

# **SPECIFICATION FOR APPROVAL**

# **CUSTOMER APPROVAL**

**SIGNATURE:** 

**DATE:** 

CUSTOMER:

HM065

PART NO .:

**REV**:

Please sign and return one copy.

All production units will be built according to this specification, The component specifications remain as same, its brand can be changed

| Manufacturer |         |          |    |       |
|--------------|---------|----------|----|-------|
| Approved     | Checked | Prepared | QA | Sales |
|              |         |          |    |       |
|              |         |          |    |       |
|              |         |          |    |       |

Model No.: K36V120300G B55S68

Unit Color: BLACK

100-240V<sub>AC</sub> 50/60Hz Input:

Output:

A0

12.0V<sub>DC</sub> 3.0A

Product Category: AC ADAPTOR Description: ROHS

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## 2.0 Electrical performance

| 2.1 Input Characteristics:     |  |
|--------------------------------|--|
| Rated input voltage            | 100-240Vac   |
| Operating range                | 90-264Vac  |
| Rated input frequency          | 50-60Hz  |
| Rated input current            | 0.9A Max.  |
| Power consumption (no loading) | <b>0.1W Max.</b> (Input voltage 115V and 230V)             |
| Primary current protection     | An adequate internal fuse on the AC input line is provide. |
| Configuration                  | <u>2</u> Conductor   |

### 2.2 Output Characteristics:

| 2.2.1 | Nominal dc output voltage | 12.0V   |  |
|-------|---------------------------|---|--|
| 2.2.2 | Minimum load current      | 0.0A  |  |
| 2.2.3 | Rating load current       | 3.0A  |  |
| 2.2.4 | Rating output power       | 36.0W   |  |
| 2.2.5 | Line regulation           | The line regulation is less than ±5% while measuring at rated load and +/-10% of input voltage changing.  |  |
| 2.2.6 | Load regulation           | The load regulation for output is less than $\pm 5\%$ , at measured output load from 10% to 100% rated load .   |  |
| 2.2.7 | No load voltage range     | 11.4-12.6V  |  |
| 2.2.8 | Ripple and noise          | ≪200mVp-p   |  |
|       |                           | Full load Ripple and noise 200mVp-pmax.<br>Measurement is done by 20MHZ bandwidth oscilloscope and the<br>output Paralleled a 0.1µF ceramic capacitor and a 10µF electrolysis<br>capacitor.(test under the Condition of rated input and rated output) |  |
| 2.2.9 | Average efficiency        | Accord with energy level VI. Average efficiency 87.40% minimum  |  |
|       |                           | 115V/60Hz and 230V/50Hz, output current from 100%, 75%, 50%, 25%.   |  |

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| 2.2.10 | Turn on delay time      | 3000 mS. At nominal input AC voltage and full load  |
|--------|-------------------------|---|
| 2.2.11 | Rise time               | The Supply shall have a start-up rise time of less than <b>100 mS</b> to rise to within regulation limits for all DC outputs. |
| 2.2.12 | Hold up time            | <b>5 mS</b> minimum At nominal input AC voltage and full load   |
| 2.2.13 | Output over-shoot       | Less than 10% of nominal voltage value  |
| 2.2.14 | Protection function     |   |
|        | Over current protection | At rated AC input, output current in the range ofhe power supply will protect.  |

#### 2.3Dielectric Withstand Voltage (HI-POT):

Engineering test: This Adapter shall be applied 3000Vac for 60s between AC input terminal to DC output terminal and enclosure. The cutoff current is specified as 10 mA; Large cargo product testing: This Adapter shall be applied 3000Vac for 2s between AC input terminal to DCoutput terminal and enclosure. The cutoff current is specified as 10 mA

#### 2.4 Insulation Resistance:

DC <u>500</u> V <u>30</u> M $\Omega$  min between input to output and enclosure.

#### 2.5 Overload Test:

KPTEC

In an ambient temperature of  $\underline{25}^{\circ}$ C applies a power source of rated input with the

output load adjusted to 10% of rated output and rated continuously for  $\underline{4}$  Hours,

after turning off 60 minutes in normal temperature.

#### 2.6 Humidity Test:

Temperature  $\underline{35}^{\circ}$  C,  $\underline{90}$  RH for  $\underline{4}$  Hours after taken out from oven.

#### **3.0 Mechanical Characteristics**

#### 3.1 Strain Relief Test:

Plug or SR, at their 30cm position applied a weight of <u>10</u> lbs, 1 minutes after the shift is less than 2MM.

#### 3.2 Cord Bending Test:

The cord shall withstand a weight of 400 g, swinging from left to right at an angle

of <u>120</u> degree, <u>40 cycle/min</u>, <u>1000</u> times minimum. The cord shall be conductible.

#### 3.3 Drop Test:

Product shall be dropped from a height of 80cm, onto 1cm thickness dry wood

Surface 1 times from 3 different surface.

#### 4.0 Environmental:

#### 4.1 Operating Temperature and Humidity Range:

Operate over the temperature range of  $\underline{0^{\circ}C}$  to  $\underline{35^{\circ}C}$ ,  $\underline{20\%}$  to  $\underline{90\%}$  relative humidity no condensation.



#### 4.2 Storage Temperature and Humidity Range

The operation specified herein will not be adversely affected if stored or transported within the temperature

limits of <u>-20 °C</u> to <u>+70 °C</u> with relative humidity up to <u>90%</u> no condensation.

#### 5.0 Surface Structure:

- 5.1 Appearance: Rift, dirty etc. are not permitted.
- 5.2 Outline: Dimension and express as drawing
- 5.3 Net Weight: <u>168g</u> Max.

#### 6.0 Safety & EMC:

- 6.1 Safety Standard :EN62368-1:2014/A11:2017
- 6.2 EMC Standard : EN55032:2015,EN55035:2017

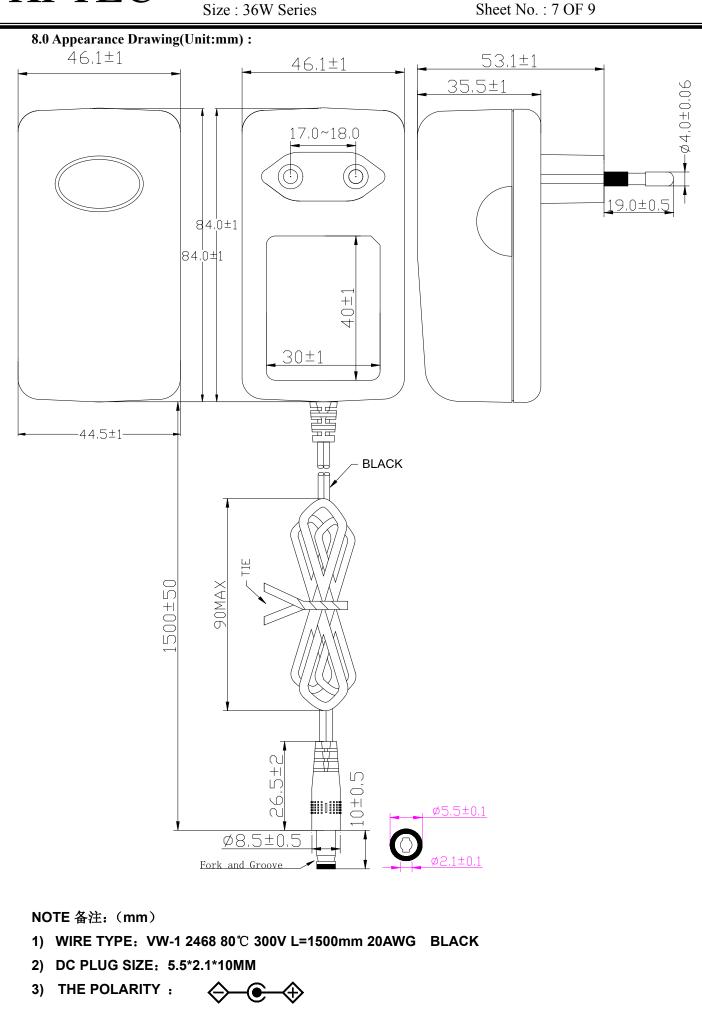
#### 7.0 MTBF:

The design and construction of this power supply shall exhibit a minimun mean time between failure of 35000 hours full rated load operation at 20--25  $^{\circ}$ C.



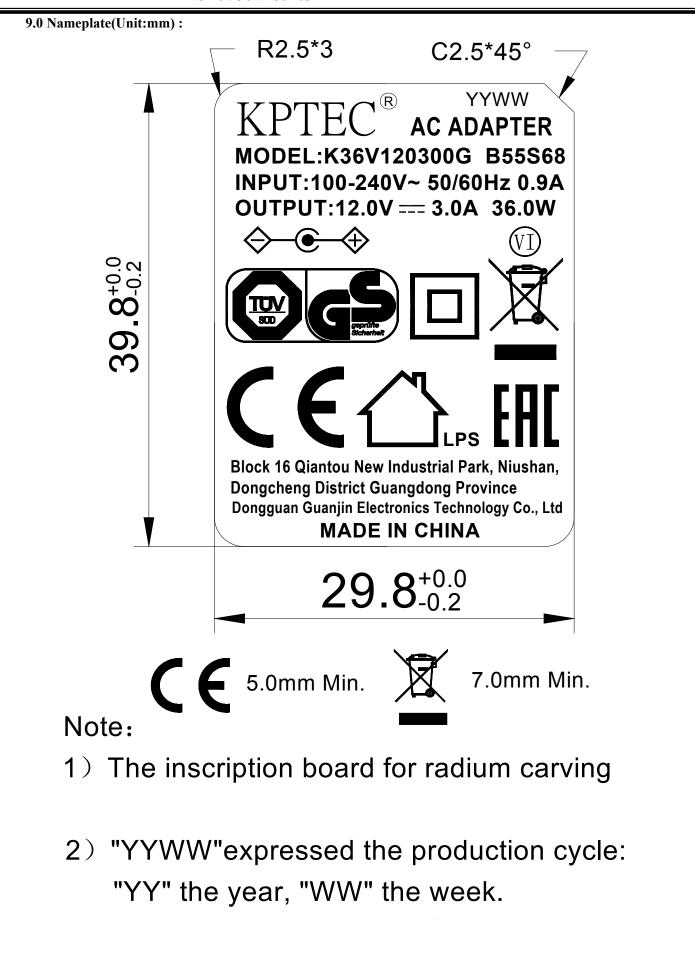
Model No. :K36V120300G B55S68 S/N : K35829

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