

Features

- Universal Input 100~240VAC 50/60Hz
- IEC/EN/ANSI/AAMI ES 60601-1 (ED 3.1)
- EMC: IEC60601-1-2:2014(ED 4.0)
- Safety Approvals: cULus / UKCA / CB / PSE / FCC / CE / TUV / RoHS / REACH
- Means of Protection: 2 X MOPP
- Touch Current: < 100µA
- Single Output to 36W
- Regulated Output with Low Ripple Noise
- Safety Agency Requirements and EMI/EMS Certified
- Meets DoE Level VI, Energy Star, ErP Stage 2



Ideal Power's 44ATM036T-Pxyz-RS 36W AC/DC External Desktop Medical Power Supply (PSU) Series are certified to cULus, UKCA, CB, PSE, FCC, CE, TUV, RoHS, REACH & EN 60601-1/IEC 60601-1/ES 60601-1 Standards and comply with (EU) 2019/1782, Level VI Efficiency Regulations. These are primarily used in Medical, ITE, Audio & Video Industries and customised solutions are available upon request.

Models

Model Number	RS Part Number	Output Voltage	Output Current	Output Power
44ATM036T-P050-RS	229-7849	5V DC	5A	25W
44ATM036T-P075-RS	229-7851	7.5VDC	4A	30W
44ATM036T-P090-RS	229-7853	9V DC	4A	36W
44ATM036T-P120-RS	229-7855	12V DC	3A	36W
44ATM036T-P180-RS	229-7857	18V DC	2A	36W
44ATM036T-P240-RS	229-7858	24V DC	1.5A	36W

General Specification

Type	Switched Mode Power Supply
Input Connector	IEC 320-C14
Output Connection	2.5x5.5x11.0mm +ve inner/centre
Number of Outputs	1
Energy Efficiency Level	VI
Mounting Style	Desktop
MTBF	300,000 hours calculated at 25°C, by Telcoria SR-332
Power Indicator	LED Indicator for power on
Cable Length	1500mm(±30mm)
Cable Type	16AWG/18AWG/20AWG (Depending on model)
Medical Approved	Yes

Ideal Power Limited

14 Larks Way, Tree Beech Enterprise Park, Gunn, Barnstaple, Devon, EX32 7NZ.
 www.idealpower.co.uk | +44 (0) 845 260 3400

Mechanical Specifications

Housing Material	Fully Enclosed Plastic Case
Overall Dimensions	100mm x 50mm x 33mm
Overall Length	100mm
Overall Depth	50mm
Overall Width	33mm
Weight	210g

Input Specifications

Rated Input Voltage	100~240Vac (±10%)
Rated Frequency	50/60Hz
Efficiency Level VI	Level VI / Efficiency (EU) 2019/1782
Input Current	1.0A-0.45A
Inrush Current	70A Max. / 230Vac (Cold Start At 25°C, Full Load)
Touch Current	Less than 100µA
Input Protection	Internal Primary Current Fuse

Output Specifications

Output Regulation	±5%
Ripple & Noise (max.)	2% Vp-p Max. for Output Voltage @ Full Load
Voltage Tolerance	±5%
Load Regulation	±5%
No Load Power Consumption	<0.075W
Hold-up Time	10mS @ Full Load
Transient Response	0.5mS for 50% Load Change(Typical)
Number of Outputs	1
Insulation Class	I
Dielectric Strength	Primary to Secondary 4,000Vac for 1 Minutes
Isolation Resistance	10MΩ for 500Vdc
Over Circuit Protection	Auto-recovery
Over Voltage Protection	V out * 200% MAX., latch off
Over Current Protection	I out * 200% MAX., auto-recovery

Protection Category

Means of Protection	2 X MOPP
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Approvals

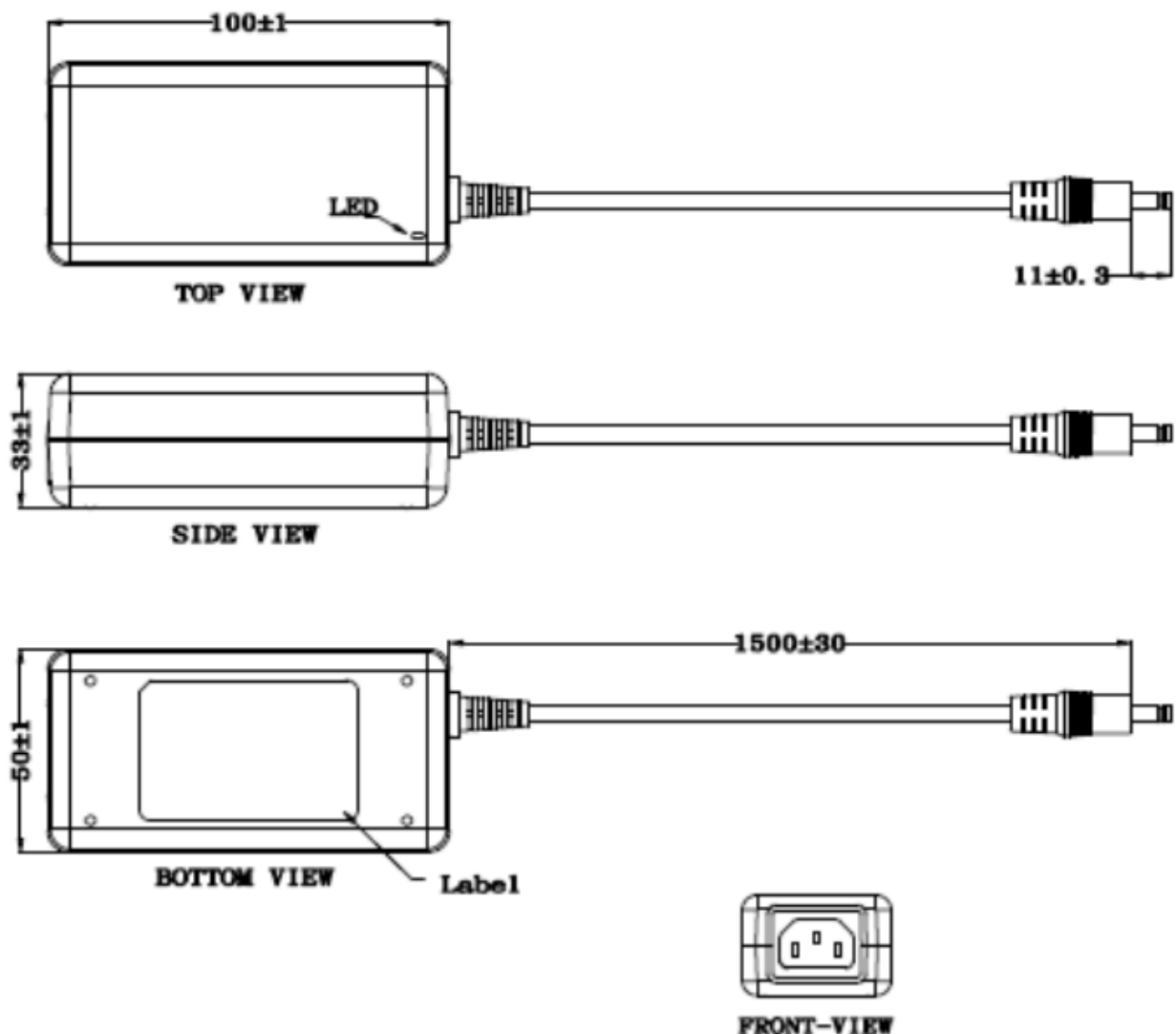
Compliance/Certifications	CB / cULus/ FCC / CE / UKCA / T-mark / TUV / PSE
Safety Standard	IEC/EN/ANSI/AAMI ES 60601-1
EMC Emission:	Directive 93/42/EEC (EN 60601-1-2)

Mechanical Drawing

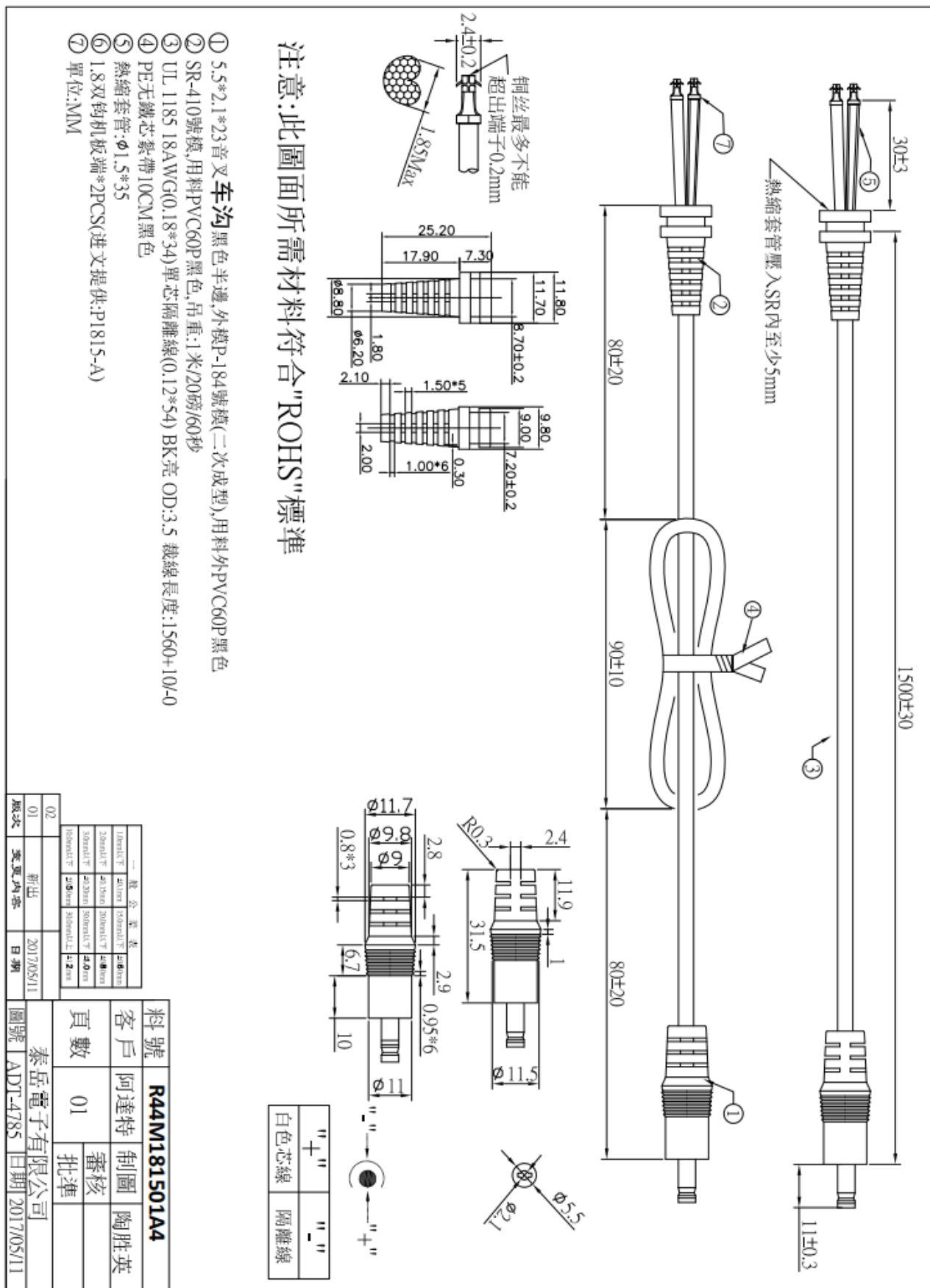
Weight: 210g Typical
 Cable type: Black UL2468 18AWG
 (wire & plug)
 Plug: 05.5*02.5*11mm
 (turning fork & cannellure)
 Cable Length: 1500mm
 Case Dimension: 99x50x33mm
 Material Flammability; UL 94V-0
 External Appearance: As drawing below (scale mm)



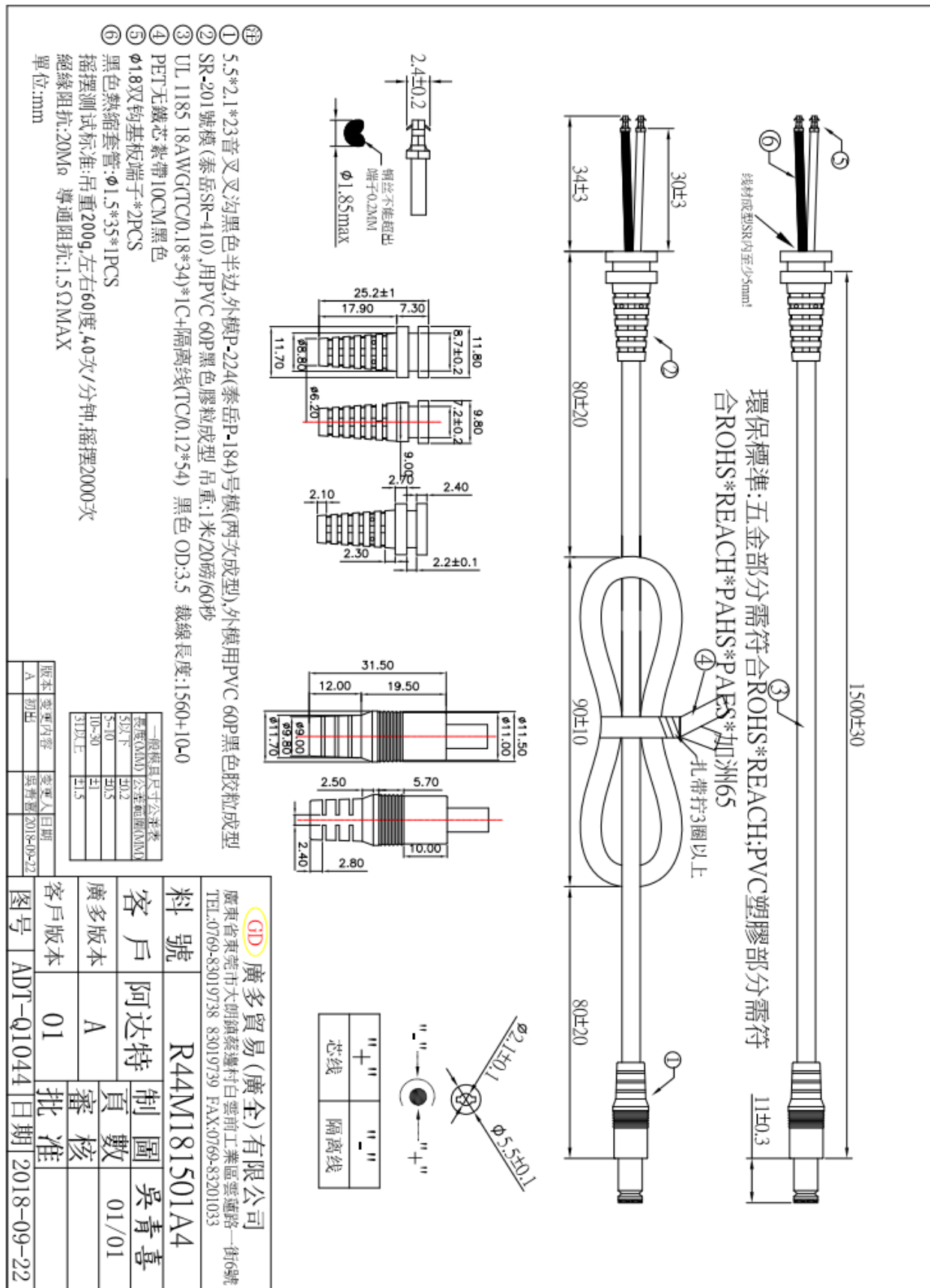
Output Cable Plug Pin Assignment



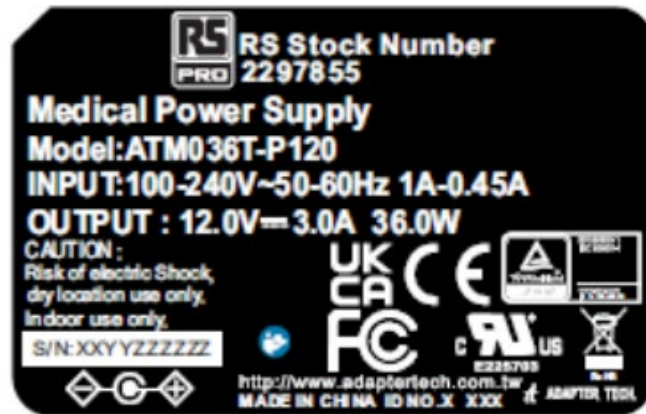
Cable Drawing



Cable Drawing (continued)



Labels



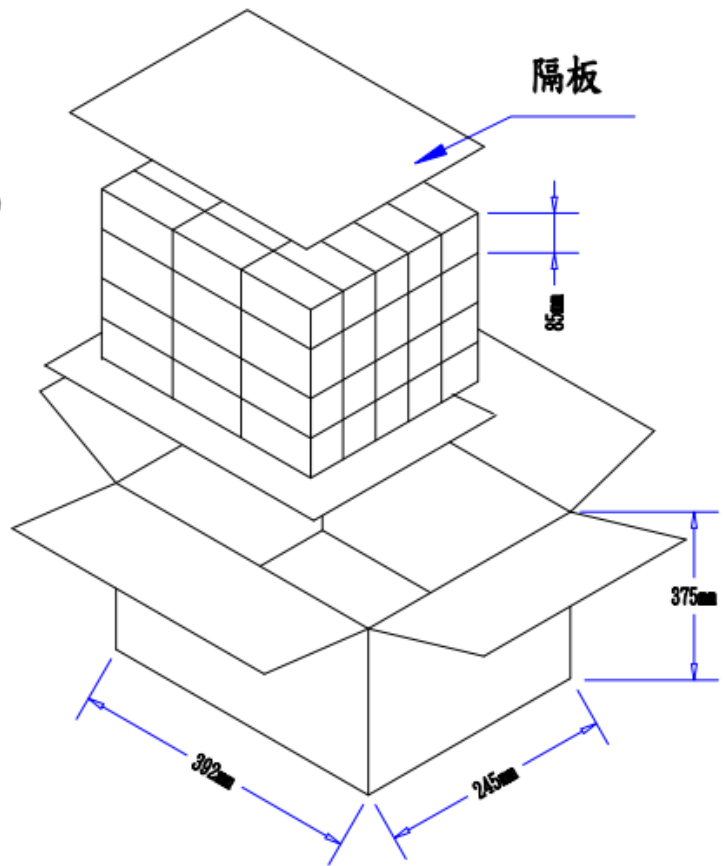
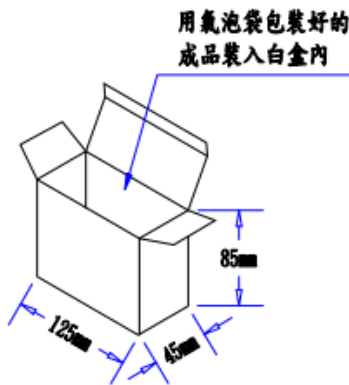
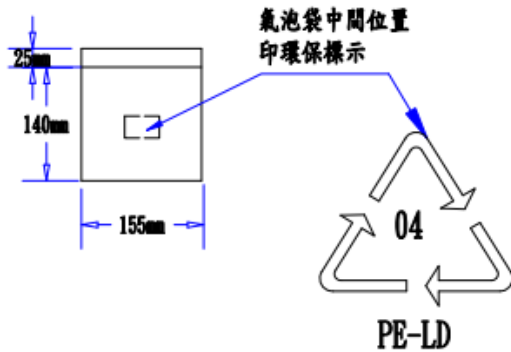
條碼內容為：**229-7855**

Label貼於此
面正中間



Label Part No.:94Z9000060
REV:A

Packaging



REVISIONS				
SHOW	REV	DESCRIPTION	DATE	APPROVED
	A	ISSUE	13/06/22	

PIS18W00049 包裝(FOR 18, 24, 30W桌上型)(K=K) 短環保雙面氣泡袋厚-白盒-60

- 9550021101** 1. 隔板:380(L)*233(W)*6mm K=K 2/60
2. 數量:5*3*4=60PCS.
- 9520028801** 3. 外箱:392(L)*245(W)*375(H)mm K=K 1/60
- 9510003302** 4. 白盒:125(L)*45(W)*85(H)mm 350P+CE(即C9紙加裱350磅白板紙) 1/1
- 9540008701** 5. 環保氣泡袋:140(L)*155(W)*25mm 9KG 無色透明,單端開口,中間位置印環保標示. 1/1
6. 成品裝入氣泡袋封好,再放入白盒內,方向必須統一.
7. 外箱,白盒標注為外徑尺寸.
8. 以上所用材料均符合環保要求.

阿達特科技股份有限公司

DRAWING NO.	PIS18W00049	APPROVAL 1 BY		
UNIT	MODEL NO. 18W, 24W, 30W(桌上型)	APPROVAL 2 BY		
FILE NO.	ADT-0220	CHECKED BY(ENGINEER)		
SCALE	REV. A	SHEET 1/1	DRAWN BY	李金朝
				DATE: 2013/06/22

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14 Larks Way, Tree Beech Enterprise Park, Gunn, Barnstaple, Devon, EX32 7NZ.
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Test Results
A. Line Regulation Test
Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
90Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
115Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
132Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
180Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
230Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
264Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V

B. Efficiency Test
Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac	87.403% Min.	88.13 %	88.26 %	88.14 %
230Vac	87.403% Min.	88.15 %	88.02 %	88.24 %
230Vac@10% load	78.303% Min	85.07 %	84.89 %	85.23 %

C. Load Regulation Test
Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 0 % Load	11.40V ~ 12.60V	12.24 V	12.19 V	11.21 V
115Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
115Vac / 100 % Load	11.40V ~ 12.60V	11.90 V	11.84 V	11.87 V
230Vac / 0 % Load	11.40V ~ 12.60V	12.24 V	12.19 V	11.21 V
230Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
230Vac / 100 % Load	11.40V ~ 12.60V	11.89 V	11.84 V	11.87 V

Test Results (continued)

D. Ripple & Noise Test

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 100 % Load	120mVpp Max.	57.8 mV	61.2 mV	44.3 mV
230Vac / 100 % Load	120mVpp Max.	49.2 mV	51.2 mV	32.2 mV

E. Inrush Current

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
230Vac / 100 % Load	70A Max	62.9 A	63.5 A	62.1 A

F. Over Current Protection

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 100 % Load	I out *200% MAX	140 %	139 %	138 %
230Vac / 100 % Load	I out *200% MAX	146%	145 %	144 %

G. Short Circuit Protection

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 100 % Load	Auto Recovery	OK	OK	OK
230Vac / 100 % Load	Auto Recovery	OK	OK	OK

H. Input Power Consumption(No Load)

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
230Vac / 0 % Load	≤ 0.1 W	0.07W	0.07W	0.07W

Test Results (continued)
Efficiency Test Report

- A. **Model Number** : ATM036T-P120(12.0V/3.0A)
- B. **DC Power Cord** : UL1185 , 18AWG ,1.5M
- C. **Efficiency** :
- LEVEL VI** **EFF(av) ≥ 87.403% & Eff ≥ 78.303% @10% Load**
- D. **NO Load Power Consumption** :
- LEVEL VI** **0.1W max.**
- E. **Testing Dequpiment** :
1. **AC Power Source** : " Chroma **61605**
2. **Electronic Load** : " PRODIGIT " **3311F**
3. **Power Meter** : "YOKOGAWA " **WT310**
4. **Digital Meter** : " FLUKE " **179**
- F. **AC Input Voltage** : 115Vac/60Hz

Reported \ Load Conditions	100% * I ₀	75% * I ₀	50% * I ₀	25% * I ₀	10% * I ₀	0% * I ₀
Rms Output Current(mA)	3000mA	2250mA	1500mA	750mA	300mA	0mA
Rms Output Voltage(V)	11.850V	11.939V	12.027V	12.114V	12.174V	12.201V
Active Output Power(W)	35.55W	26.86W	18.04W	9.09W	3.65W	0.00W
Rms Input Voltage(V)	115V	115V	115V	115V	115V	115V
Rms Input Current(A)	0.733A	0.594A	0.456A	0.310A	0.266A	0.199A
Rms Input Power(W)	40.86W	30.55W	20.33W	10.21W	4.20W	0.050W
Total Harmonic Distortion of the input current	162.00%	177.50%	194.32%	217.72%	239.97%	154.21%
True Power Factor	0.487	0.450	0.393	0.289	0.225	0.002
Power Consumed by UUT(W)	5.31W	3.69W	2.29W	1.12W	0.55W	0.05W
Efficiency	87.01%	87.93%	88.74%	88.99%	86.96%	*
Average Efficiency	88.17%					*

G. AC Input Voltage : 230Vac/50Hz

Reported \ Load Conditions	100% * I ₀	75% * I ₀	50% * I ₀	25% * I ₀	10% * I ₀	0% * I ₀
Rms Output Current(mA)	3000mA	2250mA	1500mA	750mA	300mA	0mA
Rms Output Voltage(V)	11.845V	11.935V	12.023V	12.112V	12.174V	12.201V
Active Output Power(W)	35.54W	26.85W	18.03W	9.08W	3.65W	0.00W
Rms Input Voltage(V)	230V	230V	230V	230V	230V	230V
Rms Input Current(A)	0.504A	0.419A	0.328A	0.235A	0.218A	0.184A
Rms Input Power(W)	40.82W	30.49W	20.40W	10.28W	4.32W	0.064W
Total Harmonic Distortion of the input current	223.85%	239.25%	253.31%	276.62%	365.71%	456.32%
True Power Factor	0.352	0.315	0.272	0.191	0.141	0.002
Power Consumed by UUT(W)	5.29W	3.64W	2.37W	1.20W	0.67W	0.06W
Efficiency	87.11%	88.15%	88.52%	88.60%	85.07%	*
Average Efficiency	88.10%					*

Tester :Sun