



HON-KWANG ELECTRIC CO., LTD.  
HON-KWANG ELECTRIC(SHENZHEN) CO., LTD  
HON-KWANG ELECTRIC(KUNSHAN) CO., LTD

## SPECIFICATION FOR APPROVAL

CUSTOMER: **JAMECO**

DESCRIPTION: I.T.E. POWER SUPPLY REV: (A0)

MODEL NO: HK-AW-240A050-US PART NO: HKSC-180473

DESIGNED NO: 180473-1214 DATE: DEC.14th.2018

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					

鳳冠電機股份有限公司  
鳳冠電機(深圳)有限公司  
鳳冠電機(昆山)有限公司





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## 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +24V, 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: 50A Max

2.4 Input Power Consumption at no-load : 0.1W Max

Test condition will be tested after No load operating for 30min then measure it.

2.5 Input Current: 0.4A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +24V

3.2 Output Regulation: 22.8-25.2V

3.3 Output Load Range: 0-0.5A

3.4 Output Ripple & Noise: 200mV Max @20MHz bandwidth with  
10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY:  $\geq 82.96\%$  @ average of 25/50/75/100% loads 115V&230VAC input

Test condition will be tested after full load operating for 30min then measure it.

5.0 LINE REGULATION:  $\pm 2\%$  maximum

6.0 HOLD UP TIME: 10ms Min at 110VAC full load.

7.0 TURN ON TIME: 2S Max at 110VAC full load.



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8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

## 9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

Primary to Secondary :AC 3000Vrms, 4 mA , 1 minute for type test, 2 second for production test.

## 10.0 INSULATION RESISTANCE

Primary to secondary: 50M OHM to 500VDC.

## 11.0 PROTECTION

### 11.1 Input Protection

The switching power supply has a 2 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.



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## 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 designed to meet the following safety standards:

FCC 47 CFR Part 15 Subpart B ICES-003 Issue 6-2016 ANSI C63.4-2014

EN 55032: 2015 Class B IEC 61000-4-2: 2008

EN 55024: 2010+A1: 2015 IEC 61000-4-3: 2006+A1:2007+A2:2010

CISPR 32: 2015 (Ed2.0) IEC 61000-4-4: 2012

CISPR 24: 2010+A1: 2015 IEC 61000-4-5: 2014

EN 61000-3-2: 2014 IEC 61000-4-6: 2013

EN 61000-3-3: 2013 IEC 61000-4-8: 2009

IEC 61000-4-11: 2004+A1: 2017

## 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.

### 14.2 MTBF

When the operation is complying with this specification, the switching power supply's MTBF will be 50,000 hours at 25 centigrade degrees.

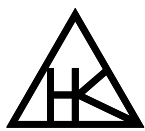
## 15.0 SAFETY

The switching power supply has designed to meet the following safety standards:

UL 60950-1, 2nd Edition, 2014-10-14

CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10

EN 60950-1: 2006 +A11: 2009 +A1: 2010 +A12: 2011 +A2: 2013



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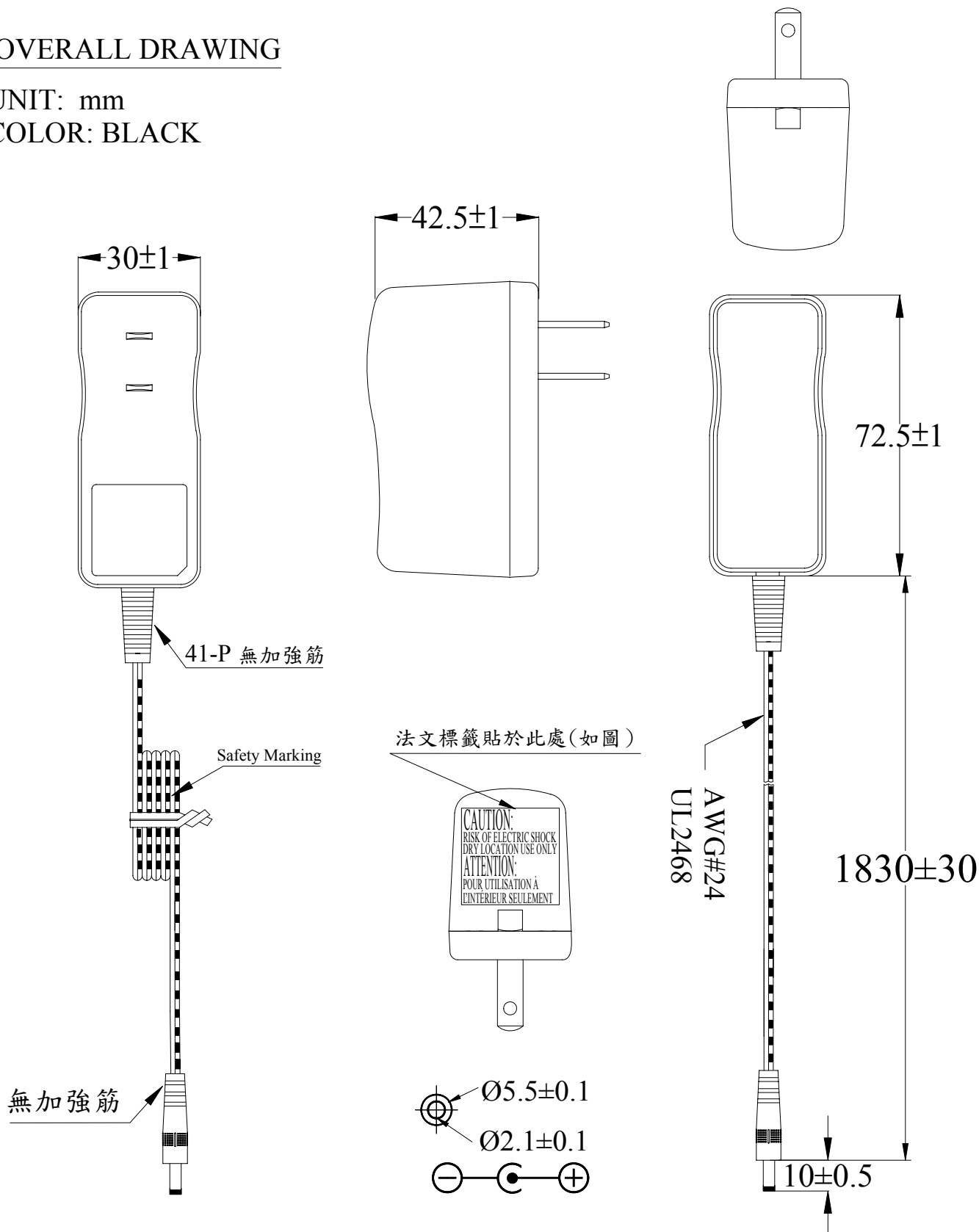
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## 16. OVERALL DRAWING

UNIT: mm

COLOR: BLACK





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## 17. PACKING

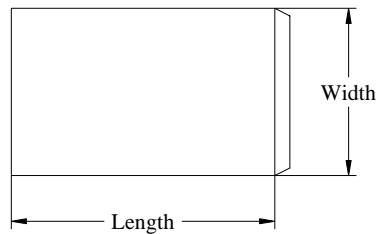
### 17.1 Inner Box

UNIT: mm

PE BAG

Length :

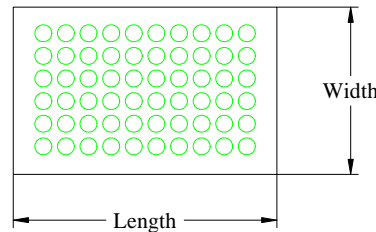
Width :



BUBBLE BAG

Length:

Width:

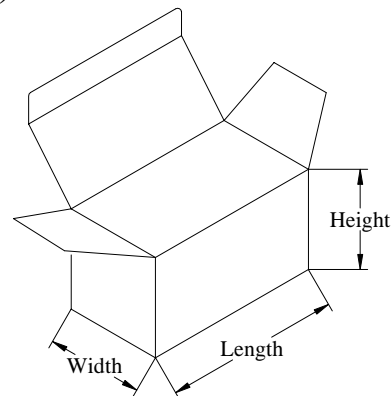


BOX (  Normal BOX  Corrugated BOX )

Length:82

Width:67

Height:30



### NOTICE:

Its probably different from the white box of the sample and the figure dimension. The white box is used to pack during product.

注意:樣品使用的小白盒尺寸可能與此圖面尺寸不同,此圖面尺寸是用于生產時的包裝.





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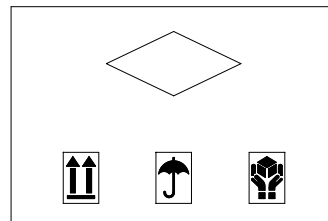
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## 17. PACKING

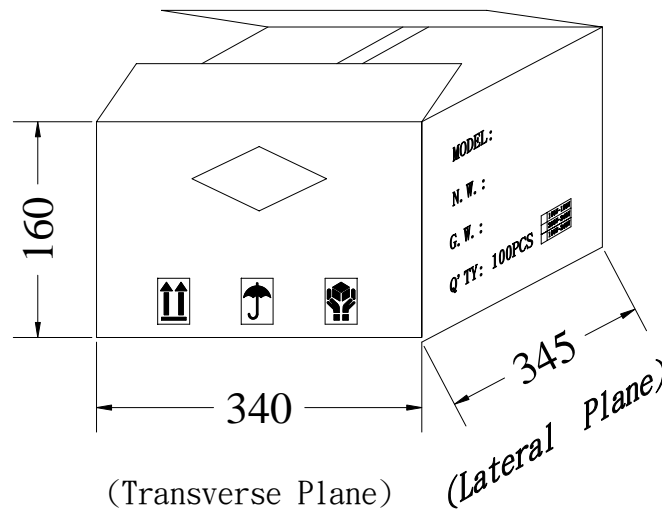
### 17.2 Carton

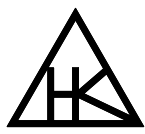
UNIT: mm



MODEL:  
 N. W. :  
 G. W. :  
 Q' TY: 100PCS

	100V-120V
	200V-240V
	100V-240V





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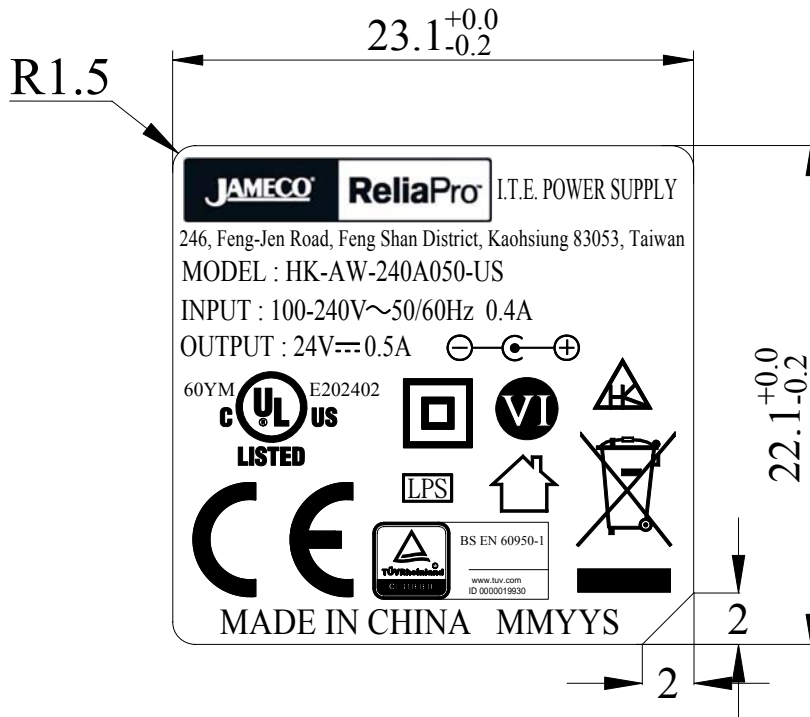
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## 18. MARKING

100# CPC 壓花底+上光 NAME-PLATE: WHITE CHARACTERS BLACK BACKGROUND.

UNIT: mm

$\begin{matrix} \text{M} & \text{M} & \text{Y} & \text{Y} & \text{S} \\ | & | & | & | & | \\ \text{month} & & \text{year} & & \\ & & \text{made in China} & & \\ & & \text{by Hon-kwang} & & \end{matrix}$



法文標籤貼於CASE上

銅板紙表面上光 NAME-PLATE: BLACK CHARACTERS WHITE BACKGROUND.

