



**IDEALPOWER**

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# SPECIFICATION FOR APPROVAL

CUSTOMER: \_\_\_\_\_

DESCRIPTION: SWITCHING POWER SUPPLY REV: (A3)

MODEL NO: HK-AB-240A125-CP6 PART NO: HKSC-161037

DESIGNED NO: 161037-1026 DATE: MAR.25th.2020

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					

Ideal Power, 14 Larks Way, Tree Beech Enterprise Park, Gunn, Barnstaple, Devon, England EX32 7NZ

Web: [www.idealpower.co.uk](http://www.idealpower.co.uk) email: [sales@idealpower.co.uk](mailto:sales@idealpower.co.uk) TEL +44 (0) 845 2603400 Fax +44 (0) 845 2603401



**SPECIFICATION CHANGE HISTORY**

CUSTOMER		PART NO	HKSC-161037
MODEL NO	HK-AB-240A125-CP6	REV	(A3)
REV	DATE	DESCRIPTION	REMARKS
A0	16.10.26	新發行承認書. (New issue)	羅珍珍
A1	18.10.18	1. 更新安規標準及銘板. (Update safety standards and nameplates.) 2. 追加CCC,PSE安規及更新銘板.(Add CCC and PSE on the label marking.)	陳冬婷
A2	18.12.18	依安規要求更新銘板上生產工廠代碼, 從MMYYC改成MMYYSS. (As per safety requirement, update the production factory' s code and change from MMYYC into MMYYSS.)	陳冬婷
A3	20.03.25	1. 移除PSE安規證書跟LOGO (Remove PSE logo and PSE certificate.) 2. 將安規標準改為62368-1和更新銘板.(Change the Safety standard to 62368-1 and update the label.)	陳冬婷

SAFETY APPROVAL:	ENGINEER APPROVAL:	
	ELECTRICAL	STRUCTURAL
毛源龍	田青松	陳銘



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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 Power Consumption at no-load : 0.1W Max

2.4 Input In-rush Current: 60A Max

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

2.5 Input Current: 0.8A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +24V

3.2 Output Regulation: 22.8-25.2V

3.3 Output Load Range: 0-1.25A

3.4 Output Ripple & Noise: 240mV Max @20MHz bandwidth with  
10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY  $\geq$  86.95% @ 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

9.1 Primary to Secondary :AC 3000 Vrms ,4mA,1minute 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.

11.2.3 Over Current Protection(OCP):2.6A Max



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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 GB17625.1-2012; GB 9254-2008

EN 55032: 2015, Class B CISPR 32: 2012 (Ed 2.0)

EN 61000-3-2: 2014 EN 61000-3-3: 2013

IEC 61000-4-2: 2008 IEC 61000-4-3: 2006 +A1: 2007 +A2: 2010

IEC 61000-4-4: 2012 IEC 61000-4-5: 2014 IEC 61000-4-6: 2013

IEC 61000-4-8: 2009 IEC 61000-4-11: 2004 +A1: 2017

AS/NZS CISPR 32: 2015 J55022(H22) J3000(H25)

## 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 100,000 hours at 25 centigrade degrees.

## 15.0 SAFETY

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

UL 62368-1, Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements

CSA C22.2 NO. 62368-1-14, Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements

EN 62368-1:2014+A11 BS EN 62368-1:2014+A11 AS/NZS 62368.1:2018 J60950-1(H27) GB4943.1-2011



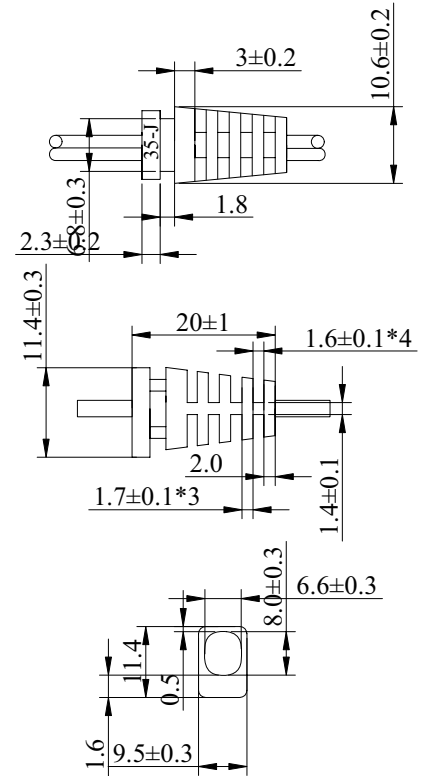
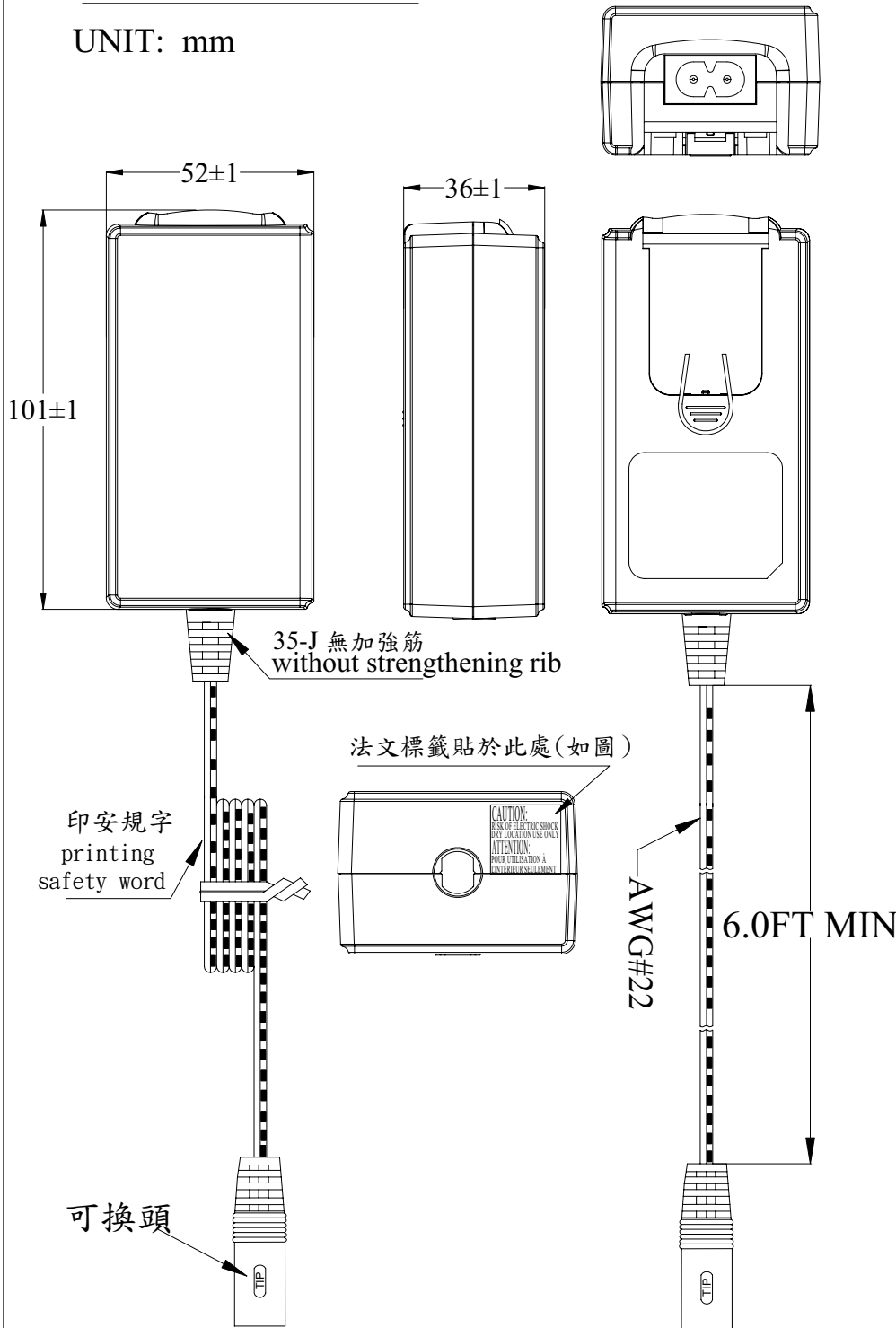
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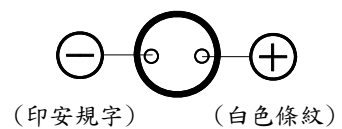
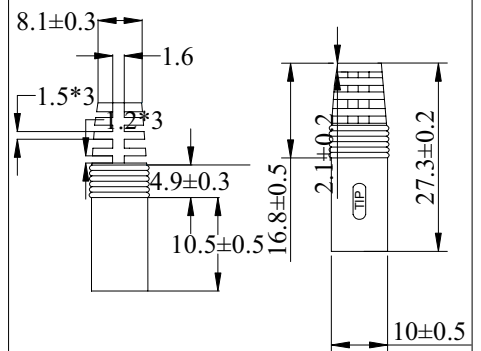
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## 16. OVERALL DRAWING

UNIT: mm



未注標尺寸公差: ±0.2

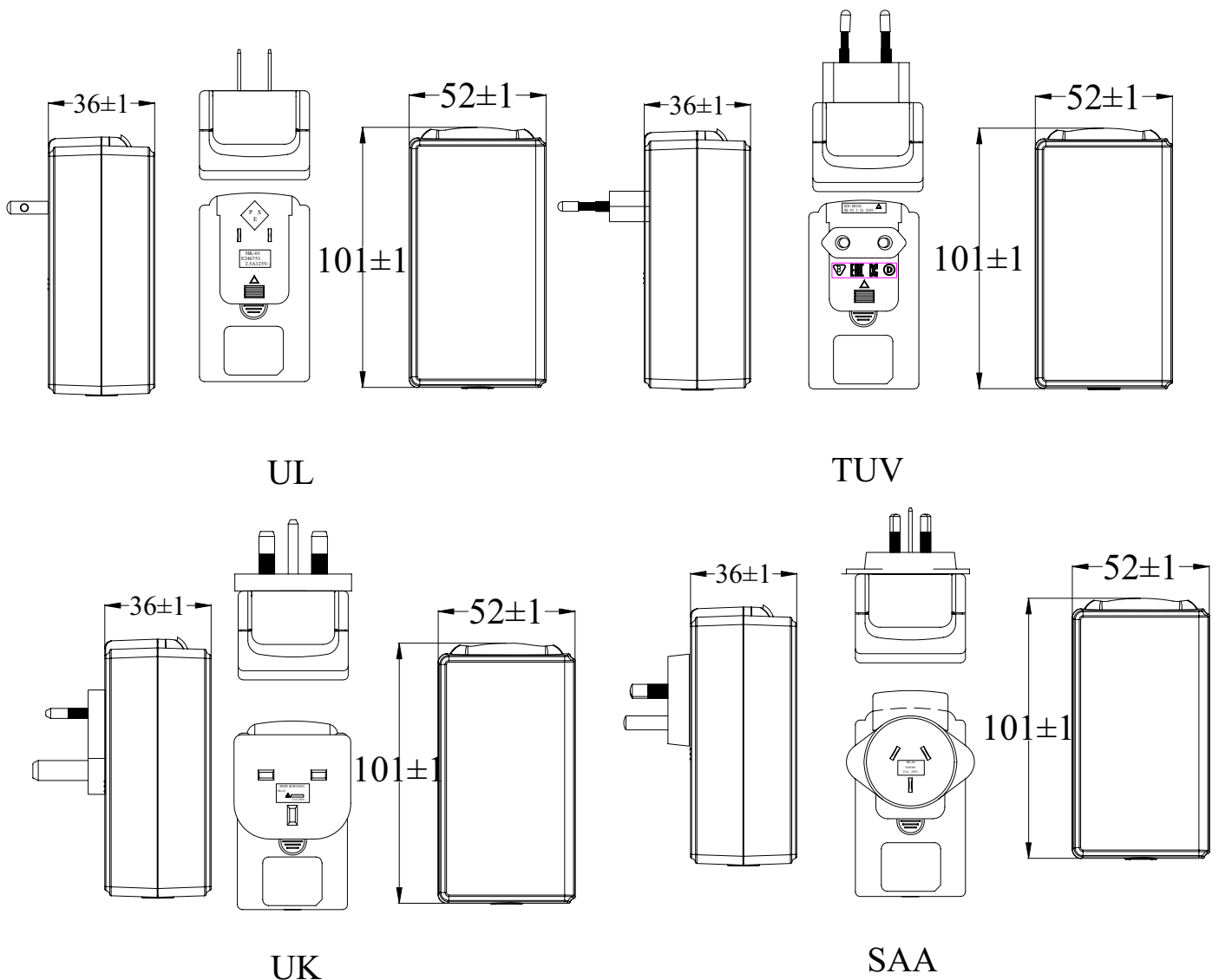




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## 16. OVERALL DRAWING

UNIT: mm





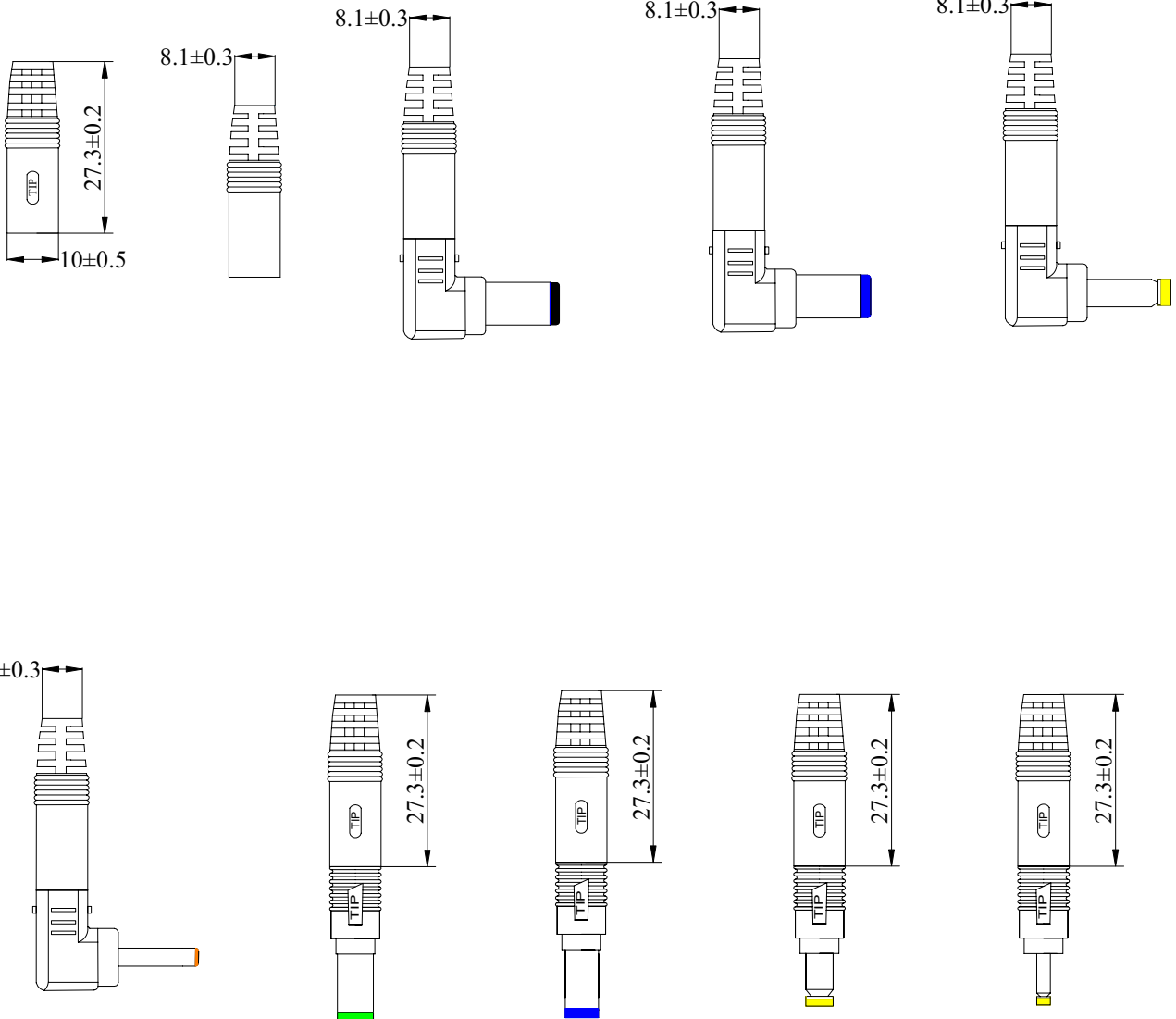


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UNIT: mm



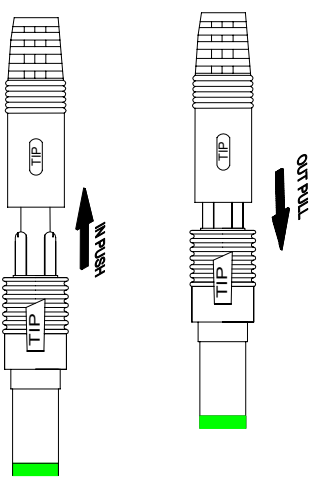
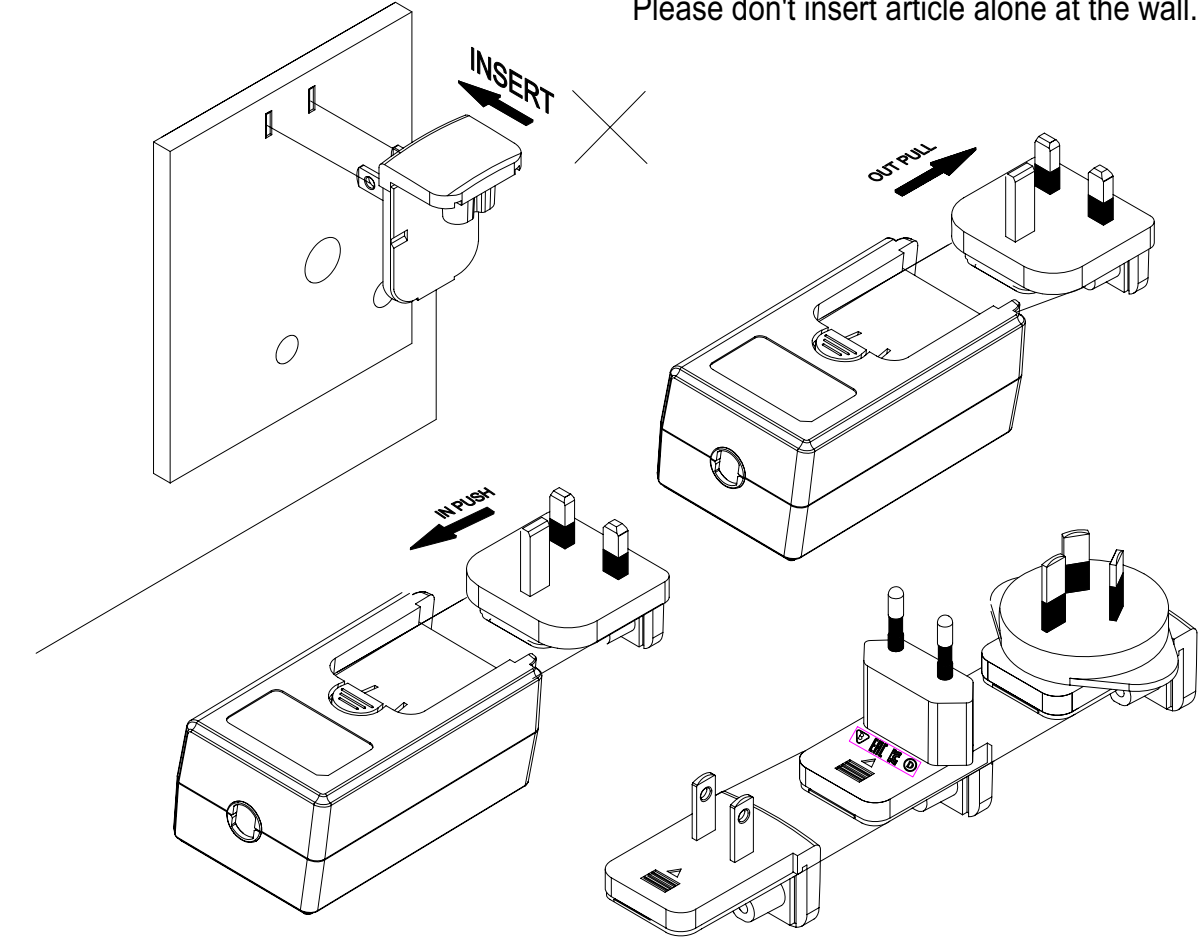


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## 17. USE SPECIFICATION

## WARNING!

Please don't insert article alone at the wall.



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14 LARKS WAY

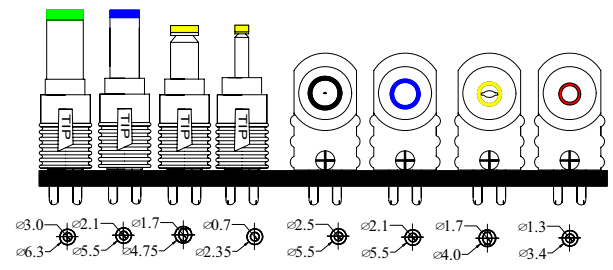
Output connector instructions.

Supplied by Ideal Power Ltd, Acorn House, Tree Beech Enterprise Park, Gunn, Barnstaple, Devon, England EX32 7NZ Tel. +44 (0) 845 2603400

Please ensure the correct polarity is observed before connecting to any user equipment.

Positive Inner

Positive Outer



Instruction manual card



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## 18. PACKING

### 18.1 Inner Box

UNIT: mm

■ BOX( ■ Normal BOX □ Corrugated BOX)

Length:145

Width:75

Height:65

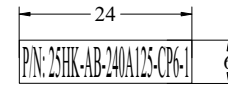
英規插本體

(UK Plug fitted to SPS Body)

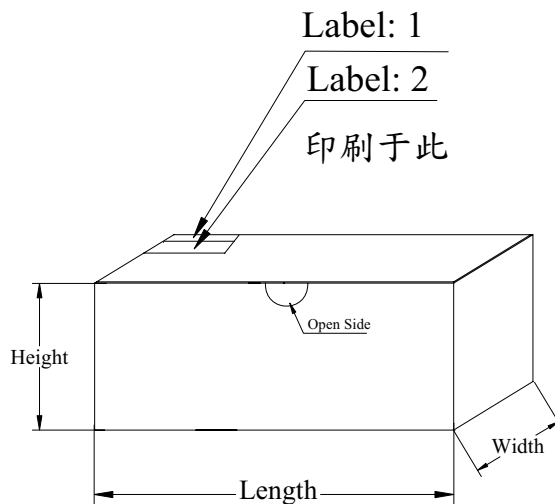
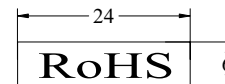
與美, 歐, 澳轉接頭放同一白盒內

(Put US, EU, AU Plug inside the box)

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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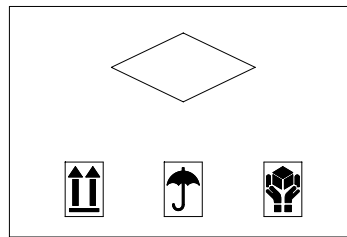
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## 18. PACKING

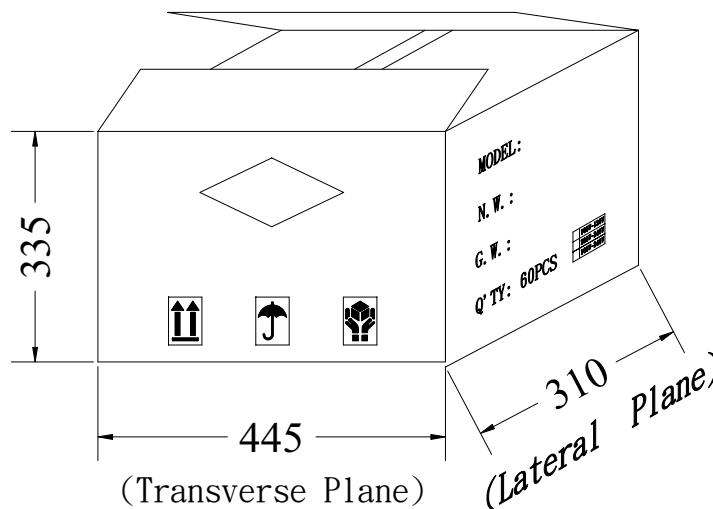
### 18.2 Carton

UNIT: mm



MODEL :
N. W. :
G. W. :
Q' TY: 60PCS

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





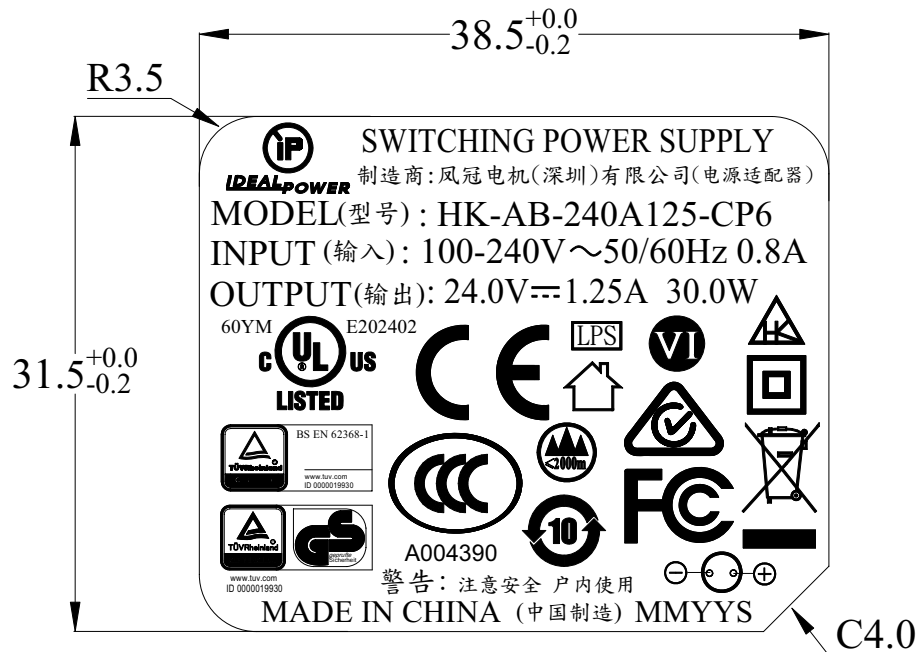
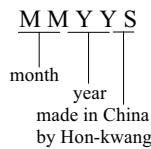
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## 19. MARKING

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

UNIT: mm



法文標籤貼於CASE上

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

