

# SPECIFICATION

## High Quality Switching Desktop Adapter

Universal AC Input  
40W 12VDC 3.3A Output

**P/N: A120033HK1**

**\*\*Specification Approval\*\***

This specification (total 7 pages including cover page) is approved in it's entirety by:

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Company Name

Print Name

Signature

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## 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +12V, and electronic process. The switching power supply will provide power for technology equipments including electrical business equipment. The adaptor meets the requirement of lead free and RoHS.

## 2.0 INPUT REQUIREMENTS

2.1 Input Voltage Range: 100(-10%)VAC to 240(+10%)VAC

2.2 Input Frequency Range: 47 Hz to 63 Hz

2.3 Input In-rush Current: 60A Max

2.4 Input Power Consumption at no-load : 0.5W MAX

2.5 Input Current: 1.5A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +12V

3.2 Output Regulation: 11.4V-12.6V

3.3 Output Load Range: 0-3.33A

3.4 Output Ripple & Noise: 120mV Max @20MHz BANDWIDTH WITH  
22UF/50V AND 104/50V CAPACITANCE

4.0 EFFICIENCY:  $\geq 83.19\%$  @ AVERAGE OF 25/50/75/100% LOADS & 115/230VAC INPUT

5.0 LINE REGULATION: 2% MAXIMUM

6.0 HOLD UP TIME: 10ms MIN AT 110VAC FULL LOAD.

7.0 TURN ON TIME: 2S MAX AT 110VAC FULL LOAD.

8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

## 9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

9.1 Finished product withstands AC 3.0KV, for 2 second, 4mA max primary to secondary.

9.2 Finished product withstands AC 3.0KV, for 2 second, 4mA max primary to case.

9.3 Finished product withstands AC 3.0KV, for 2 second, 4mA max primary to gnd.

## 10.0 INSULATION RESISTANCE

Primary to secondary: 50MOHM to 500VDC.

## 11.0 PROTECTION

### 11.1 Input Protection

The switching power supply has a 2.5 amps inner current fuse to protect itself.

### 11.2 Output Protection

#### 11.2.1 Output Current:

Overload conditions shall decrease the output voltage. Removal of an output overload shall provide automatic recovery for the output voltage.

#### 11.2.2 Short Circuit Protection: Auto Recovery.

## 12.0 ENVIRONMENTAL CONDITIONS

The switching power supply can withstand the following environmental conditions:

### 12.1 Storage Temperature:-20°C ~ +70 °C

Relative Humidity: 10% ~ 95%

### 12.2 Operation Temperature:0°C~40°C

Relative Humidity: 10%~95%

## 13.0 EMI / EMC

The switching power supply has approved by the following standards:

FCC PART 15B

(1)EN55022 (EN61000-3-2 EN61000-3-3)

(2)EN55024 (IEC61000-4-2 IEC61000-4-3 IEC61000-4-4  
IEC61000-4-6 IEC61000-4-8 IEC61000-4-11)

## 14.0 RELIABILITY AND QUALITY CONTROL

### 14.1 Burn-in

The burn-in test will be performed at least 2 hours at 40 centigrade degrees under full load condition.

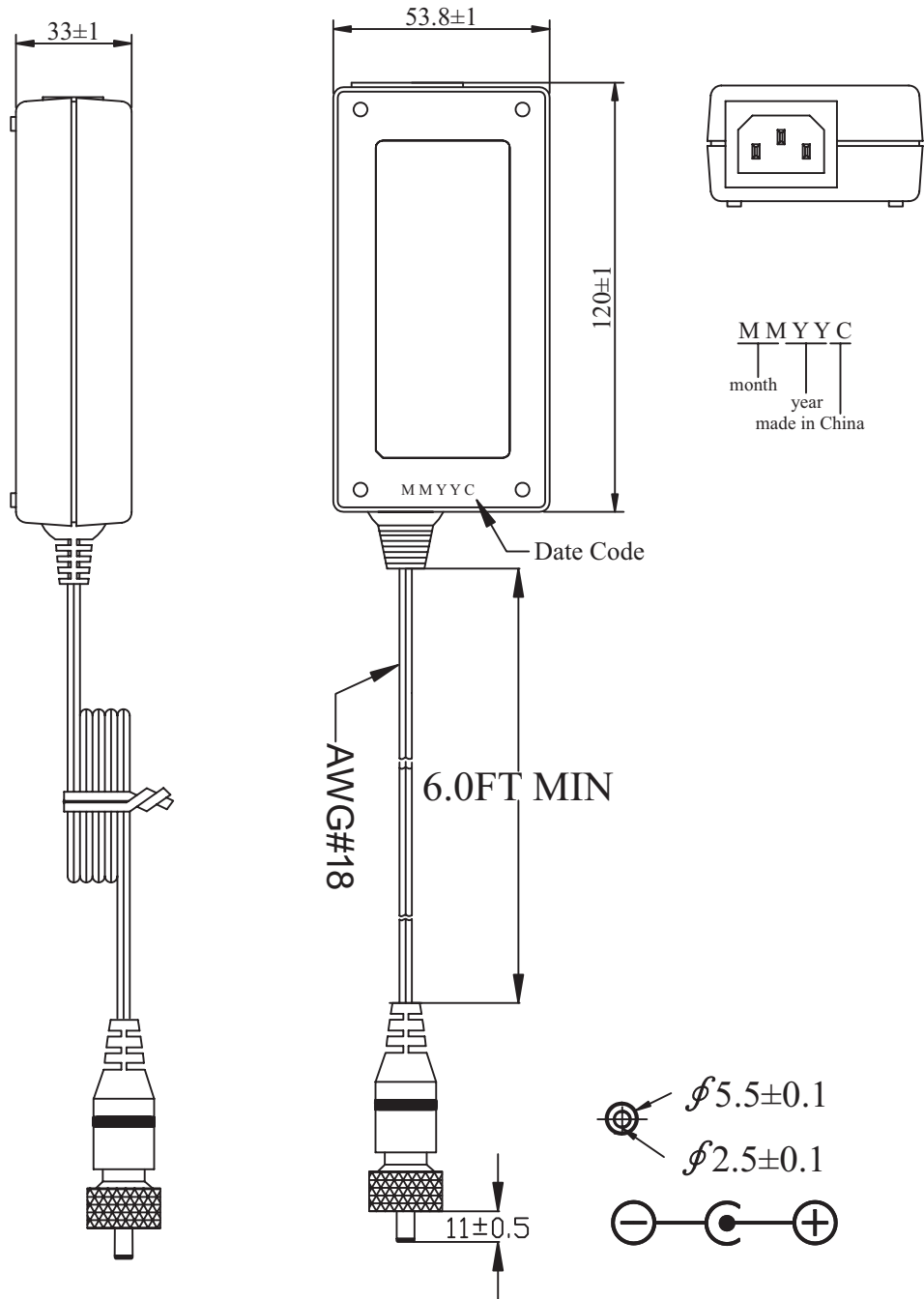
## 15.0 SAFETY

The switching power supply has approved by the following safety standards:

UL1950 (Third Edition),CAN/CSA-C22.2 No.950-95,  
IEC 60950-1:2001,EN60950-1:2001

### 16. OVERALL DRAWING

UNIT: mm



## 17. PACKING

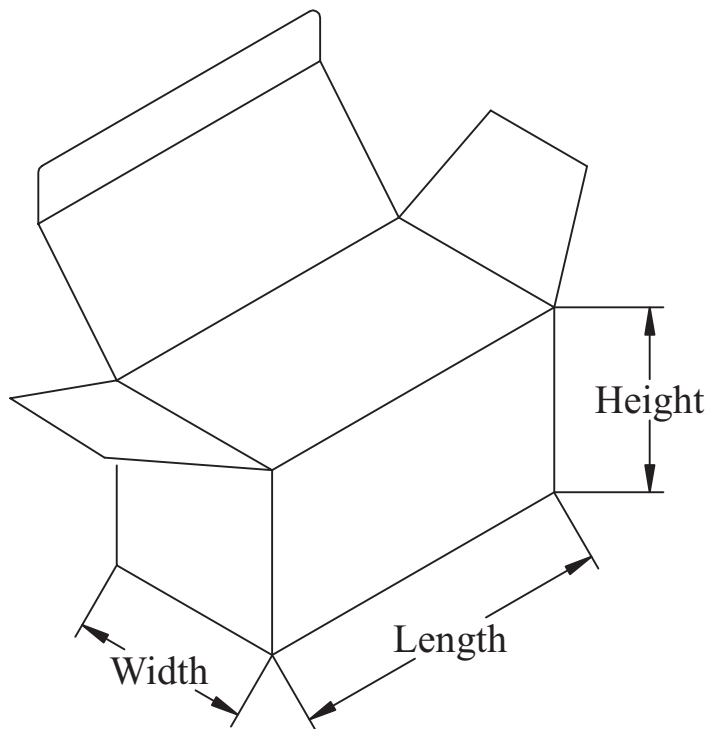
### 17.1 Inner Box

UNIT: mm

Length:150

Width:75

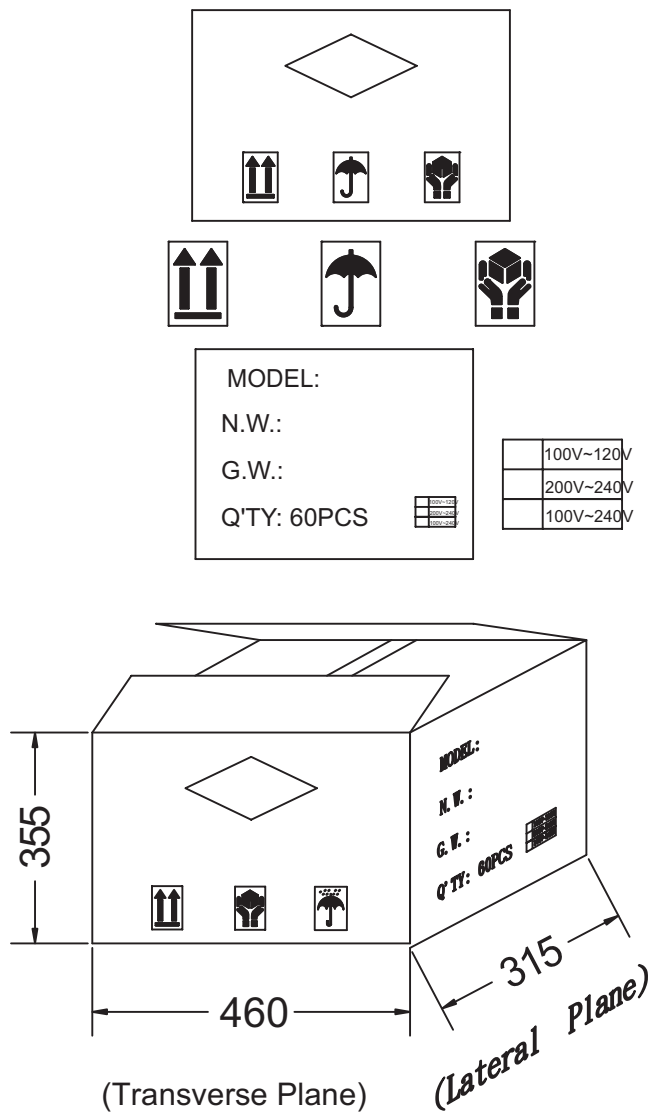
Height:65



### 17. PACKING

#### 17.2 Carton

UNIT: mm



18. LABEL

UNIT: mm

