



深圳市巨能伟业技术有限公司  
SHENZHEN G-ENERGY TECHNOLOGY CO., LTD

# 物料承认书

SPECIFICATION FOR APPROVAL

厂商名称 (Provider): 巨能伟业

规格型号 ( Model No.): N200V5-L

料件编码 ( Part No.): 8000-01887-00

备注 ( Remark):

出厂确认 TRX APPROVAL

| 承认人/日期<br>Edited by /Date | 审核/日期<br>Checked by/Date | 批准/日期<br>Approved by/Date |
|---------------------------|--------------------------|---------------------------|
|                           |                          |                           |

客户确认 CUSTOMER APPROVAL

| 承认人/日期<br>Edited by /Date | 审核/日期<br>Checked by/Date | 批准/日期<br>Approved by/Date |
|---------------------------|--------------------------|---------------------------|
|                           |                          |                           |

公司地址：深圳市光明新区公明街道上村莲塘工业城同富裕旭发科技园 1、2 栋

ADD: Building 1 and 2, tongfuyu xufa science and technology park, liantang industrial city, shangcun town, gongming street, guangming new district, shenzhen

电 话：0755-27641207

传真：0755-27641707

E-mail: G-energy@163.com

Http:// www.G-energy.cn





# 目录 Contents

|   |   |
|---|---|
| 一、概述 Introduction .....   | 2 |
| 二、产品主要规格 Product Main Specification .....   | 2 |
| 三、环境条件 Environment condition .....  | 2 |
| 四、电气特性 Electrical character .....   | 3 |
| 输入特性 Input character .....  | 3 |
| 输出特性 Output character .....   | 4 |
| 保护特性 Protection character .....   | 5 |
| 其它特性 Other character .....  | 5 |
| 五、安规特性 Production Compliance characteristics .....  | 5 |
| 六、曲线 Relative Data Curve .....  | 5 |
| 七、机械特性及接插件定义 The mechanical character and the<br>definition of connectors (单位 unit: mm) ..... | 7 |
| 1、外形尺寸 Dimensions .....   | 7 |
| 2. 安装孔位尺寸 Assembly Holes Dimensions .....   | 7 |
| 八、使用注意事项 Attention For Application .....  | 8 |
| 九、包装、运输、贮存 Packaging, Transport, Storing .....  | 8 |
| 十、标贴 Label .....  | 9 |



## 一、概述 Introduction



本电源具有体积小、效率高、工作稳定、可靠性高等特点。电源具有输入欠压，输出限流，输出短路等等。电源采用同步整流电路极大地提高了电源效率，节约了能耗；

The power supply has the characteristics of small volume, high efficiency, stable operation and high reliability. The power supply has input under-voltage, output current limiting, output short circuit and so on. The synchronous rectifier circuit greatly improves the efficiency of the power supply and saves energy consumption.

## 二、产品主要规格 Product Main Specification

| 输出功率<br>Output Power<br>(W) | 输入电压范围<br>Rated Input<br>Voltage<br>(Vac) | 输出电压<br>Rated Output<br>Voltage (Vdc) | 输出电流范围<br>Output Current<br>Range<br>(A) | 稳压精度<br>Precision | 纹波及噪音<br>Ripple and<br>Noise<br>(mVp-p) |
|-----------------------------|---|---------------------------------------|--|-------------------|---|
| 200                         | 180—264                                   | +5.0                                  | 0-40.0                                   | ±2%               | ≤200                                    |

## 三、环境条件 Environment condition

| 序号<br>Item | 项目<br>Description | 技术指标<br>Tech Spec | 单位<br>Unit | 备注<br>Remark |
|------------|-------------------|-------------------|------------|--------------|
|------------|-------------------|-------------------|------------|--------------|



|   |                                 |                         |     |  |
|---|---------------------------------|-------------------------|-----|--|
| 1 | 工作温度<br>Working temperature     | -30—60                  | ℃   | 电源外壳温度超出<br>80℃需增大散热面积<br>或降额使用<br>Power supply housing<br>temperature over<br>80 °C needs to<br>increase heat<br>dissipation area or<br>reduce the amount of<br>use |
| 2 | 储存温度<br>Storing temperature     | -40—85                  | ℃   |  |
| 3 | 相对湿度<br>Relative humidity       | 10—90                   | %   | 无冷凝<br>No condensation   |
| 4 | 散热方式<br>Heat dissipation method | 自然冷却<br>Natural cooling |     | 电源工作时需安装在<br>金属板上散热<br>The power supply<br>should be installed<br>on the metal plate to<br>dissipate heat  |
| 5 | 大气压力<br>Air pressure            | 80—106                  | Kpa |  |
| 6 | 海拔高度<br>Height of sea level     | 2000                    | m   |  |

#### 四、电气特性 Electrical character

| 1          | 输入特性 Input character            |                   |            |  |
|------------|---------------------------------|-------------------|------------|--|
| 序号<br>Item | 项目<br>Description               | 技术要求<br>Tech Spec | 单位<br>Unit | 备注<br>Remark   |
| 1.1        | 额定输入电压<br>Rated voltage range   | 200-240           | Vac        | 参照输入电压与负载关系曲线图使用<br>Refer to the diagram of input voltage and load relation. |
| 1.2        | 输入频率范围<br>Input frequency range | 50/60             | Hz         |  |
| 1.3        | 效率<br>Efficiency                | ≥85.0             | %          | Vin=220Vac 25℃输出满载（常温下）<br>Output Full Load (at room temperature)            |
| 1.4        | 功率因数<br>Efficiency factor       | ≥0.40             |            | Vin=220Vac 额定输入电压条件下，输出满载。<br>Rated input voltage, output full load          |



|                    |   |  |                    |   |
|--------------------|---|--|--------------------|---|
| 1.5                | 最大输入电流<br>Max input current                 | $\leq 3$   | A                  |   |
| 1.6                | 启动冲击电流<br>Dash current                      | $\leq 70$  | A                  | 冷机状态测试<br>@220Vac<br>Cold state test<br>@220Vac   |
| 2                  | <b>输出特性 Output character</b>                |  |                    |   |
| <b>序号<br/>Item</b> | <b>项目<br/>Description</b>                   | <b>技术要求<br/>Tech Spec</b>  | <b>单位<br/>Unit</b> | <b>备注<br/>Remark</b>  |
| 2.1                | 输出电压额定值<br>Output voltage rating            | +5.0   | Vdc                |   |
| 2.2                | 输出电流范围<br>Output current range              | 0-40.0   | A                  |   |
| 2.3                | 输出电压可调范围<br>Output voltage adjustable range | /  | Vdc                |   |
| 2.4                | 电压调整率<br>Output voltage range               | $\pm 2$  | %                  |   |
| 2.5                | 负载调整率<br>Load regulation                    | $\pm 2$  | %                  |   |
| 2.6                | 稳压精度<br>Voltage stability accuracy          | $\pm 5$  | %                  |   |
| 2.7                | 输出纹波及噪音<br>Output ripple and noise          | $\leq 200$   | mVp-p              | 额定输入，输出满载，20MHz 带宽 10 $\mu$ F/104 电容。<br>Rated input, output full load, 20MHz bandwidth, load side and 47uf / 104 capacitor |
| 2.8                | 开机输出延迟<br>Start output delay                | $\leq 3.0$   | S                  | Vin=220Vac @25°C<br>测试 test   |
| 2.9                | 输出电压上升时间<br>Output voltage raise time       | $\leq 90$  | ms                 | Vin=220Vac @25°C<br>测试 test   |
| 2.10               | 开关机过冲<br>Switch machine overshoot           | $\pm 5$  | %                  | 测试条件：满载，CR 模式<br>Test conditions: full load, CR mode  |
| 2.11               | 输出动态<br>Output dynamic                      | 电压变化小于 $\pm 5\% V_0$ ；动态响应时间 $\leq 250\mu s$<br>The voltage change is less than $\pm 10\% V_0$ ；the dynamic response time is less than 250us | mV                 | LOAD 25%-50%-25%<br>50%-75%-50%   |



| 3       |   | 保护特性 Protection character |         |   |
|---------|---|---------------------------|---------|---|
| 序号 Item | 项目 Description                                      | 技术要求 Tech Spec            | 单位 Unit | 备注 Remark   |
| 3.1     | 输入欠压保护<br>Input under-voltage protection            | 135-165                   | VAC     | 测试条件: 满载<br>Test conditions:<br>full load   |
| 3.2     | 输入欠压恢复点<br>Input under-voltage recovery point       | 140-170                   | VAC     |   |
| 3.3     | 输出限流保护点<br>Output current limiting protection point | 46-60                     | A       | HI-CUP 打嗝自恢复, 避免了电源长期短路后损坏电源。<br>HI-CUP hiccups self-recovery, avoid long-term damage to power after a short-circuit power. |
| 3.4     | 输出短路保护<br>Output short circuit protection           | 自恢复<br>Self-Recovery      | A       |   |
| 3.5     | 过温保护<br>over temperature protection                 | /                         |         |   |
| 4       |   | 其它特性 Other character      |         |   |
| 序号 Item | 项目 Description                                      | 技术要求 Tech Spec            | 单位 unit | 备注 Remark   |
| 4.1     | MTBF  | $\geq 40,000$             | H       |   |
| 4.2     | 漏电流<br>Leakage Current                              | $< 1 (V_{in}=230V_{ac})$  | mA      | GB8898-2001 测试方法 test method  |

## 五、安规特性 Production Compliance characteristics

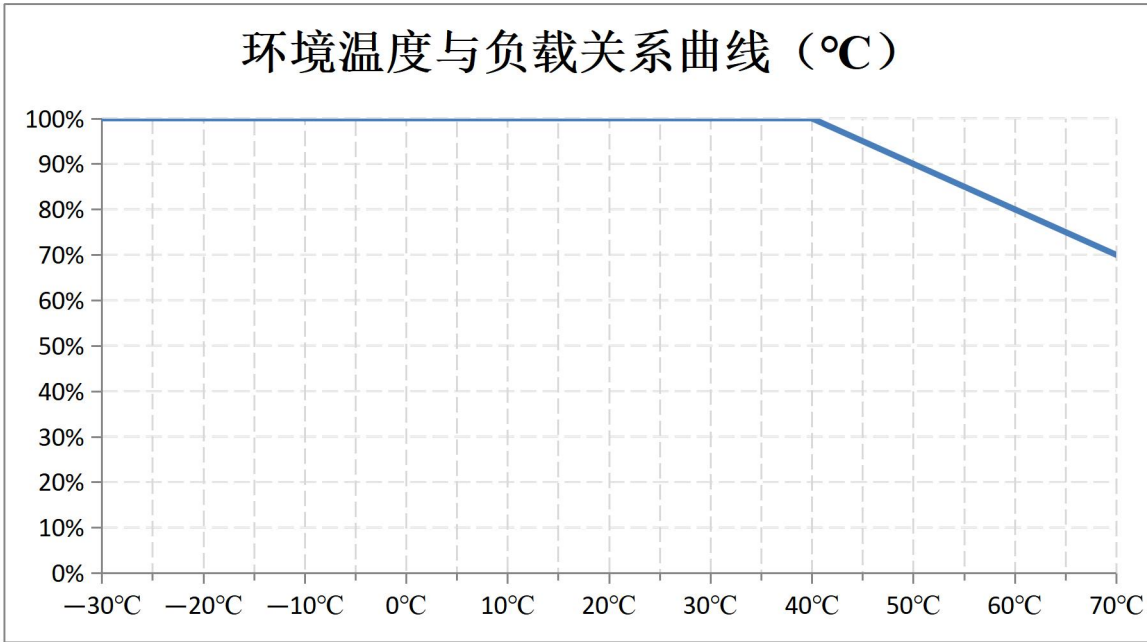
| 序号 Item | 项目 Description            |                          | 测试条件 Tech Spec    | 备注 Remark                          |
|---------|---------------------------|--------------------------|-------------------|------------------------------------|
| 1       | 抗电强度<br>Electric Strength | 输入对输出<br>Input to output | 3000Vac/10mA/1min | 无飞弧、无击穿<br>No arcing, no breakdown |
| 2       | 抗电强度<br>Electric Strength | 输入对地<br>Input to ground  | 1500Vac/10mA/1min | 无飞弧、无击穿<br>No arcing, no breakdown |
| 3       | 抗电强度<br>Electric Strength | 输出对地<br>Output to ground | 500Vac/10mA/1min  | 无飞弧、无击穿<br>No arcing, no breakdown |

## 六、曲线 Relative Data Curve

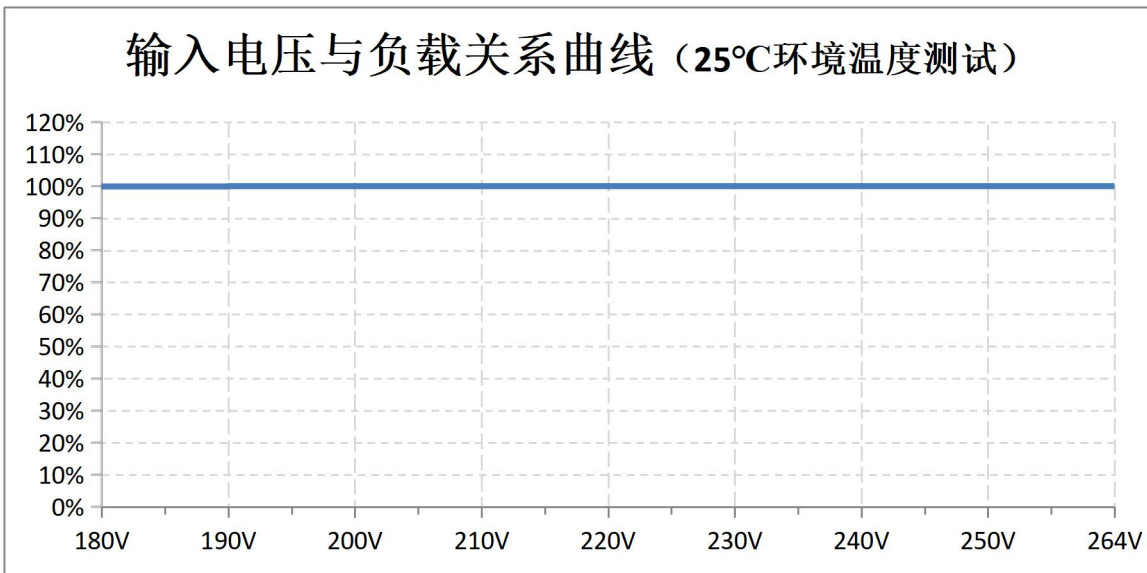
### (1) 环境温度与负载关系曲线 Relationship between environmental



## temperature and load

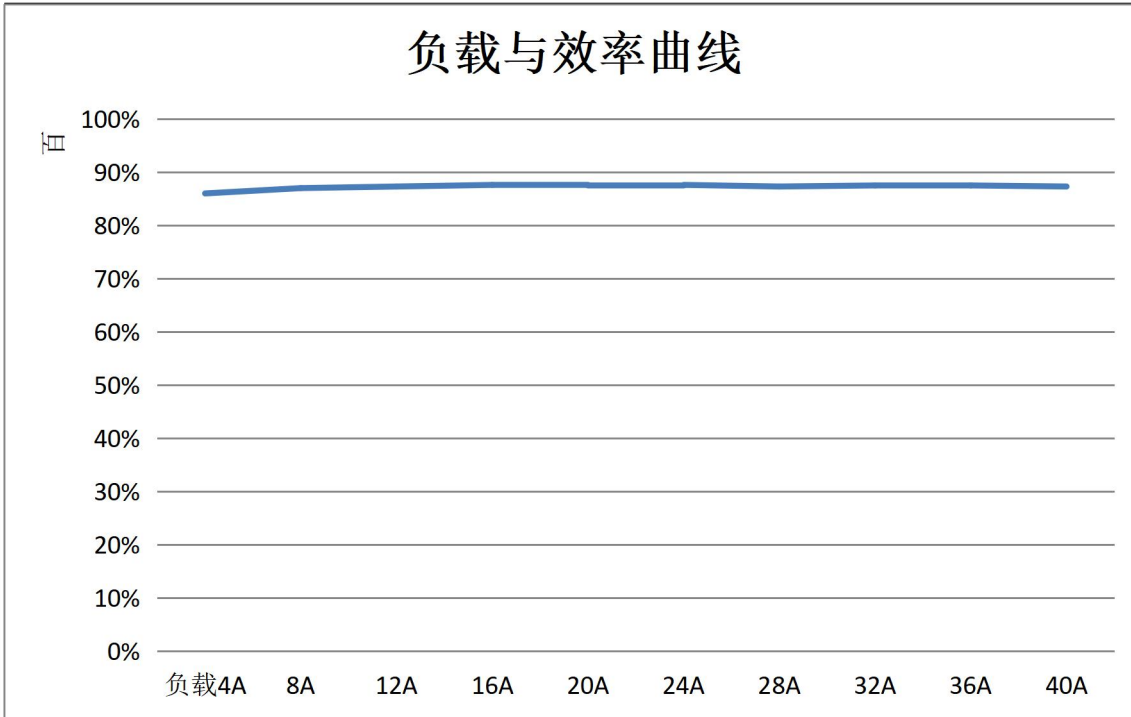


## (2) 输入电压与负载关系曲线 Input voltage and load voltage curve



## (3) 负载与效率曲线 Load and efficiency curve

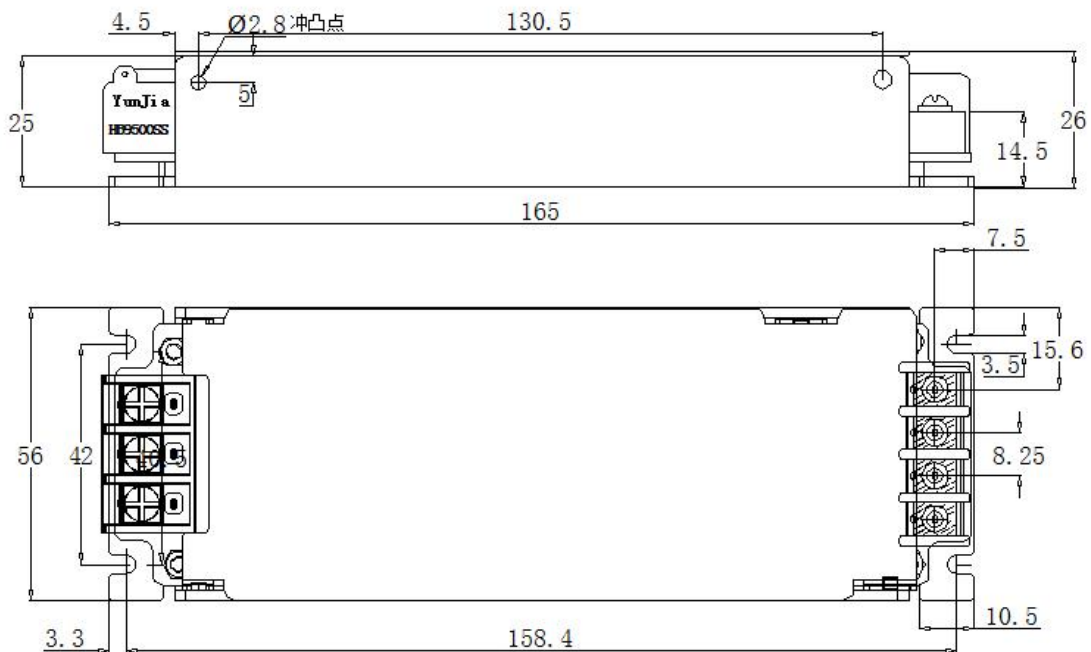




## 七、机械特性及接插件定义 The mechanical character and the definition of connectors (单位 unit: mm)

1、外形尺寸 Dimensions: 长 length×宽 width×高 height=165×56×26±0.5.

### 2. 安装孔位尺寸 Assembly Holes Dimensions



上图为底壳俯视图, 固定于客户系统的螺丝规格是 M3, 共 4 个. 固定螺丝进入电源本体的



长度不能超过 3.5mm

Above is the top view of the bottom shell. The specifications of the screws fixed in the customer system are M3, totaling 4. The length of the fixed screws entering the power supply body should not exceed 3.5mm.

## 八、使用注意事项 Attention For Application

1、电源使用须安全绝缘，其任一面须与外面金属壳体有 8mm 以上安全距离。如果达不到 8mm 需垫 1mm 厚度以上 PVC 片以加强绝缘

Power supply to be safe insulation, any side of the metal shell with the outside should be more than 8mm safe distance. If less than 8mm need to pad 1mm thickness above PVC sheet to strengthen the insulation.

2、安全使用，避免用手接触散热片，造成触电

Safe use, to avoid contact with the heat sink, resulting in electric shock.

3、PCB 板安装孔螺柱直径不超过 8mm

PCB board mounting hole stud diameter not exceeding 8mm.

4、需外垫一个 L355mm\*W240mm\*H3mm 的铝板作为辅助散热

Need a L355mm\*W240mm\*H3mm aluminum plate as auxiliary heat sink.

## 九、包装、运输、贮存 Packaging, Transport, Storing

1、包装 Packaging

包装箱上有产品名称、型号、厂家标识、厂家质量部门的检验合格证、制造日期等；包装箱内有附件清单。

There are product name, model, manufacturer's logo, manufacturer's quality department's inspection certificate, manufacturing date and so on on the packing box; there is a list of accessories in the packing box.

2、运输 Transport

适用于车、船、飞机运输，运输中应遮蓬、防晒、文明装卸。

Suitable for car, ship, air transport, transportation should awnings, sun protection, civilized handling.

3、贮存 Storing

产品未使用时应存放在包装箱内，仓库环境温度为-40℃—+80℃，相对湿度为 10%—90%，仓库内不允许有有害气体，易燃，易爆的产品及有腐蚀性的化学物品，并且无强烈的机械振动，冲击和强磁场作用，包装箱应垫离地至少 20cm 高，距离墙壁、热源、窗口或空气入口至少 50cm，在本规定条件下的贮存期一



一般为 2 年，超过 2 年后应重新进行检验。

When the product is not in use should be stored in the box, the warehouse ambient temperature  $-40^{\circ}\text{C}$ — $+80^{\circ}\text{C}$ , relative humidity of 10% -90%, the warehouse does not allow harmful gases, flammable, explosive products and corrosion Chemical products, and no strong mechanical vibration, shock and strong magnetic field, the box should be at least 20cm away from the ground, from the wall, heat, window or air inlet at least 50cm, under the conditions of the storage period is generally 2 years, more than 2 years should be re-tested.

## 十、标贴 Label

