



IDEALPOWER

experts in power conversion

Ideal Power Ltd Product Specification Document

Description	Ext. PSU
Model Number	25HK-U-120A050-CP-3A
Revision	A0
Notes	-

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					

Ideal Power Ltd

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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 : 0.3W Max

2.4 Input In-rush Current: 50A Max

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: $\geq 73.48\%$ @ 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.

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 10 ohm resistance 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 15 Class B AS/NZS CISPR 22:2009 Class B J55022(H22)

GB17625.1-2012; GB 9254-2008 K00022(2009-12) K00024 (2009-12)

EN55022:2010/AC:2011

EN61000-3-2:2006/A2:2009 EN61000-3-3:2008

EN55024:2010/AC:2011

IEC61000-4-2:2008 IEC61000-4-3:2006/A1:2007/A2:2010 IEC61000-4-4:2012

IEC61000-4-5:2005 IEC61000-4-6:2008 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 standards:

UL 60950-1, 2nd Edition, 2011-12-19 CSA C22.2 NO.60950-1-07, 2nd Edition, 2011-12

EN60950-1:2006+A11+A1+A12 AS/NZS 60950.1:2011+A1

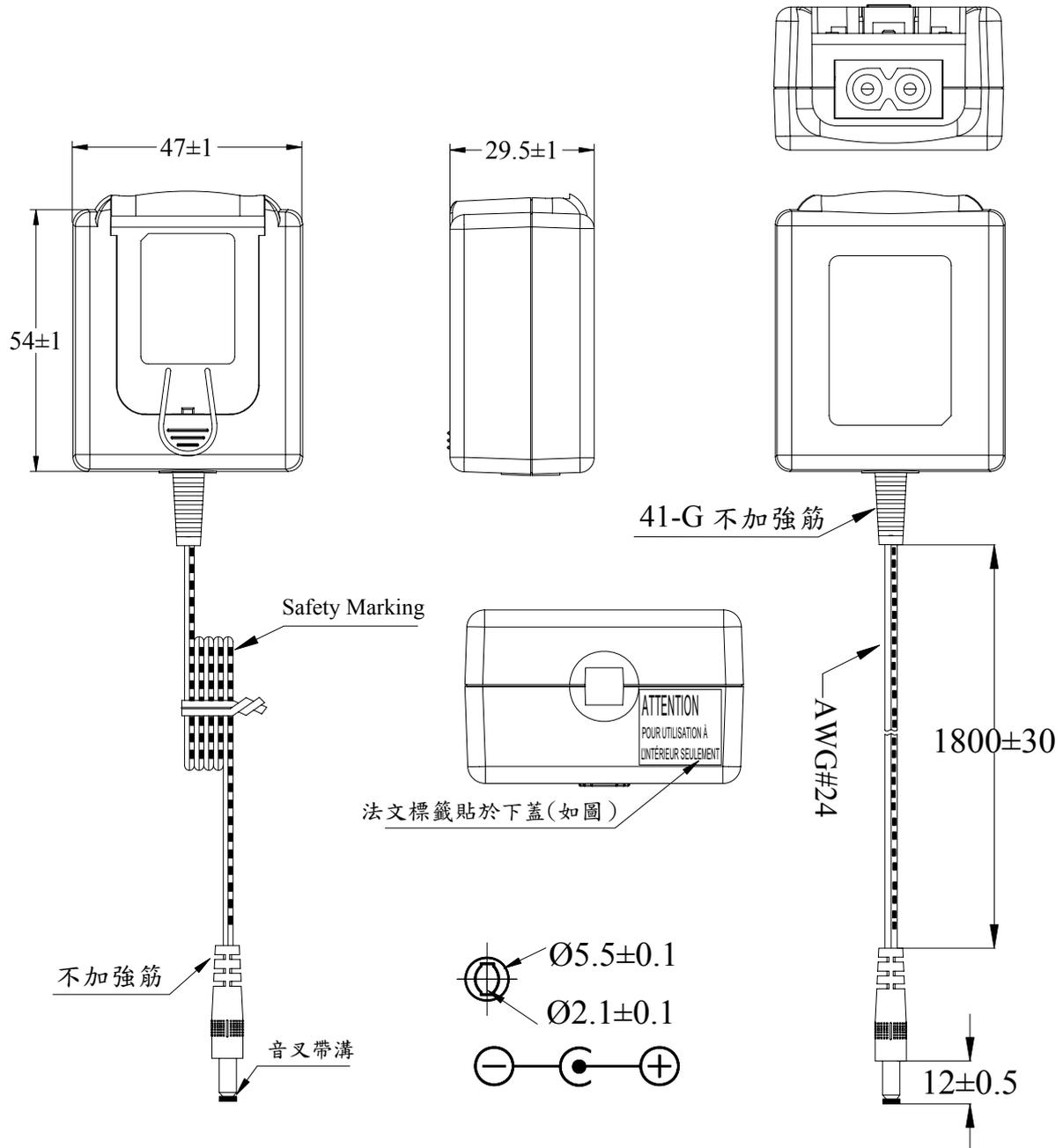
BS EN60950-1:2006+A1+A12 J60950-1(H22) GB4943.1-2011

IEC 60950-1:2005+A1+A2 K 60950-1(2006-12)

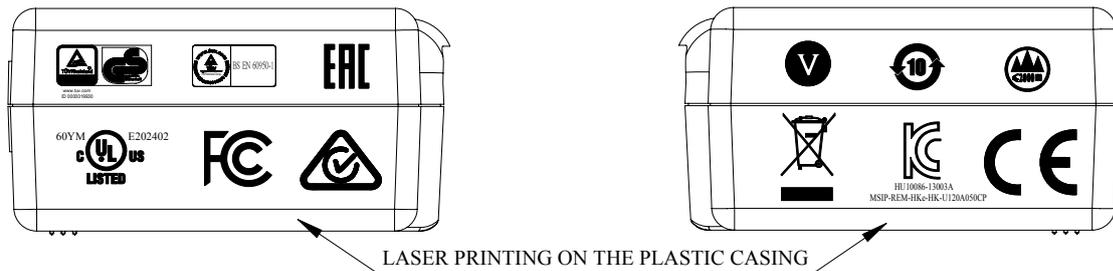
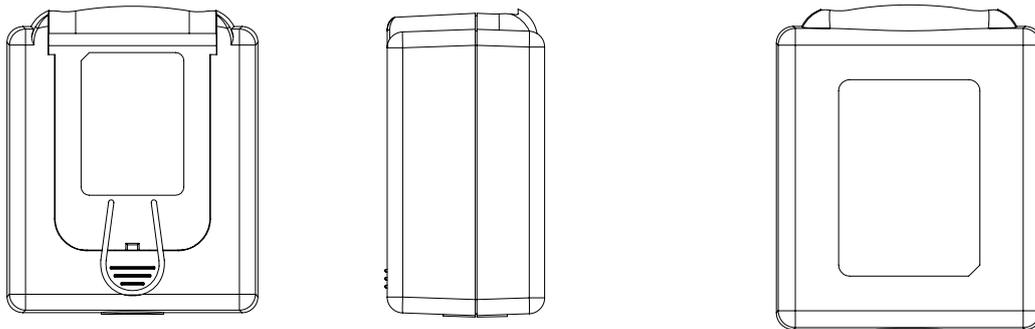
EN60950-1:2006+A11+A1+A12+A2

16. OVERALL DRAWING

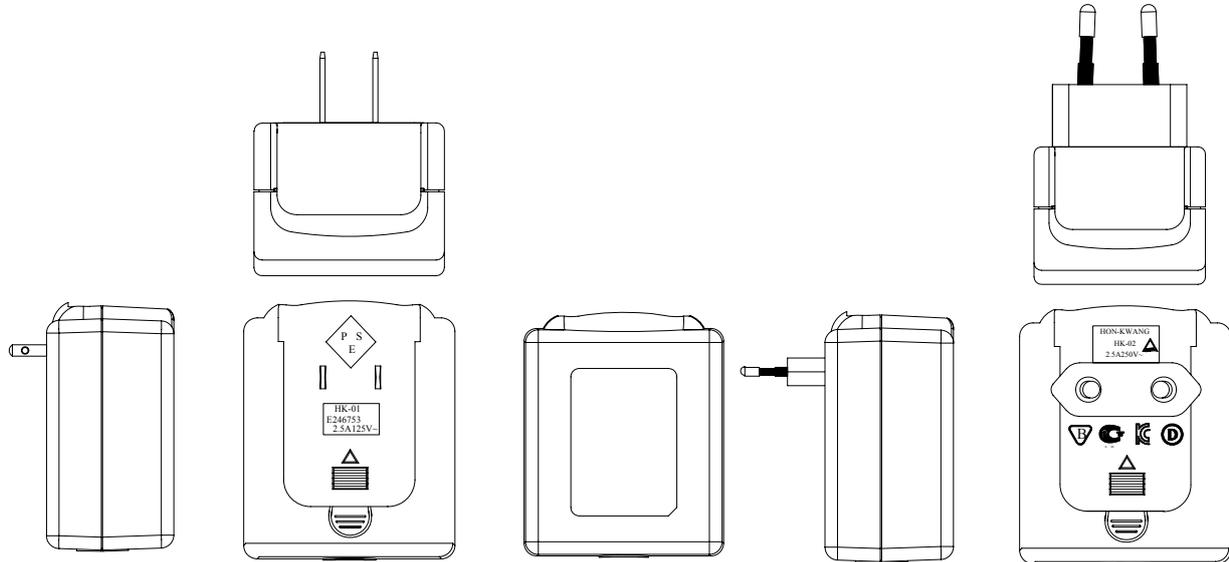
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UNIT: mm

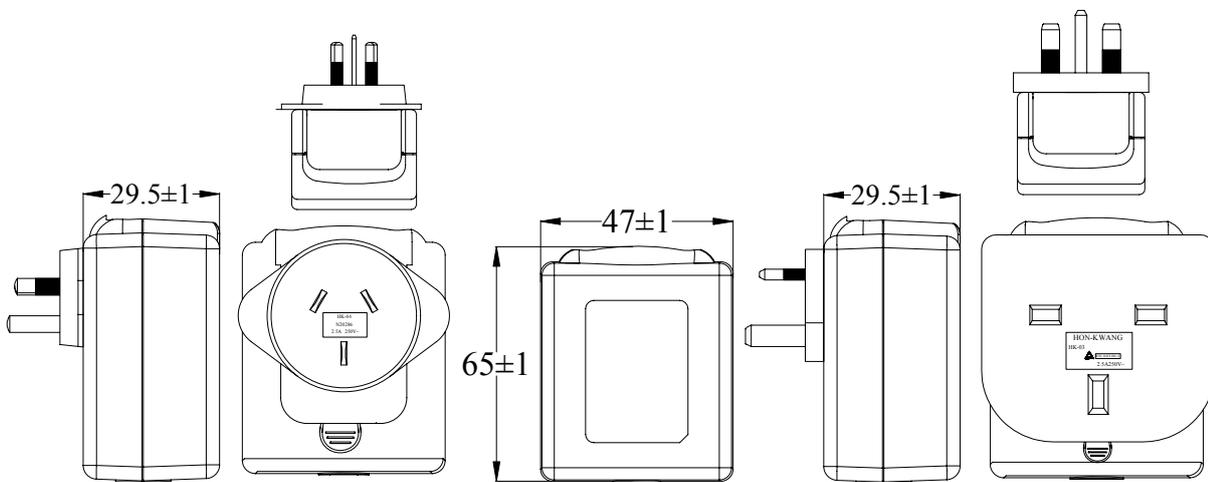


UNIT: mm



UL/PSE

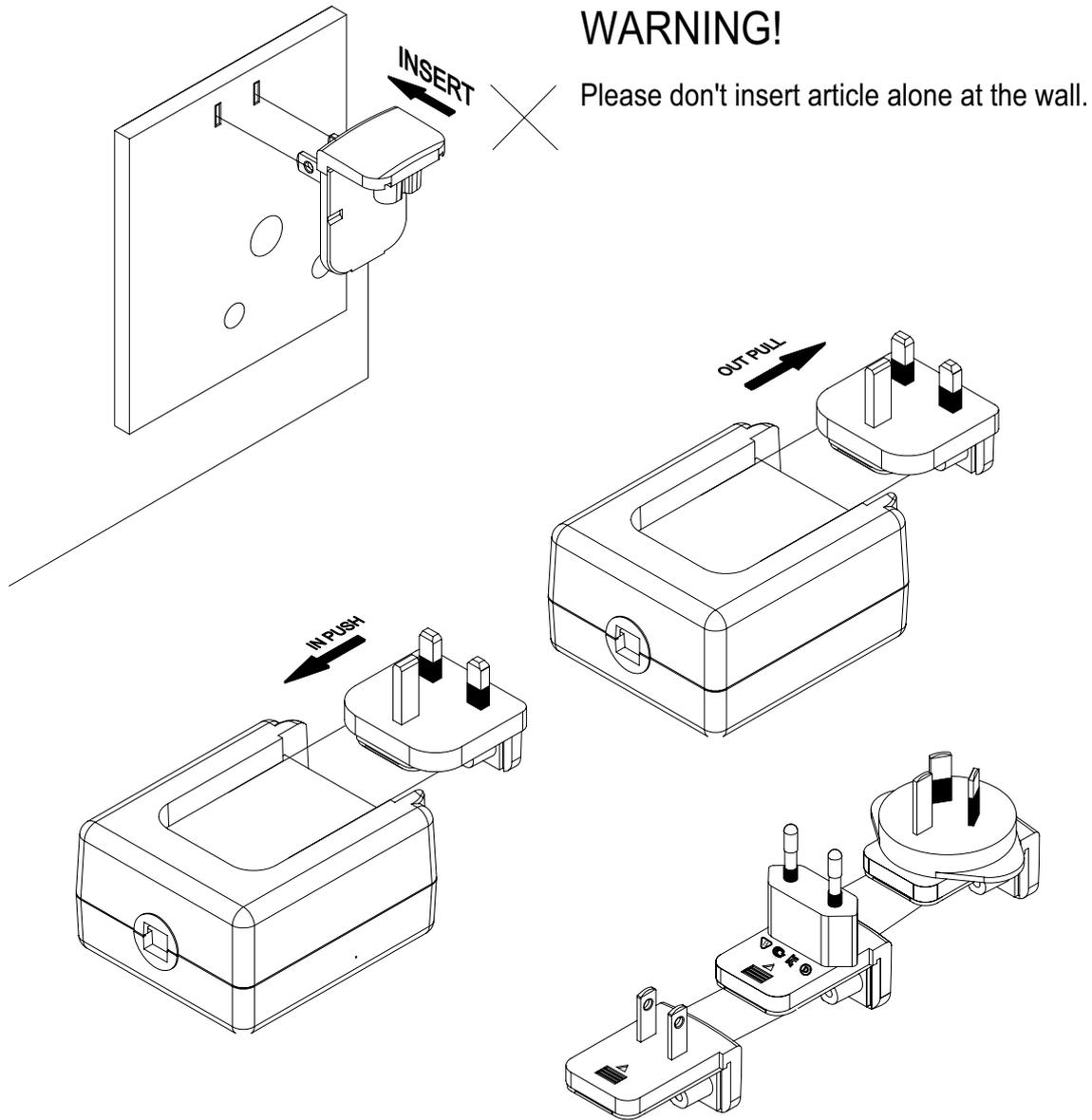
TUV



SAA

UK

17. USE SPECIFICATION



18. PACKING

18.1 Inner Box

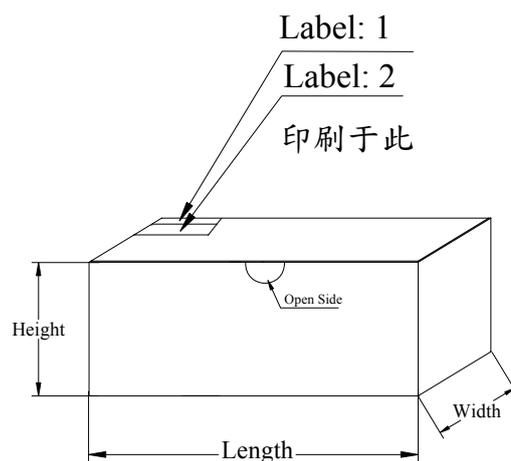
UNIT: mm

BOX (
 Normal BOX
 Corrugated BOX)

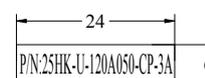
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Width: 70

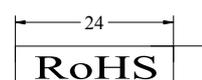
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Label: 1



Label: 2



Material: A卡400磅(0.53t)White

NOTICE:

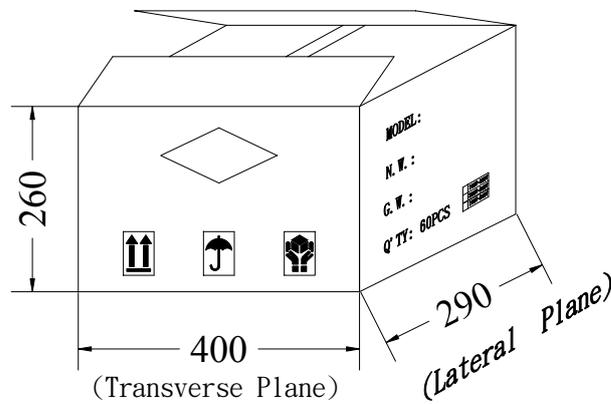
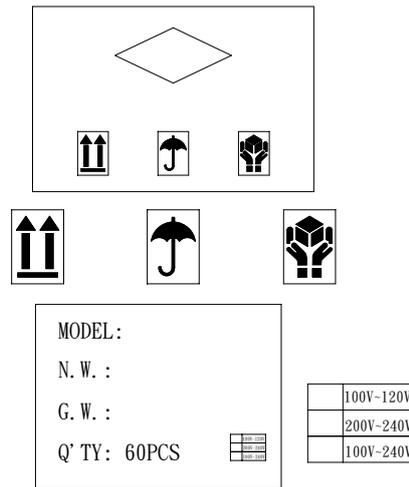
Its probably different from the white box of the sample and the figure dimension.
The white box is used to pack during product.

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.

18. PACKING

18.2 Carton

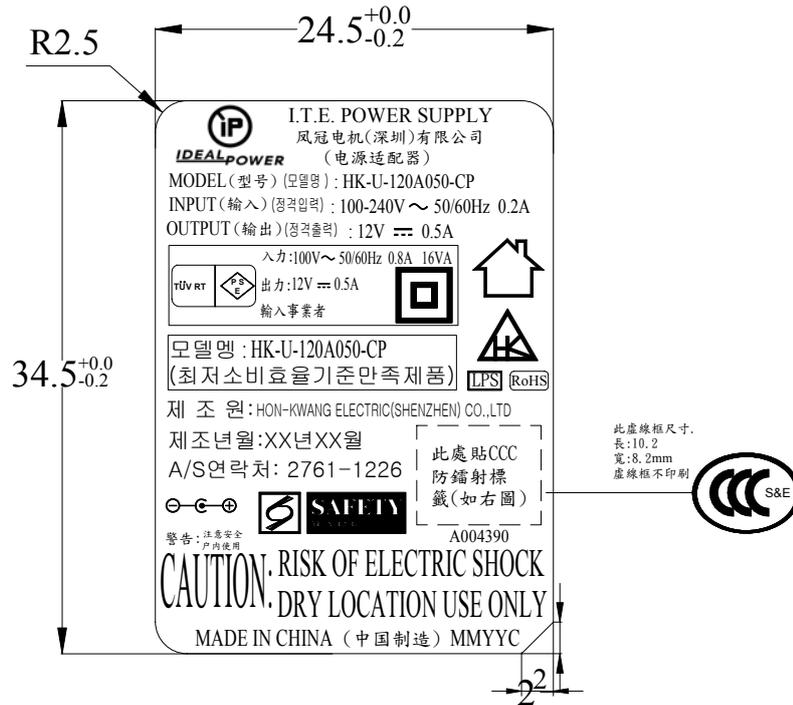
UNIT: mm



19. MARKING

200# CPC 合成紙+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.

