



IDEALPOWER
experts in power conversion

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

DESCRIPTION: I.T.E. POWER SUPPLY REV: (A1)

MODEL NO: HK-AP-120A050-CP PART NO: HKSC-170077

DESIGNED NO: 170077-0207 DATE: MAR.25th.2017

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					

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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 Power Consumption at no-load : 0.1W Max

2.4 Input In-rush Current: 50A Max

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

2.5 Input Current: 0.2A Max

3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +12V

3.2 Output Regulation: 11.4-12.6V

3.3 Output Load Range: 0-0.5A

3.4 Output Ripple & Noise: 300mV Max @20MHz bandwidth with 10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY: $\geq 78.88\%$ @ 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 3.0 KVrms, 4mA, 1 minute for type, 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 10 ohm fusing resistor 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 approved by the following standards:

FCC PART 15 Class B	AS/NZS CISPR 32:2015
EN55032:2015	AS/NZS CISPR 14.1:2013
EN55014-1:2006+A1:2009+A2:2011	AS/NZS CISPR 14.2:2015
EN55014-2:2015	AS/NZS CISPR 22:2009+A1:2010
EN55022:2010	AS/NZS CISPR 24.1:2013
EN55024:2010+A1:2015	AS/NZS 61000.3.2:2013
EN61000-3-2:2014	AS/NZS 61000.3.3:2012
EN61000-3-3:2013	

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 approved by the following standards:

UL 60950-1, 2nd Edition, 2014-10-14	CSA C22.2 NO.60950-1-07, 2nd Edition, 2014-10
EN60950-1:2006+A11+A1+A12+A2	BS EN60950-1:2006+A2
AS/NZS 60950.1:2015	



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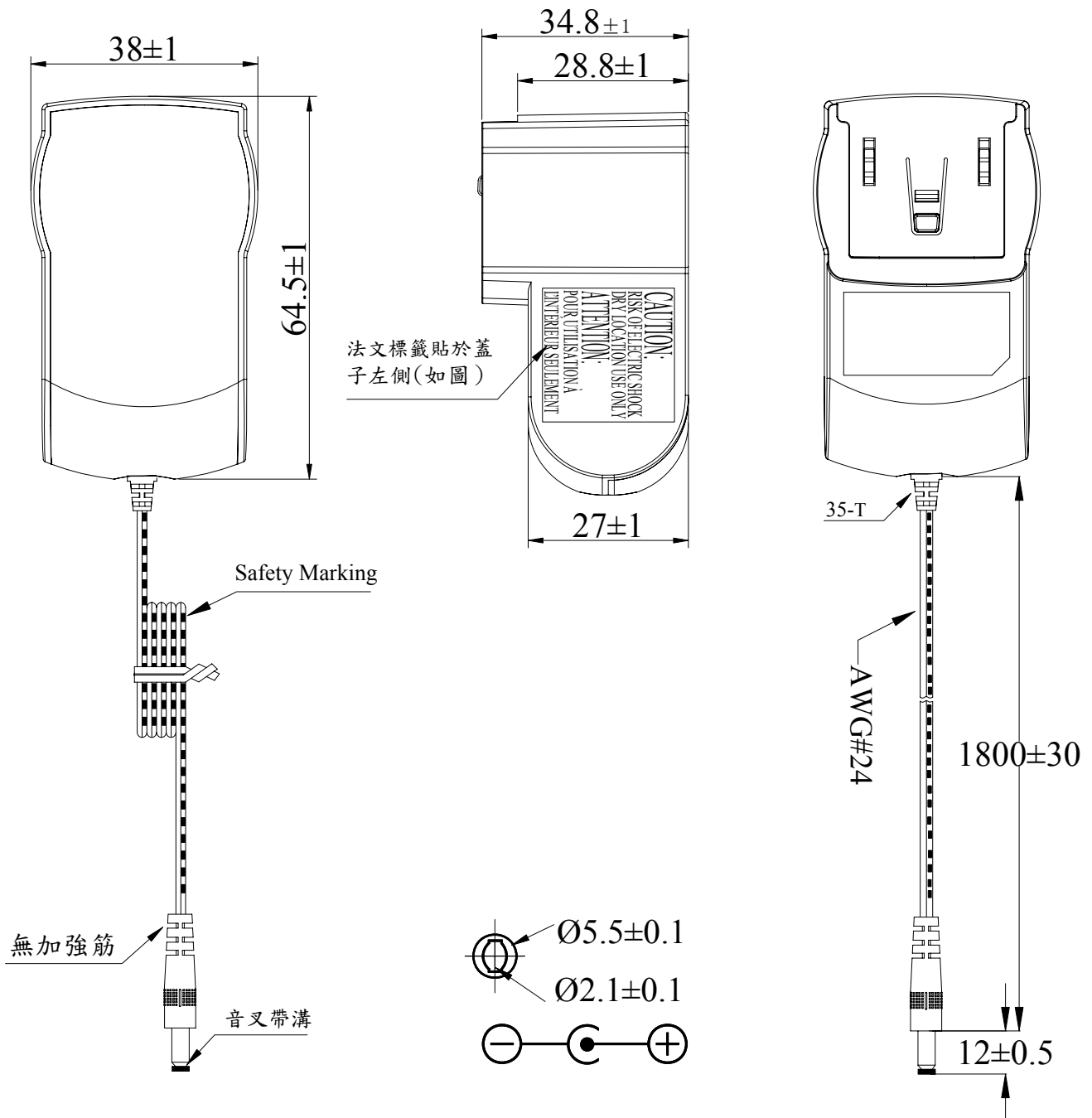
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16. OVERALL DRAWING

UNIT: mm

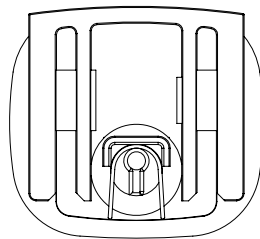
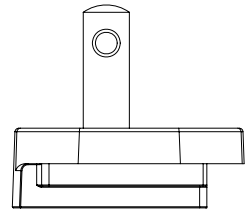
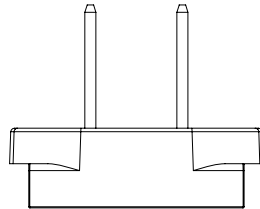
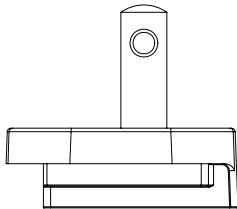
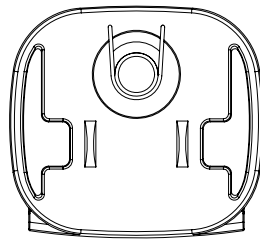
COLOR: BLACK





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UNIT: mm



UL

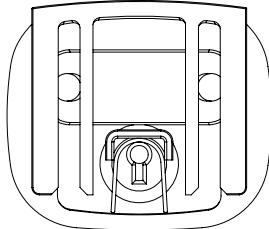
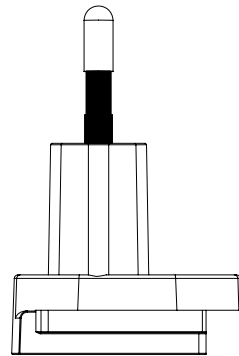
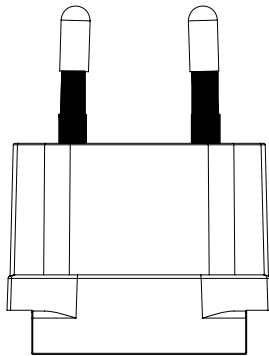
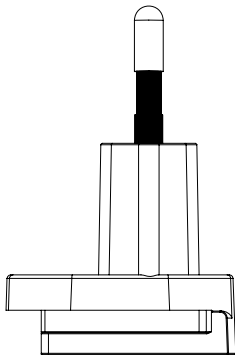
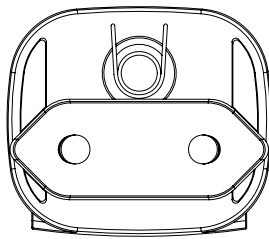


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UNIT: mm



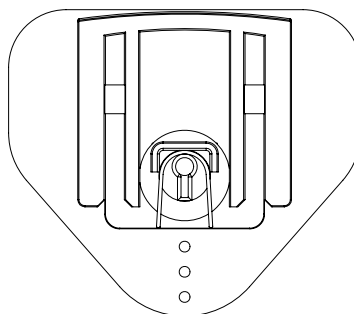
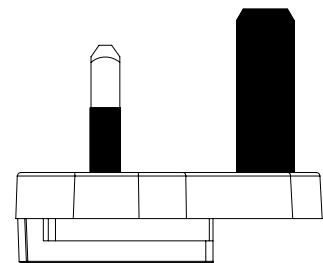
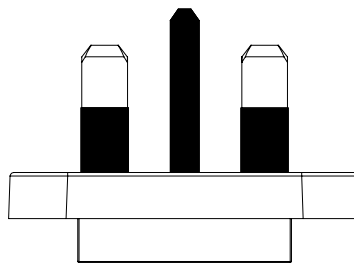
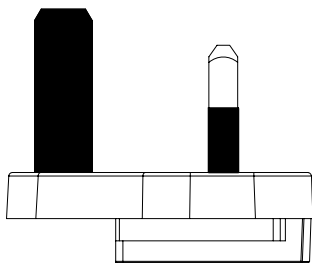
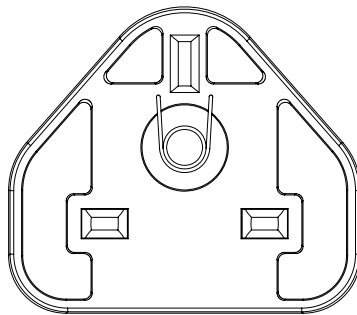
TUV



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UNIT: mm



UK

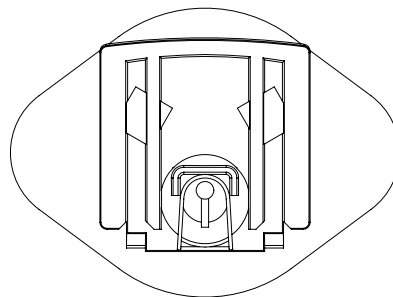
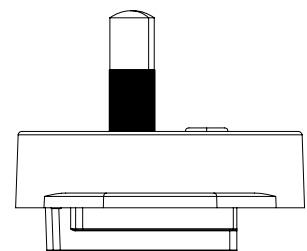
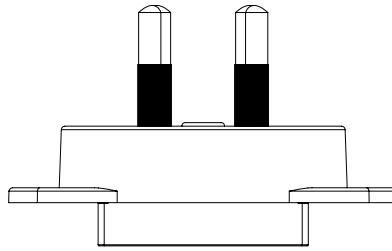
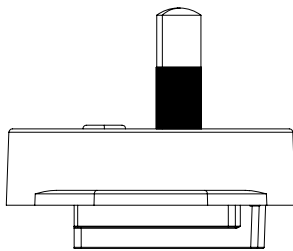
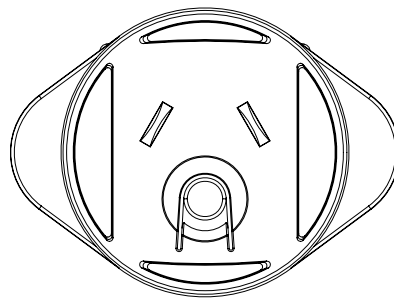


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UNIT: mm



SAA



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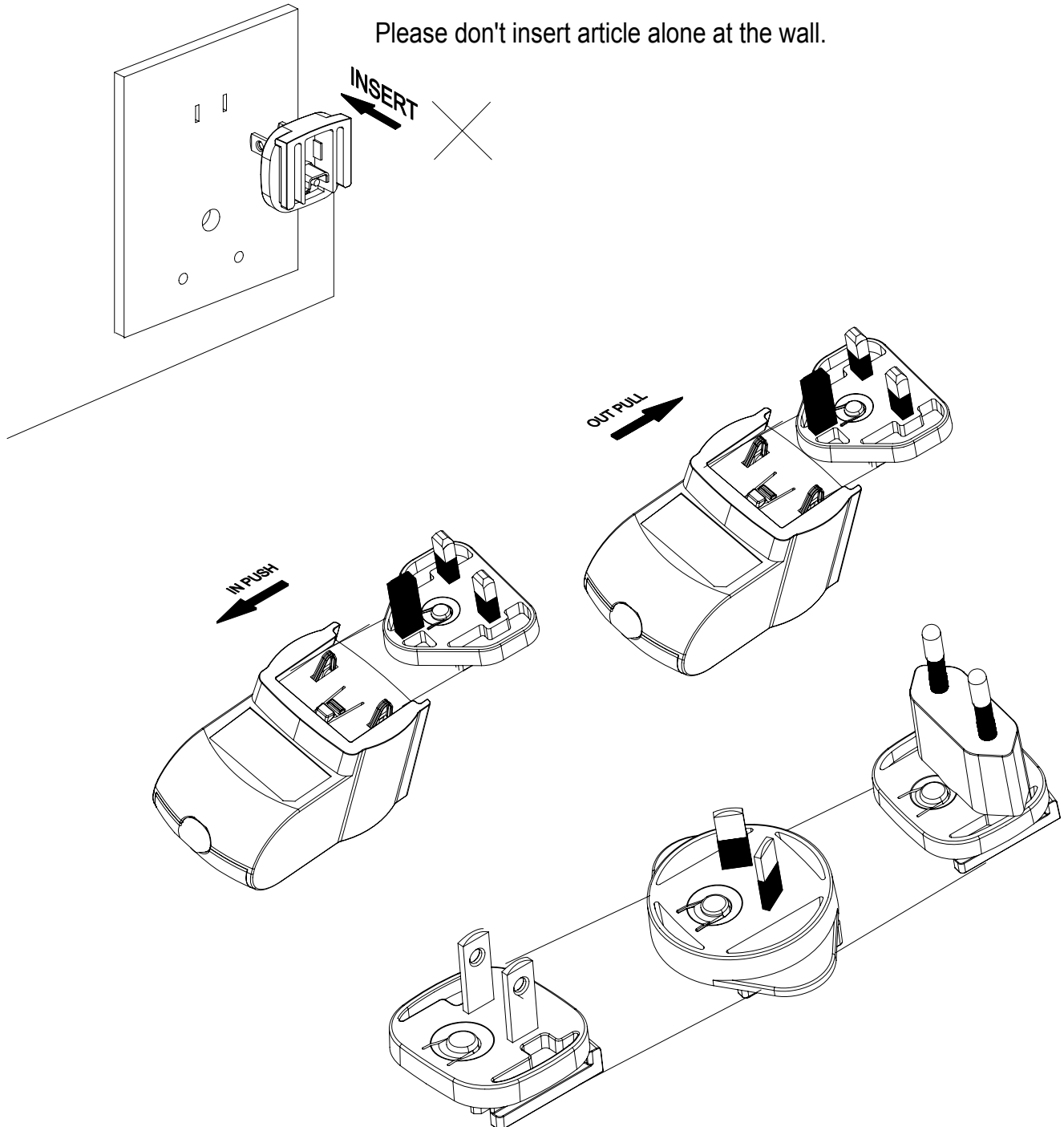
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UNIT: mm

WARNING!

Please don't insert article alone at the wall.





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17. PACKING

17.1 Inner Box

UNIT: mm

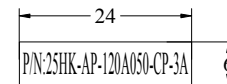
■ BOX (■ Normal BOX □ Corrugated BOX)

Length: 82

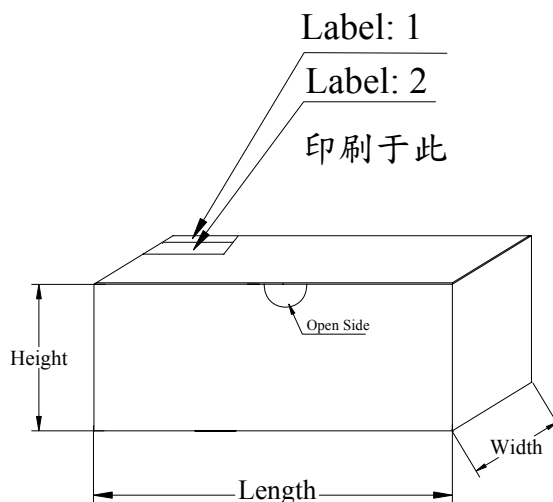
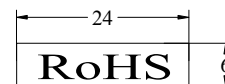
Width: 85

Height: 55

Label: 1



Label: 2



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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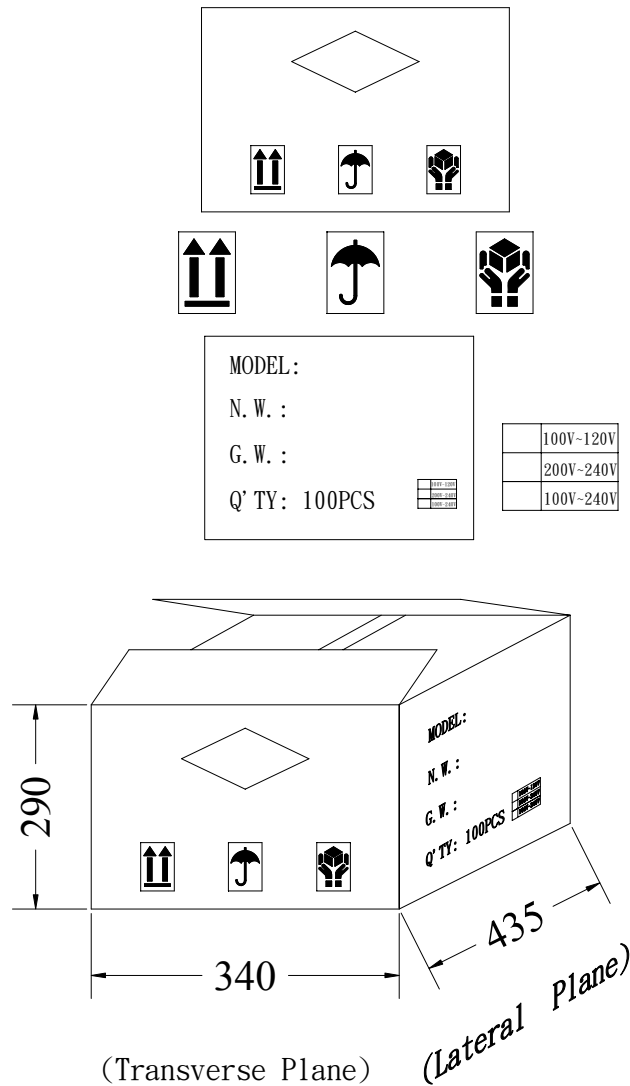
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17. PACKING

17.2 Carton

UNIT: mm



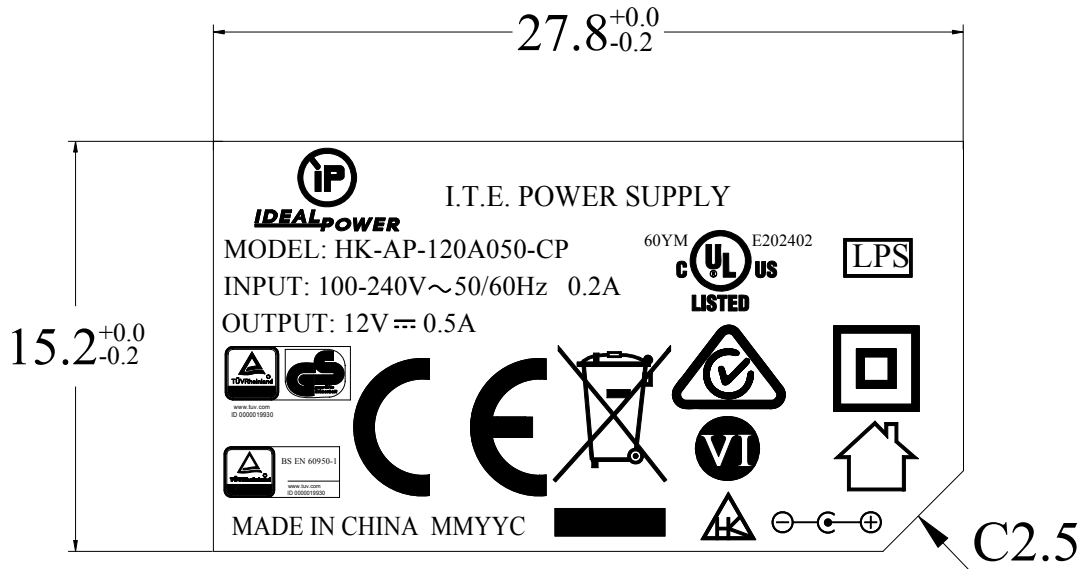


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18. MARKING

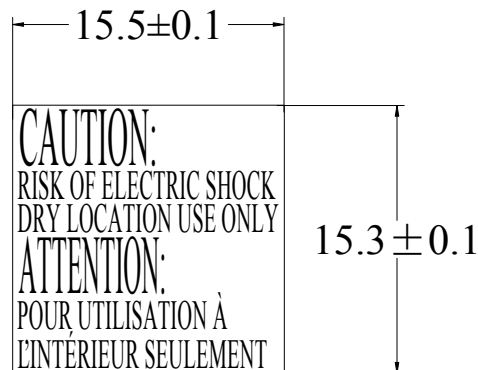
100# CPC 壓花底+上光 NAME-PLATE:WHITE CHARACTERS BLACK BACKGROUND.

UNIT: mm M M Y Y C
 month year
 made in China
 by Hon-kwang



法文標籤貼於CASE上

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



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