

AMPLUS INDUSTRIAL LTD.

AM09257L—60W CEC SWITCHING ADAPTOR SPECIFICATIONS

Prepared by:

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SPECIFICATION

AM 09257 SWITCHING ADAPTOR SPECIFICATIONS

1. SCOPE

This document is applied to AM09257 model for S.M.P.S

2. SPECIFICATION NUMBER

AMPLUS part number : AM09257

Customer part number:

3. ENVIRONMENTAL REQUIREMENTS

Operating temperature: 0 °C -- 40 °C

Storage temperature : -25 °C -- +85 °C

Operating humidity : 30% -- 95%

Storage humidity : 30% --98%

Operating bar : 1BAR

4. INPUT REQUIREMENTS

Regular input voltage: AC 100 –AC 240V

Variable input voltage range : AC 90V—AC264V

Rating frequency : 50Hz—60Hz

Frequency range : 47Hz—63Hz

Input current : 1.5Arms MAX (at regular voltage & current)

5. INTRODUCTION

The S.M.P.S Only 2.0cm in thickness, with various output plugs, suitable for laptop and a variety of appliances.

The S.M.P.S Particular design for 2-pin multi-plug.

The S.M.P.S A variety of efficiency work mode for saving power.

The S.M.P.S Overcurrent, overload, overheat, under voltage protection.

The S.M.P.S Advanced dithering switch work mode, reduce electromagnetic interference

The S.M.P.S Overshock resistance switch circuit design, prevent device from instant impulse damage

The S.M.P.S Design with environment friendly materials, safe and healthy.

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The S.M.P.S operated at input regular voltage AC 100V – 240V.

The S.M.P.S should be capable of a total continuous DC power output of 60 Watts.

The S.M.P.S should be capable of a total peak 70 Watts.

The S.M.P.S designed a energy saving to meet Europe energy star standard.

The S.M.P.S should be able to single output only. Refer output rated and electrical specifications table.

The S.M.P.S will shut down automatically when the AC input voltage lower than AC 90 V.

The S.M.P.S output voltage will drop to very low when overload by overload protection.

The S.M.P.S should not be fired or emitted smoke by protection when the circuit is short.

The S.M.P.S will shut down automatically when output voltage is over 14V by overvoltage protection.

The S.M.P.S build-in thermal protector, when the transformer over heat (raise to 105°C),the circuit will be shut down by PWM IC thermal protector.

The S.M.P.S can be changeable output voltage by changeable slot.

6. DC INSULATION RESISTANCE

Input – Output : 50M Ω minimum (at 500VDC)

Input – Body metal : 50M Ω minimum (at 500VDC)

7. DIELECTRIC WITHSTAND - VOLTAGE

Input – Output : 3750VAC minimum (2s)

Input – Body metal : 3750VAC minimum (2s)

8. MAIN FUSE

Input fuse is 3.15A 250V

9. INRUSH CURRENT

Peak inrush current shall be limited to 30A for a cold start

10. TIME SEQUENCE

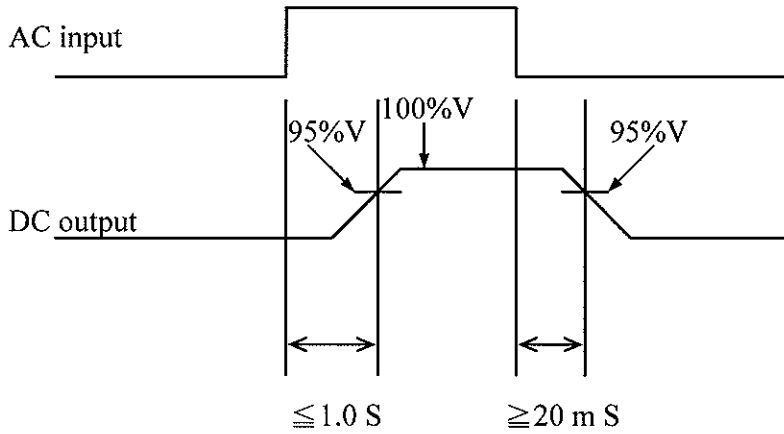
Time sequence should be satisfied to power ON/OFF, restart in power failure

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AC switch at ON/OFF



11. EFFICIENCY

The efficiency of the S.M.P.S must be satisfied the minimum 87%.

12. SAFETY STANDARD

To meet ETL-UL1950, CETL-C22.2 NO.950, GS-DIN EN60950
AS/NZS 4665.1 : 2005, EuP 2005/32/EC

13. RFI EMISSION

- EN55022: 1998+A1+A2
- EN61000-3-2: 2000
- EN61000-3-3: 1995+A1
- EN55024: 1998+A1+A2
- FCC PART 15

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14. OUTPUT RATED & ELECTRICAL SPECIFICATIONS

RATED OUTPUT (V)	5	6	7	8	9	10	11	12
Rated current(A)	5.2	5.2	5.2	5.2	5.0	5.0	5.0	5.0
Max. output voltage(V)	6.0	6.5	7.5	8.5	9.5	10.5	11.5	12.5
Min. output voltage(V)	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5
Ripple & Noise(mV)	<150	<150	<150	<150	<150	<150	<150	<150
Over load current(A)	>6.8	>7.2	>7.6	>8.5	>8.5	>8.2	>7.8	>7.5
Over heat protection	YES	YES	YES	YES	YES	YES	YES	YES
Rated power(W)	26	31.2	36.4	41.6	45.0	50	55	60
Switch frequency(KHZ)	132	132	132	132	132	132	132	132
Insulation class	II	II	II	II	II	II	II	II
Consumes(W)	<0.3W	<0.3W	<0.3W	<0.3W	<0.3W	<0.3W	<0.5W	<0.5W
Efficiency (%)	>80.6	>82	>84.9	>85.7	>86.2	>86.9	>87	>87
Efficiency Level	V	V	V	V	V	V	V	V

Note: ADJ . output voltage procedure

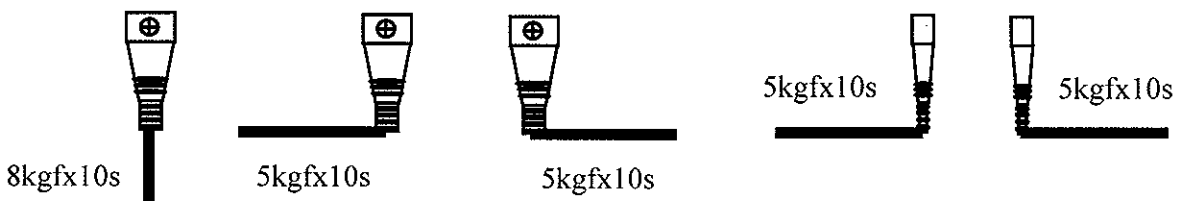
1. Power off
2. Select suitable output voltage form 5V to 12V by changeable slot.
3. Connect to Load
4. Power ON

15. RELIABILITY TESTING

A. DC OUTPUT CORD PUSH/PULL TEST OF I/O CONECTOR SIDE

Test condition: 8kgf X10sec at Y axis; 5kgfX10sec at other 4 direction verticality

RESULT: No cutting inner wire is acceptable



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B. DC OUTPUT CORD PUSH/PULL TEST OF ADAPTOR SIDE

Test condition: 8kgf X10sec at 5 direction verticality

RESULT: No cutting inner wire is acceptable

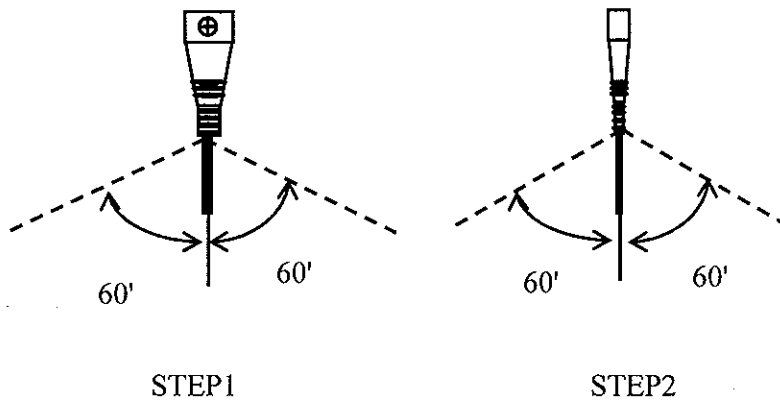
C. CORD BENDING TEST OF I/O CONECTOR SIDE

Test condition: 60°+60°=1 cycle, 30 cycle/1min, weight = 200g ,
from step 1 to step 2 continuously

Step 1. 2000 cycle for difficult bending direction

Step 2. 3000 cycle for easy bending direction

RESULT: No cutting inner wire is acceptable



D. CORD BENDING TEST OF ADAPTOR SIDE

Test condition: 60°+60°=1 cycle, 30 cycle/1min, weight = 500g ,
from step 1 to step 2 continuously

Step 1. 500 cycle for difficult bending direction

Step 2. 500 cycle for easy bending direction

RESULT: No cutting inner wire is acceptable

E. INDIVIDUAL DROP TEST

Test condition: 6 face, each face 1 time 70 cm, on the 5mm wooden board.

RESULT: Without opening of case and crack, etc. electric characteristic shall be satisfied. light crack after test is acceptable.

F. LOW TEMPERATURE STORAGE TEST

Keep on -30°C (Packing) for 168 hours, and check the action after 3 hours in 25°C.

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RESULT: All normal function and meet specification.

G. HIGH TEMPERATURE STORAGE TEST

Keep on +70°C (Packing) for 168 hours, and check the action after 3 hours in 25°C.

RESULT: All normal function and meet specification.

H. HIGH HUMIDITY STORAGE TEST

Keep on +45°C95%RH (Packing) for 168 hours, and check the action after 3hour in 25°C.

RESULT: All normal function and meet specification.

I. TEMPERATURE CYCLE TEST

Keep on -45°C (Packing) for 1 hour, then keep on +85°C (Packing) for 1 hour
Repeat this cycle until 10 cycle, check the action after an hour in 25°C.

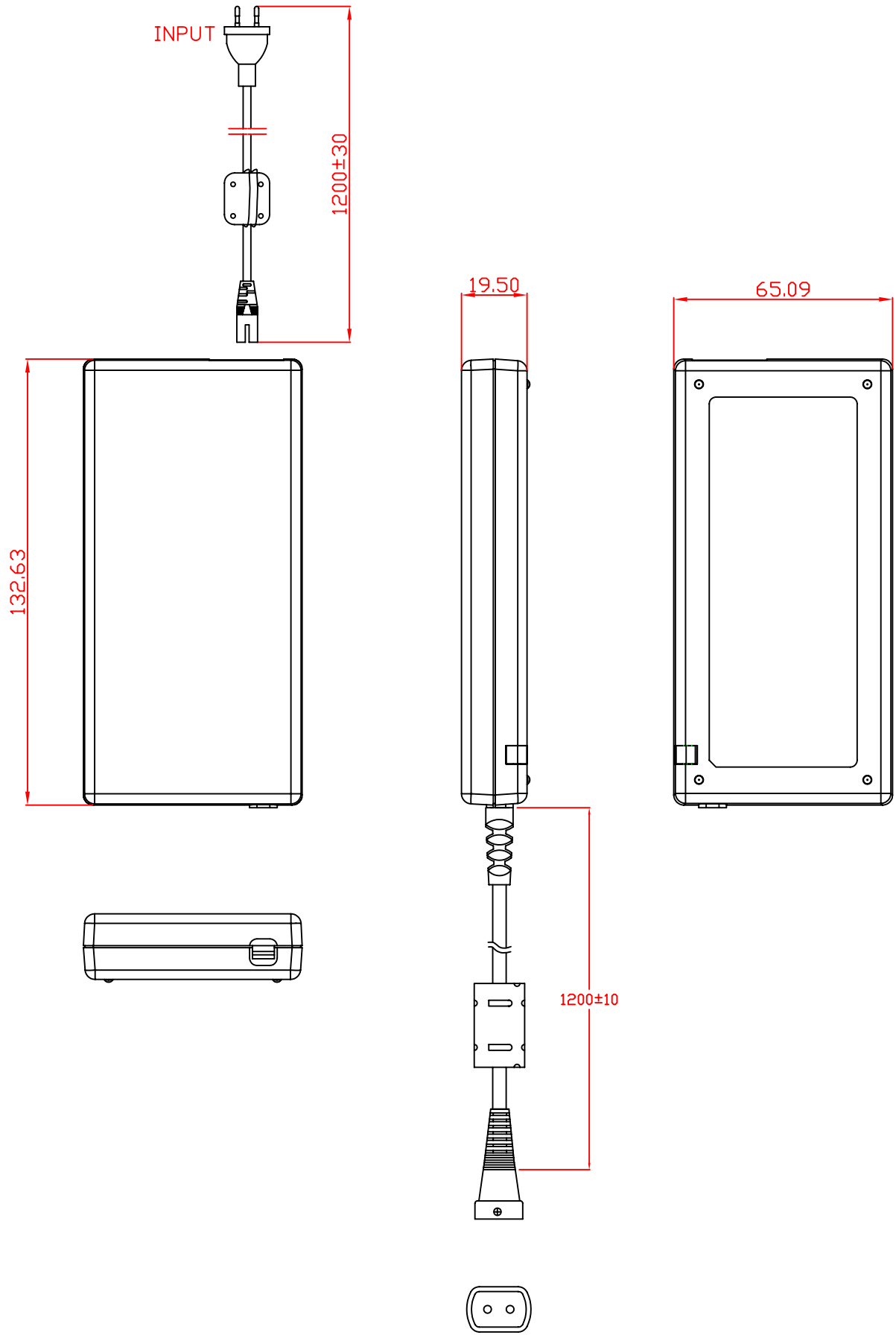
RESULT: All normal function and meet specification.

J. CURRENT- CARRYING OF HIGH VOLTAGE TEST

Select power consumption at a standard load condition. The test samples shall be active with input voltage is 280V/50Hz,50°C,48 hours, confirm its operation after left in the standard condition for 1 hour.

RESULT:any case deformation, smoking, or burn by heat should not be found.

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AMPLUS INDUSTRIAL LTD.		
TITLE: 09257 ADAPTOR		UNIT : mm
DRAWN	CHKD	APPD

SPECIFICATION

AM 09257 SWITCHING ADAPTOR SPECIFICATIONS

MODEL : 09257 AC TO DC ADAPTOR

INDOOR USE ONLY

INPUT : AC 100-240V 1500mA 50Hz/60Hz OUTPUT : SELECT BY A CHANGEABLE SLOT

Nur in Innenräumen benutzen

DC OUTPUT VOLTAGE	5V	6V	7V	8V	9V	10V	11V	12V
MAX. CURRENT(A)	5.2A	5.2A	5.2A	5.2A	5.0A	5.0A	5.0A	5.0A



**MADE IN CHINA
BY AMPLUS**

CAUTION : PLEASE BE SURED TO SELECT THE CORRECT POLARITY AND VOLTAGE BEFORE CONNECTING YOUR DEVICE. DO NOT SELECT THE VOLTAGE AND CHANGE POLARITY DURING THE POWER SUPPLY IS OPERATING.



Vorsicht: Stellen Sie bitte sicher, dass Sie die korrekte Polarität und Spannung auswählen, bevor Sie das Gerät an das Stromnetz anschliessen. Verändern Sie Spannung und Polarität nicht, solange das Gerät an das Stromnetz angeschlossen ist.

**INFORMATION TECHNOLOGY EQUIPMENT -
SAFETY - PART 1: GENERAL REQUIREMENTS**

*Nur für die Benutzung an Bürogeräten vorgesehen.
For office equipment use only*

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MODEL : 09257 AC TO DC ADAPTOR **INDOOR USE ONLY**
Nur in Innenräumen benutzen

INPUT : AC 100-240V 1500mA 50Hz/60Hz OUTPUT : SELECT BY A CHANGEABLE SLOT

DC OUTPUT VOLTAGE	5V	6V	7V	8V	9V	10V	11V	12V
MAX. CURRENT(A)	5.2A	5.2A	5.2A	5.2A	5.0A	5.0A	5.0A	5.0A

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