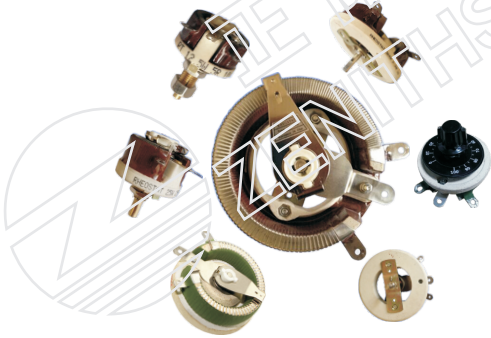


瓷盘可调电阻(Variable Wirewound Rheostat/Potentiometer)BC1 12.5W-3KW

瓷盘式可调电阻系列高端产品,外形美观,调节精确度高,可组合使用,非常方便!

Tray Type Variable Rheostat Series,High-end ,Pretty Appearance,High Adjustment Accuracy,Convenient in Combination & Usage



■ 结构 (Structure)

1. BC1系列可调电阻是采用优质电阻合金丝缠绕在C型陶瓷圈上,除了滑动接触面外,整个电阻圈涂覆不燃性树脂漆,以防护绕线丝及更好的散热,待阴干后经过特殊电子粘接料,将绕线电阻圈固定在圆形底盘上,经过高温烘烤后再装配其他五金配件,并配装中心转动调整之零件,由转轴带动碳刷于电阻线上滑动变化,而获得需要之阻值。

BC1 series Variable Rheostat is wound with copper or chromium-alloy wire as a resistance element. Except for the slide contact surface, the entire component is coated with a high-temperature, non-flammable resin. After cooling and drying, insulation is applied through a high-temperature process. Then, a centered rotating adjuster component is installed, which slides along the resistance element and varies the resistance to the desired value.

2. 一个电阻上可以采用不同的电阻绕线丝制成多个可调阻值。

Single unit with multiple winding resistance values is available.

3. 根据客户需要可以改变陶瓷材质和提供旋钮

Different ceramic raw material & knobs, made-to-order rheostats available

■ 产品介绍(Introduction)

BC1系列可调电阻通常被称为变阻器或电位器,可作为变阻器的两个连接,或作为一个电位器,有三个连接端子。当一只电阻无法满足其功率时可以通过多只叠加的方式增大功率,最大可以增加至6只相连。

BC1 series Variable Rheostats called varistors or potentiometers, used as two connections terminals of varistors or as a potentiometer with three connection terminals. When single rheostat cannot meet its power, which can be increased by connection of multiple rheostats, max up to 6 connected rheostats.

■ 适用范围 (Application)

深圳市正阳兴电子的系列可调电阻生产周期为3-4周,适用范围: Production Time: 3-4 weeks. Widely used in the scope of the application includes:

1. 搅拌机, 搅拌器, 风机, 和电动工具。

Mixer, mixer, fan, and electric tools.

2. 马达控制器, 控制马达速度。

Motor controller to control motor speed.

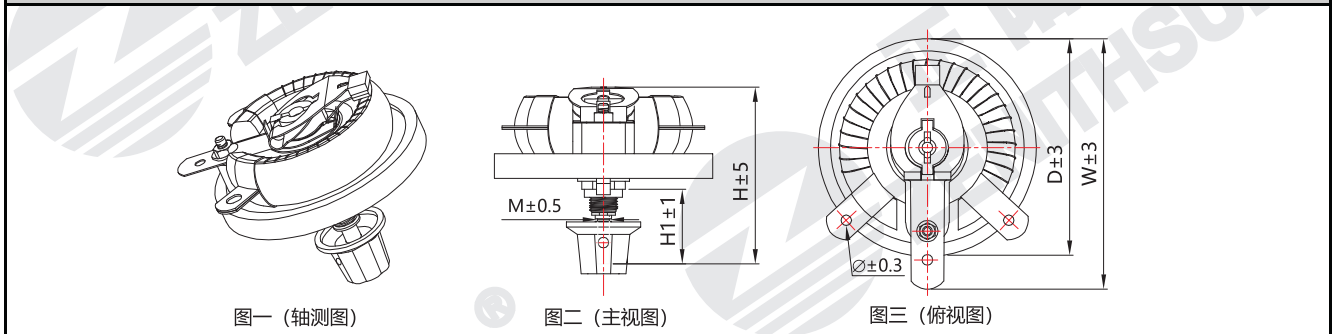
3. 测试仪器, 以提供数据准确性。

Test the instrument to provide data accuracy.

4. 负载试验、负载设备、工业机械转速调节, 电压和电流调节仪表, 自动化控制装置等。

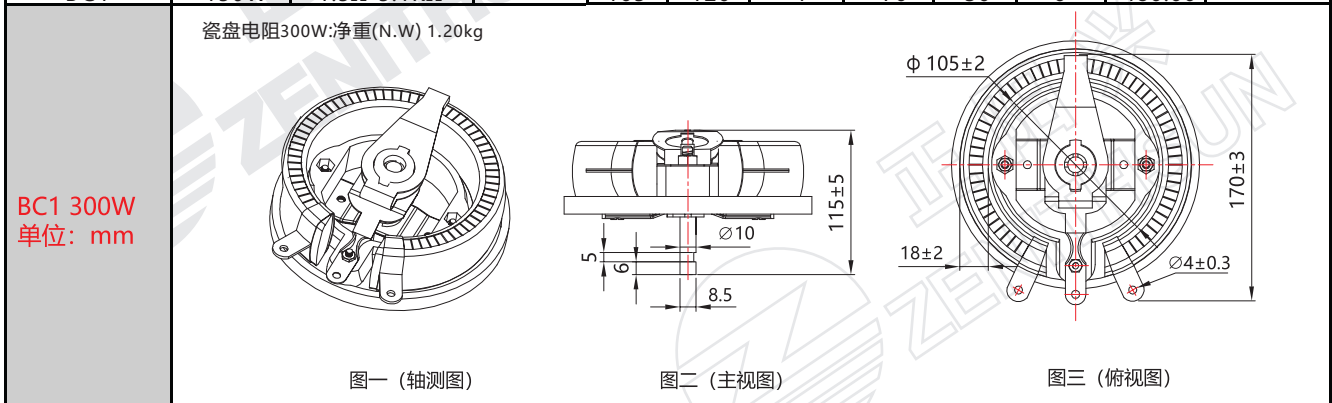
Load test, load equipment, speed regulation of industrial machinery, voltage and current regulation, instruments, automatic control devices, etc.

■ 产品尺寸图表12.5W-150W (Dimension Chart)



型号 Type	功率 Power	阻值范围 Resistance Range	精度 Tolerance	尺寸 Dimensions(mm)						净重(g) N.W	温度系数 T.C.R
				D±3	W±3	Φ±0.5	H±3	H1±3	M±0.5		
BC1	12.5W	0.5Ω-1KΩ	K(±10%) J(±5%)	22	27	1.5	38	23	3	25.00	±200PPM ~
BC1	25W	0.5Ω-3.3KΩ		45	50	2	60	25	6	80.00	
BC1	50W	0.5Ω-3.3KΩ		65	70	4	65	25	6	170.00	
BC1	100W	1.5Ω-4.7KΩ		80	92	4	65	25	6	252.00	±400PPM
BC1	150W	1.5Ω-5.1KΩ		105	120	4	70	30	6	480.00	

瓷盘电阻300W:净重(N.W) 1.20kg



BC1 300W  
单位: mm

### ■ 产品尺寸图表500W ( Dimension Chart )

瓷盘电阻500W:净重(N.W) 1.80kg

BC1 500W  
单位: mm

图一 (轴测图)      图二 (主视图)      图三 (俯视图)

### ■ 组合式瓷盘可调电阻1000W-3000W ( Demension Chart )

图一 (BC1 500Wx2)      图二 (BC1 500Wx3)      图三 (BC1 500Wx4)      图四 (BC1 500Wx5)

图五 (BC1 500Wx6)

说明:  
Note:

1. 单个电阻额定功率为 500W  
Single Rheostat with Rated power 500W
2. 1000W(2个500W电阻串/并连接)  
1000W(2pcs 500W Rheostats in series or parallel)
3. 1500W(3个500W电阻串/并连接)  
1500W(3pcs 500W Rheostats in series or parallel)
4. 2000W(4个500W电阻串/并连接)  
2000W(4pcs 500W Rheostats in series or parallel)
5. 2500W(5个500W电阻串/并连接)  
2500W(5pcs 500W Rheostats in series or parallel)
6. 3000W(6个500W电阻串/并连接)  
3000W(6pcs 500W Rheostats in series or parallel)
7. 加旋钮在底部  
Black knob in the bottom

### ■ 定货示例 ( How to order )

BC1	500W	20R	J
↓	↓	↓	↓
型号	功率	标称阻值	精度 (K:±10%,J: ±5%)
Type	Power	Nominal value	Tolerance(K:±10%,J: ±5%)

■ 绕线电阻性能实验参数 (Performance Characteristics)		
项目 Test	试验条件 Conditions of Test	性能要求 Testing Results
电阻值容许误差 Resistance Tolerance	测试电压≤3V,环境温度25℃ Testing Voltage ≤3V, Ambient Temperature 25℃	F--G--J--K
温度系数 T.C.R	$\frac{R1-R0}{R0(T1-T0)} \times 10^6$ (PPM/°C) R0:常温(T0)下阻值 R0:Room Temperature(T0)Resistance R1:常温T0+100℃(T1)下阻值 R1:Room Temperature T0+100℃(T1)Resistance	±200PPM~ ±400PPM
额定负荷 Rated Load	40℃额定电压, 1小时 40℃, rated voltage, 1 hour	$\Delta R \leq \pm(3\%R + 0.1\Omega)$
短时间过负荷 Short Time Overload	5倍额定功率, 10秒钟; 10倍额定功率 5秒; 25倍额定功率 1秒 5 times rated power for 10s; 10 times rated power for 5s; 25 times rated power for 1s	$\Delta R \leq \pm(2\%R + 0.1\Omega)$
引出端对地绝缘耐压 Dielectric Withstand Voltage	1KV-10KV Vac 60秒,漏电流2.5mA 1KV-10KV Vac 60s, leakage current 2.5mA	$\Delta R \leq \pm(0.1\%R + 0.05\Omega)$
绝缘电阻值 Insulation Resistance	1000Vdc	50~1000MΩ, 1Min
引出端强度 Terminal Tensile Strength	40N	无脱落 No off
耐振性 Vibration resistance	1.5mm, 10-55-10Hz, 分别2小时 1.5mm, 10-55-10Hz, each 2 hours	无破损, 无脱落 No damage, No off
室温耐久性 Load Life	额定电压, 通电90分钟, 停30分钟, 共500小时 At rated voltage, 90 min "On", 30 min "Off", total 500 hours	$\Delta R \leq \pm(3\%R + 0.1\Omega)$
耐低温试验 Low Temp. Resistance	产品在-55℃±2℃环境条件下储存16H Store at -55℃±2℃ for 16h	$\Delta R \leq \pm(1\%R + 0.1\Omega)$
耐高温试验 High Temp. Resistance	产品在70℃±2℃环境条件下储存16H Store at 70℃±2℃ for 16h	$\Delta R \leq \pm(1\%R + 0.1\Omega)$
不燃性 Non-flammability	10倍额定功率, 通电5分钟 10 times rated power, power on for 5Min	允许开路, 但不燃烧 Without combustion

■ 绕线电阻降功耗曲线图 (Derating Curve)

