SPECIFICATION FOR APPROVAL
Switching power Supply

CUSTOMER:________________________________________

DESCRIPTION: Input: 100~240V AC 50/60Hz  Output: DC 24V5A

OUR MODEL NO: ___________________ BSG120W-24005000

SAMPLE NO: _______________  DATE: __2022-06-11________

SAMPLE COLOR: Black ☑   White ☐

<table>
<thead>
<tr>
<th>APPROVAL SIGNATURE/</th>
<th>APPROVED BY</th>
<th>CHECKED BY</th>
<th>TESTED BY</th>
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Manufacturer

<table>
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<tr>
<th>SALES</th>
<th>APPROVED BY</th>
<th>DESIGNED BY</th>
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ICbanQ Inc.
Tel: 82-070-7019-3947 Email: Tommy@icbanq.com

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<th>Rev.</th>
<th>Date</th>
<th>Description</th>
<th>Design</th>
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1、 \textbf{DESCRIPTION:}

The purpose of the document is to specify the functional requirements of a \textbf{120W} switching power supply.

2、 \textbf{INPUT CHARACTERISTICS:}

2.1 \textbf{Input Voltage:}

Rated Voltage: 100–240Vac

Variation Range: 90-264Vac

2.2 \textbf{INPUT FREQUENCY:}

Rated Frequency: 50/60Hz.

Variation Frequency: 47-63Hz

2.3 \textbf{INPUT CURRENT:}

2.0 Amps max At any input voltage and rated, DC output rated load.

2.4 \textbf{INRUSH CURRENT:}

30 Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient.

2.5 \textbf{AC LEAKAGE CURRENT}

0.25mA Max. At 240Vac input.
3. OUTPUT CHARACTERISTICS:

3.1 Power output

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Min. Load</th>
<th>Rated. Load</th>
<th>Peak</th>
<th>Output power</th>
</tr>
</thead>
<tbody>
<tr>
<td>24Vdc</td>
<td>0.00A</td>
<td>5A</td>
<td>120W</td>
<td>120W</td>
</tr>
</tbody>
</table>

3.2 Combined Load/Line Regulation

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Min. Load</th>
<th>Rated. Load</th>
<th>Line Regulation</th>
<th>Voltage range</th>
</tr>
</thead>
<tbody>
<tr>
<td>24Vdc</td>
<td>0.00A</td>
<td>5A</td>
<td>±3%</td>
<td>23.44V-24.6V</td>
</tr>
</tbody>
</table>

3.3 Ripple and Noise:

Under nominal voltage and nominal load, the ripple and noise are as follows when measured with Max. Bandwidth of 20MHz and Parallel 47uF/0.1uF, crossed connected at testing point.

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Ripple and Noise(Max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+24Vdc</td>
<td>120mV p-p</td>
</tr>
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</table>

3.4 Turn on delay time:

3Second Max. at 115Vac input and output Max. load.

3.5 Rise time:

40 mS Max. at 115Vac input and output Max. load.

3.6 Hold up time:

5 mS Min. at 115Vac input and output Max. Load.

3.7 Average Efficiency

Average Efficiency 88Min, At 115/230Vac input and output 100% Load 75% Load 50% Load 25% Load Adapter meet efficiency Level VI
4. **PROTECTION FUNCTION:**
   4.1 **Short circuit test:**
   The power supply will be auto recovered when short circuit faults remove.
   4.2 **Over current Protection:**
   The power supply will be auto recovered when over current faults remove.
   4.3 **Over Voltage Protection:**
   The power supply will auto recovered when faults remove 120%~170%.

5. **ENVIRONMENTAL REQUIREMET:**
   5.1 **Operating Temperature:**
   0℃ to 40℃, Full load, Normal operation.
   5.2 **Storage Temperature:** -20℃ to 80℃
   With package
   5.3 **Relative Humidity:**
   5%(0℃)~90%(40℃)RH, 72Hrs, Full load, Normal operating.
   5.4 **Vibration:**
   **Operating:** IEC 721-3-3 3M3
   5~9Hz, A=1.5mm
   (9~200Hz, Acceleration = 5m/S^2)
   **2. Transportation:**
   IEC 721-3-2 2M2
   5~9Hz, A=3.5mm
   9~200Hz, **Acceleration = 5m/S^2**
   200~500Hz, **Acceleration = 15m/S^2**
3. Axes, 10 cycles per axis.
   No permanent damage may occur during testing.
   The SAMPLE has to restore to its original situation after power off/on.

5.5 Dropping Packed:
   1M for wallmount type and 760mm for desktop type as above described.
   The horizontal surface consists of hardwood at least 13mm thick, mounted on two layers of plywood
   each 19mm to 20mm thick, all supported on a concrete or equivalent non-resilient floor.

6. **SAFETY REQUIREMENT:**

6.1 Safety: accord with UL/CUL-(UL60950-1), CCC-(GB4943), IEC 60950-1; 2005

6.2 DIELECTRIC STRENGTH Hi-Pot:
   Primary to secondary: \(3750\text{Vac}10\text{mA}/3\text{S}\) for type test.

6.3 Insulation resistance:
   \(/\) Primary to secondary: \(10\text{M}\Omega\) min at 500V DC.

6.4 EMI STANDARD
   Meets the Limits of
   \(<1>.\text{Fcc part15 class B rules}\n   \(<2>.\text{EN55022 class B rules}\n   \(<3>.\text{GB9254-1998,GB17625.1-2003}\)
7. MECHANICAL REQUIREMENT:

7.1 Enclosure:

The power supply size: L166 x W67 x H39mm;
8、CORD:

技术要求

1. 外皮黑色，材料：PVC胶，长度600mm。
2. 导电线芯红色、黑色，标准20AWG。
3. SR要求：5×7mm，绕线要求如图示，5.5×2.1音插直头。
Our model: BSG120W-24005000
Customer:
Date: 2022.06.11
SAMPLE No:

9、LABEL:

전기공급의표시사항

제품명: AC/DC ADAPTER
모델명: BSG120W-24005000
정격 입력: AC100-240V
50/60Hz 2.0A
정격 출력: DC 24V == 5.0A
제조사:
SHENZHEN TECHNOLOGY CO., LTD
R-R-BxG-BSG120W-480025
제작년월: 2021-10

HU10584-21020
MADE IN CHINA
10. **PACKING:** 50PCS