



**IDEALPOWER**  
experts in power conversion

## SPECIFICATION FOR APPROVAL

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

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

MODEL NO: HK-AB-050A400-CP6 PART NO: HKSC-160836

DESIGNED NO: 160836-0806 DATE: AUG.06th.2016

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



MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	1 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## CONTENTS

1. INTRODUCTION
2. INPUT REQUIREMENTS
3. OUTPUT REQUIREMENTS
4. EFFICIENCY
5. LINE REGULATION
6. HOLD UP TIME
7. TURN ON TIME
8. TEMPERATURE COEFFICIENT
9. DIELECTRIC STRENGTH (Hi-Pot) TEST
10. INSULATION RESISTANCE
11. PROTECTION
12. ENVIRONMENTAL CONDITIONS
13. EMI/ EMC
14. RELIABILITY AND QUALITY CONTROL
15. SAFETY
16. OVERALL DRAWING
17. USE SPECIFICATION
18. PACKING
19. MARKING
20. TEST REPORT

MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	2 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +5V, 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

2.5 Input Current: 0.8A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +5V

3.2 Output Regulation: 4.75-5.25V

3.3 Output Load Range: 4.0A

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

4.0 EFFICIENCY:  $\geq 83.08\%$  @ average of 25/50/75/100% loads 115V&230VAC input

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.

MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	3 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

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.

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.

MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	4 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 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    FCC PART 15 Class B;IC ICES-003    J55022(H22)  
 CISPR 22:2008(Ed 6.0)AS/NZS CISPR 22:2009+A1:2010; CISPR 24:2010(Ed  
 2.0)AS/NZS CISPR 24:2013  
 EN55022:2010/AC:2011    IEC61000-4-3:2006/A1:2007/A2:2010  
 EN61000-3-2:2014    IEC61000-4-4:2012  
 EN61000-3-3:2013    IEC61000-4-5:2014  
 EN55024:2010    IEC61000-4-5:2014    IEC61000-4-2:2008  
 IEC61000-4-6:2013 IEC61000-4-8:2009    IEC61000-4-11:2004

## 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

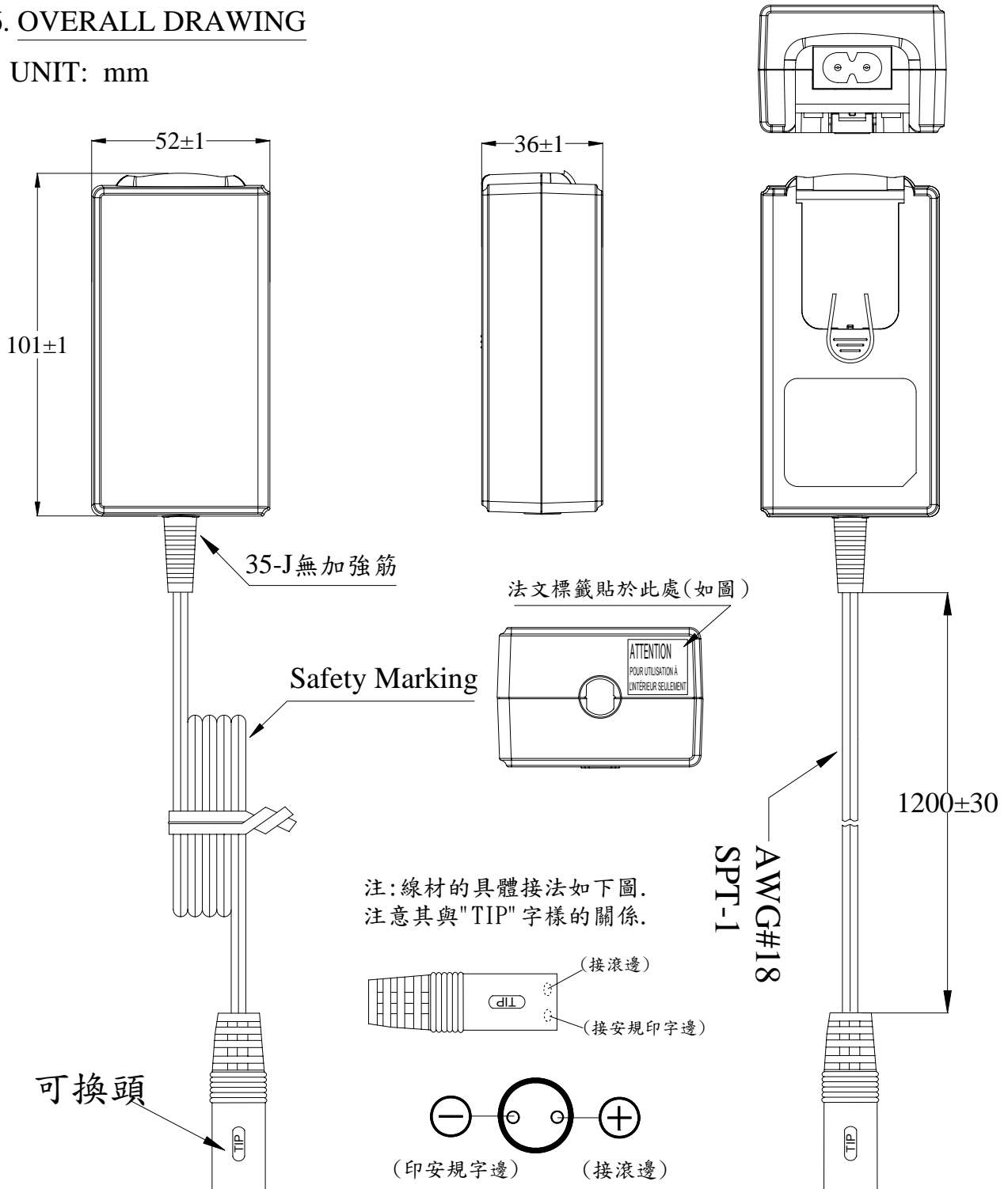
The switching power supply has approved by the following safety standards:

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    J60950-1(H22)

MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	5 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

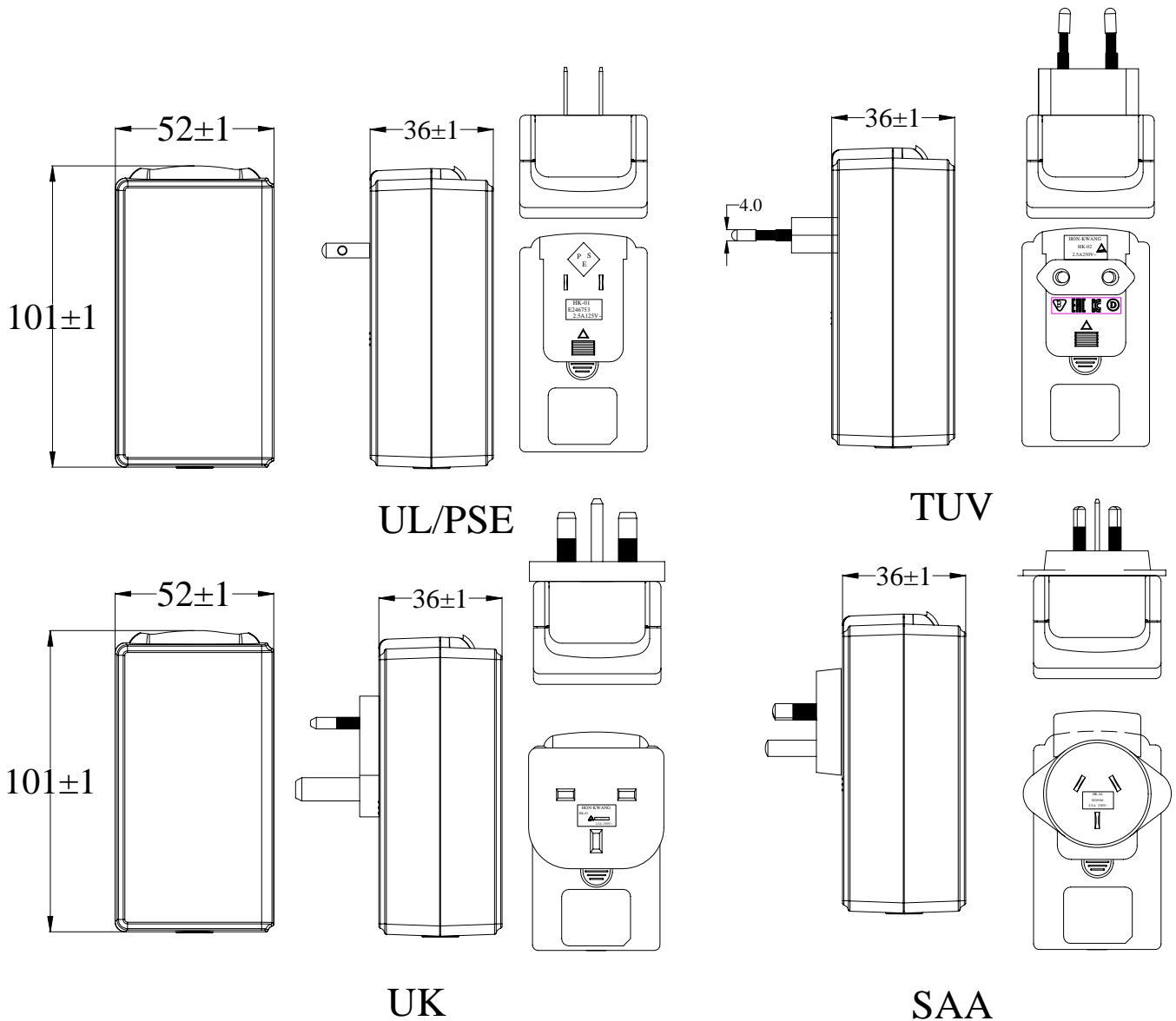
## 16. OVERALL DRAWING

UNIT: mm



MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	6 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

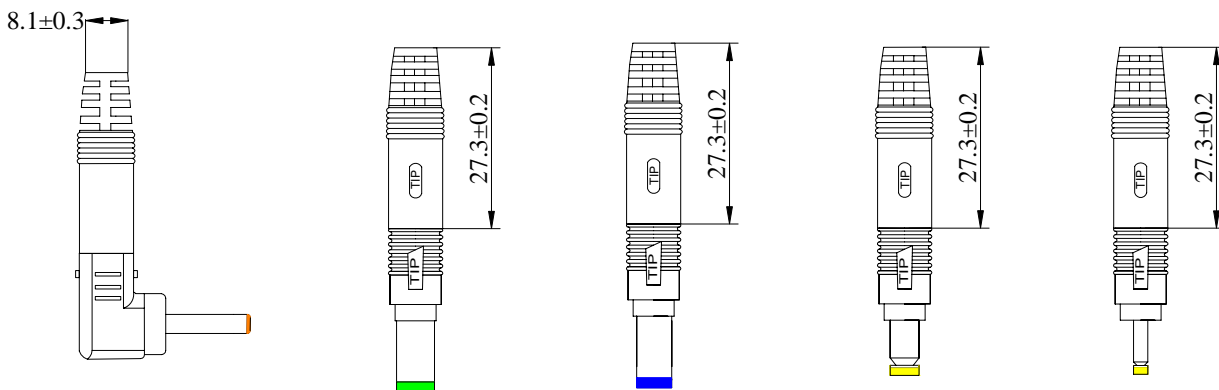
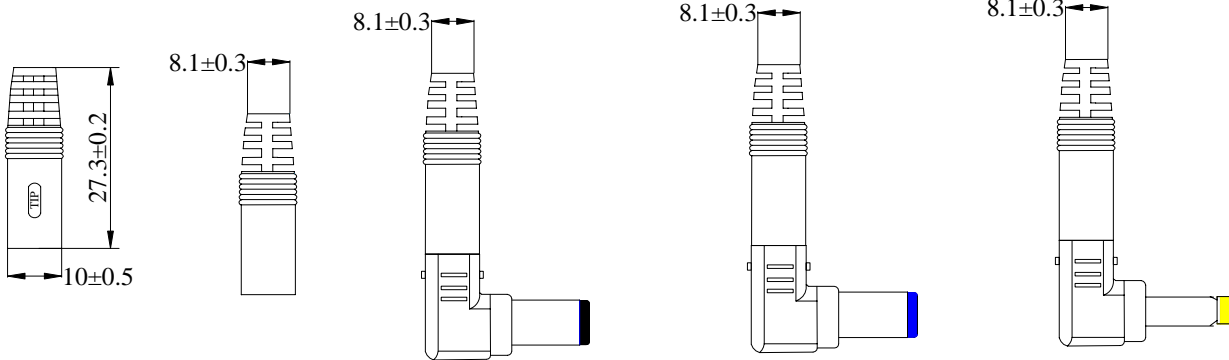
UNIT: mm





MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	7 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

UNIT: mm

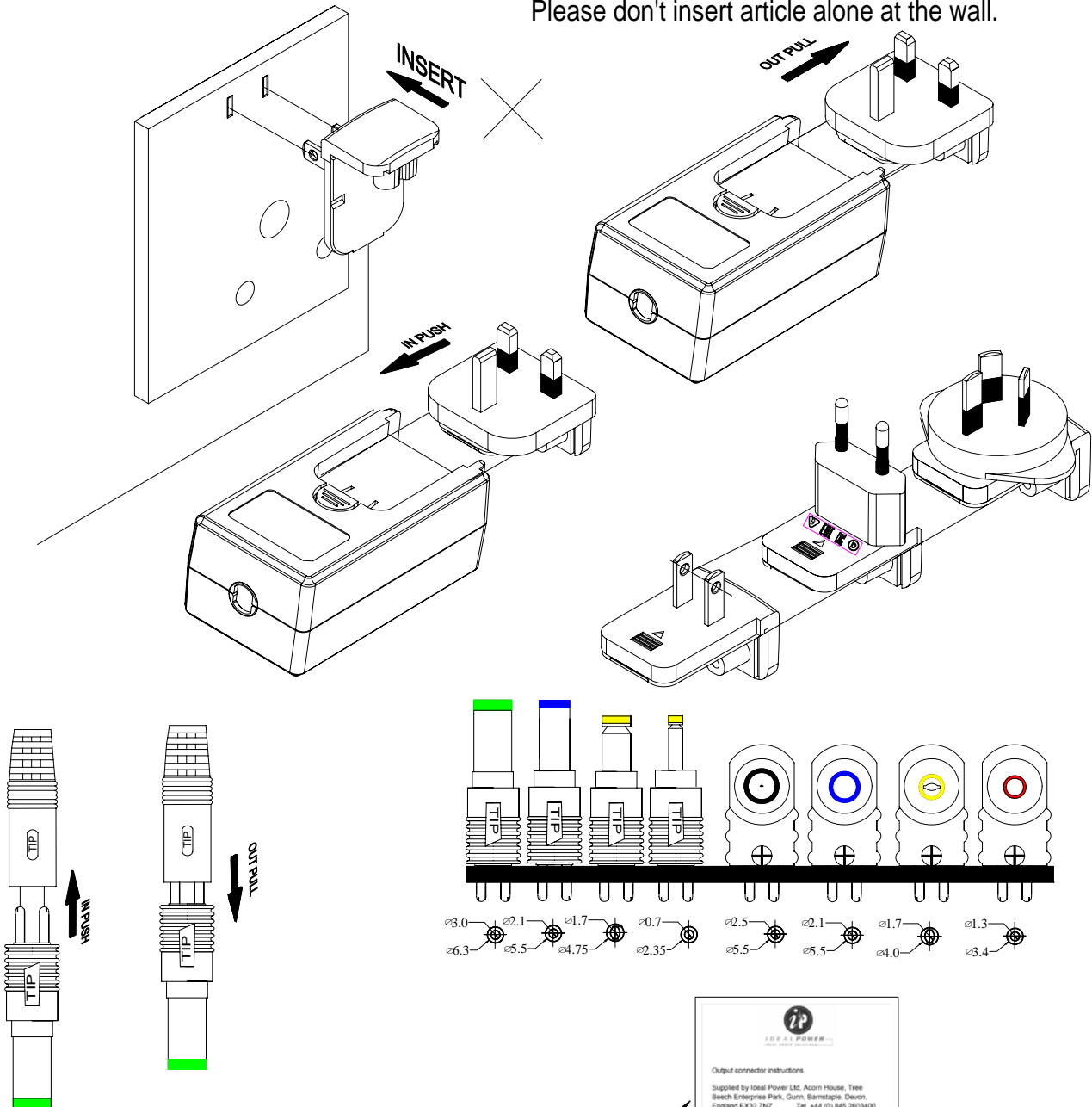


MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	8 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

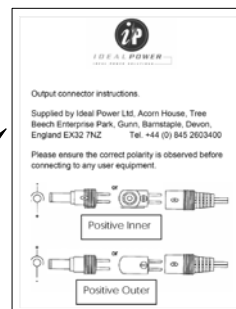
### 17. USE SPECIFICATION

### WARNING!

Please don't insert article alone at the wall.



Instruction manual card



MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	9 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 17. PACKING

### 17.1 Inner Box

UNIT: mm

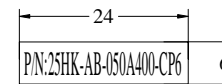
BOX(  Normal BOX  Corrugated BOX)

Length:145

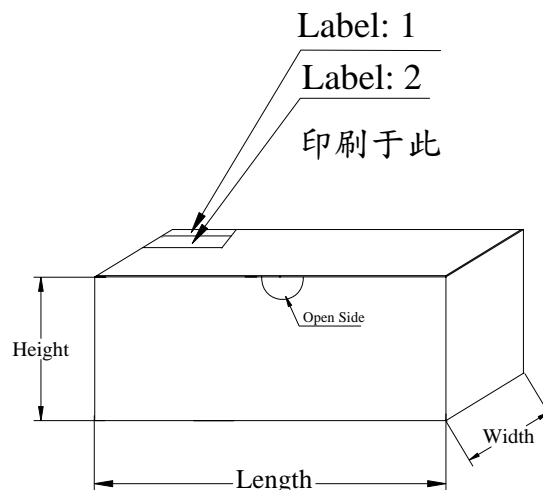
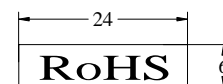
Width:75

Height:65

Label: 1



Label: 2



Material:A卡400磅(0.53t)White

### NOTICE:

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

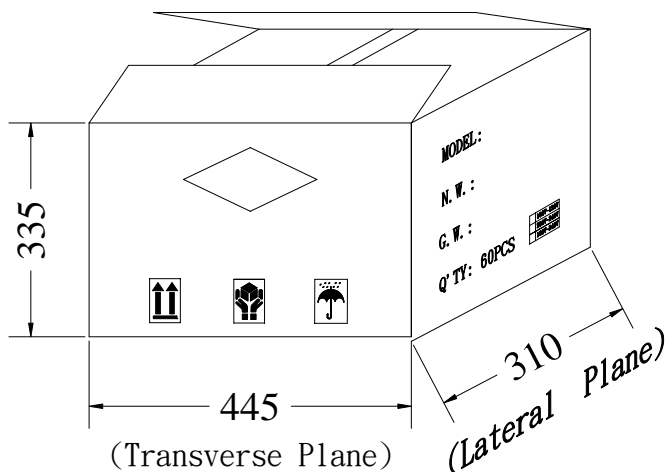
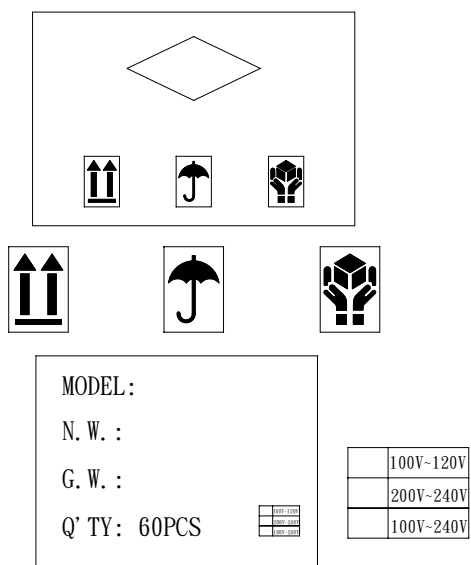
注意:樣品使用的小白盒尺寸可能與此圖面尺寸不同,此圖面尺寸是用于生產時的包裝。

MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	10 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 17. PACKING

### 17.2 Carton

UNIT: mm



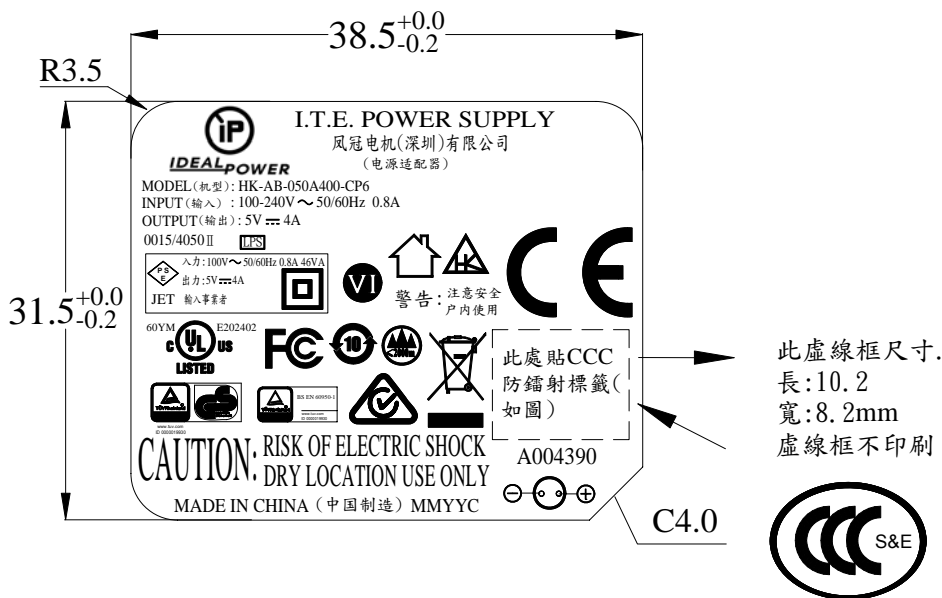
MODEL NO. :	HK-AB-050A400-CP6	PAGE NO. :	11 OF 12
PART NO. :	HKSC-160836	ISSUED DATE:	2016.08.06
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

### 18. MARKING

200# CPC 合成紙+上光 NAME-PLATE: WHITE CHARACTERS BLACK BACKGROUND.

UNIT: mm

M	M	Y	Y	C
month	month	year	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.



## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Ideal manufacturer](#):*

Other Similar products are found below :

[30-582](#) [VDV II PLUS](#) [45-915](#) [45-173](#) [45-098](#) [45-097](#) [L-5361](#) [45-093](#) [45-162](#) [41-990](#) [15DYS618-120150W-3](#) [15DYS624-050400W-K](#) [30-503](#) [35-020](#) [35-060](#) [35-516](#) [45-120](#) [45-1633-1](#) [45-170](#) [45-176](#) [45-1773-1](#) [45-1774](#) [45-1939-1](#) [45-2133-1](#) [45-298](#) [45-372](#) [45-404](#) [K-6336](#) [K-8906R](#) [L-4866](#) [L-9038](#) [LB-1091](#) [35-522](#) [61-775](#) [KB-0276R](#) [25HK-AB-050A400-CP](#) [30-593](#) [30-696](#) [33-856](#) [158050](#) [30-576](#) [45-672](#) [45-292](#) [45-129](#) [LB-1002](#) [30-793](#) [33-864](#) [45-1611-1](#) [R151005](#) [45-1513](#)