

SPECIFICATION

For

SWITCHING POWER SUPPLY

M/N : SNP-E30J-M

STANDARD PRODUCT

Reviewed by Product Manager	Clare 9/28/11	Clare 12/14/11	Hui 072415	Jim 9-14-11	Jim 1-23-11	
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SKYNET ELECTRONIC			LAST REV. NO.			

1.0 INTRODUCTIONS

SNP-E30J-M is a 300W SMPS with metal enclosure and built-in forced air cooling.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

Input voltage range : 90Vac to 264Vac

Nominal line voltage : 115Vac/230Vac

2.2 Input frequency

47Hz to 63Hz

2.3 Input current

$4A_{\text{rms}}$ max/115Vac, $2A_{\text{rms}}$ max/230Vac

2.4 Inrush current

30A max/115Vac, 60A max/230Vac (EMI capacitors excluded, cold start at 25°C)

2.5 Test Condition

All specs except international standards or specs with special notes are defined and tested at nominal line input, rated load and 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

Vo	min. load	rated load
+36V	0A	8.3A

3.1.1 Factory adjustment

+35.9V to +36.1V (60% rated load, 115Vac)

3.1.2 Min load for FAN

20W min load for main output is required for FAN to start working.

3.2 Ripple and noise

< 300mV (20MHz bandwidth limited, 1X probe with 0.47uF parallel capacitor)

3.3 Line regulation

< $\pm 0.5\%$ (90Vac to 264Vac, comparing with 115Vac)

3.4 Load regulation

< $\pm 1\%$ (20% to 100% rated load, comparing with 60% rated load)

4.0 GENERAL FEATURES

4.1 Efficiency

Rated load efficiency : 88% typical

Average efficiency of 25%, 50%, 75% and 100% rated load : >87%

4.2 Hold up time

14ms typical

4.3 Protection

4.3.1 Over-voltage protection

Trip point : +40V to +46V (60% rated load)

Protection mode : Latch-off

4.3.2 Short circuit and over-load protection

Protection mode : Auto-recovery

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

-20°C to 65°C

5.2 Storage temperature

-40°C to 85°C

5.3 Operating humidity

5% to 95% RH, non-condensing

5.4 Altitude

0 to 5000m

5.5 MTBF

> 120Khrs (based on MIL-HDBK-217F, rated load, 65 °C)

6.0 INTERNATIONAL STANDARDS

6.1 Safety Approvals

Label Voltage : 100Vac to 240Vac

UL 60601-1

CSA 22.2 NO.60601-1

EN 60601-1

6.2 Emissions and Harmonic currents

FCC docket 20780 level B

CISPR 22 level B

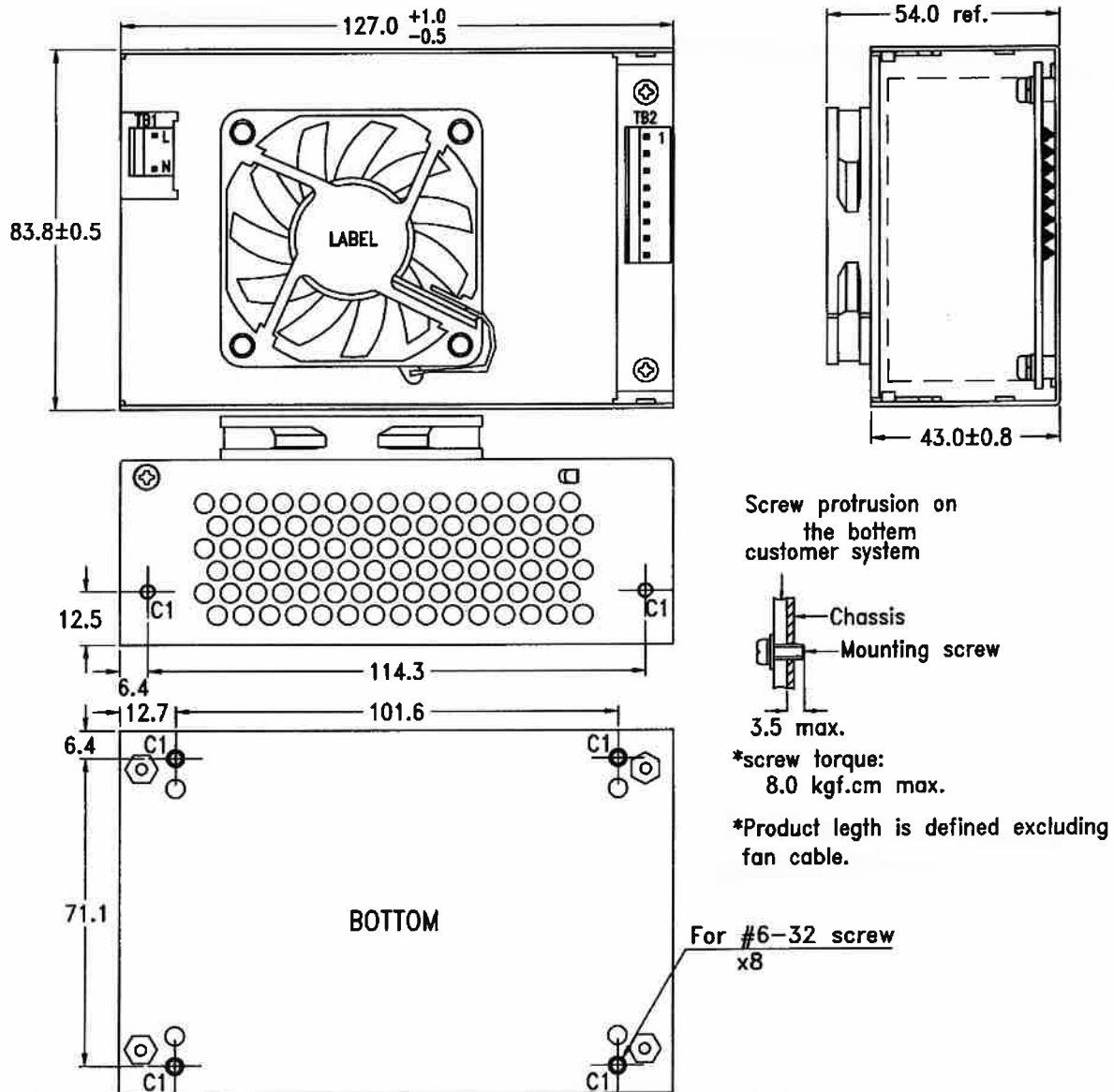
EN 61000-3-2 Class D

EN 61000-3-3

6.3 Immunity

EN61000-4-2	8kV/contact discharge, 15kV/air discharge	Criterion A
EN61000-4-3	10V/M with 80% AM	Criterion A
EN61000-4-4	2kV (100KHz)	Criterion A
EN61000-4-5	1kV/Line-Line, 2kV/Line-Earth	Criterion A
EN61000-4-6	10V with 80% AM	Criterion A
EN61000-4-8	30A/m	Criterion A
EN61000-4-11	30% dips 500ms,	Criterion A
	60% dips 200ms,	Criterion B
	100% dips 10ms,	Criterion A
	100% dips 5000ms,	Criterion B
	100% dips 20ms,	Criterion B

7.0 MECHANICAL SPECIFICATION



7.1 Dimensions

Dimensions shown in mm as above. Tolerance is specified +0.4mm.

7.2 Connectors

TB1 AC Input : Molex 5277-02A or equivalent , mating with Molex 5239-03 or equivalent

TB2 DC Output : Molex 5273-08A or equivalent , mating with Molex 5239-08 or equivalent

7.3 DC pin assignment

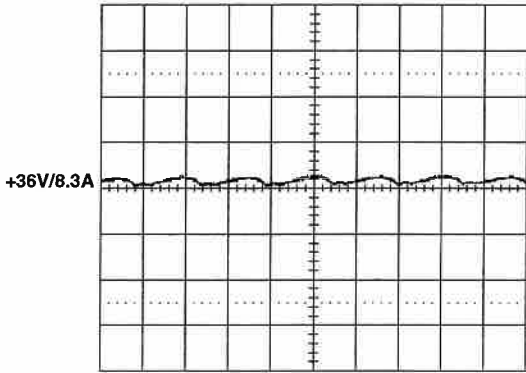
Pin 1 ~ 4 + V
 5 ~ 8 GND

7.4 Packing

Net weight : 572g approx. / unit
 Carton size(mm) : 384 (L) x 339 (W) x 327(H)
 Quantity : 24 units / carton
 Gross weight : 15.8 kg approx. / carton

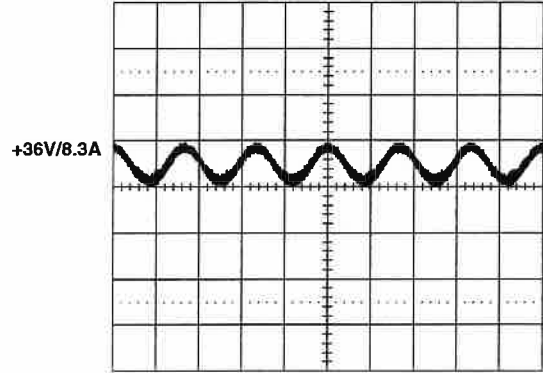
8.0 PERFORMANCE (input voltage is 115VAC, unless others specified)

8.1 Switching frequency ripple



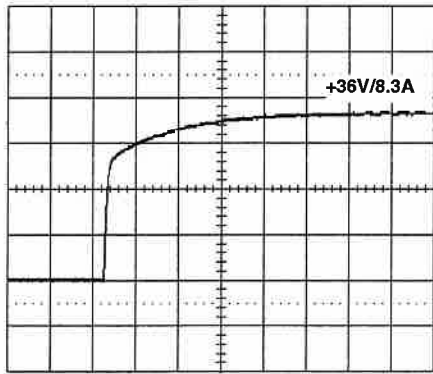
200mV/div , 5us/div

8.2 Line frequency ripple



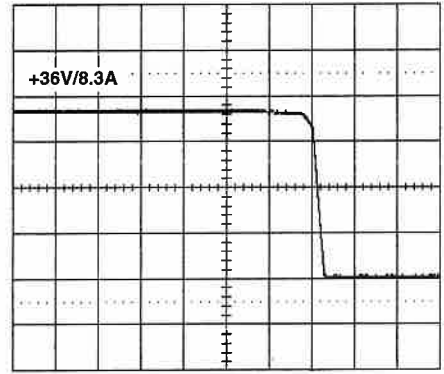
200mV/div , 5ms/div

8.3 Output turn on wave form



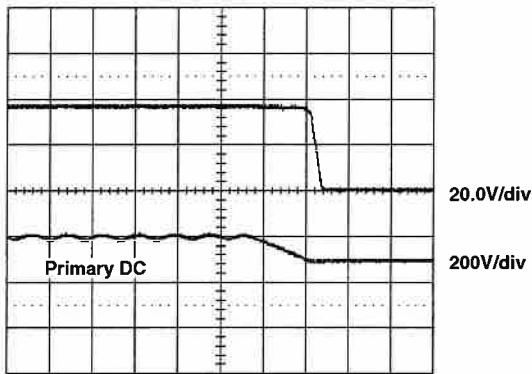
10.0V/div , 20ms/div

8.4 Output turn off wave form



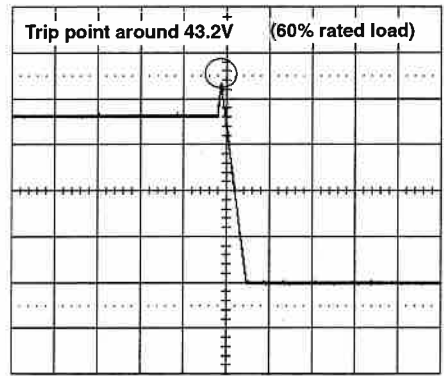
10.0V/div , 10ms/div

8.5 Hold-up time



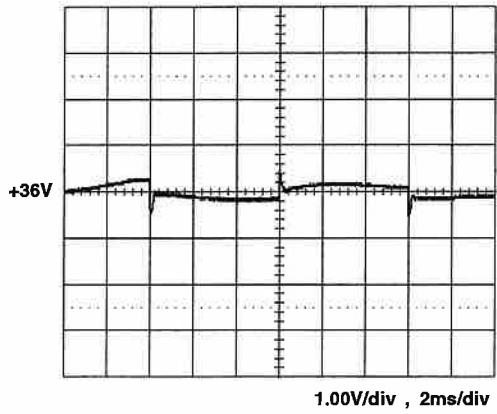
10ms/div

8.6 Over voltage protection



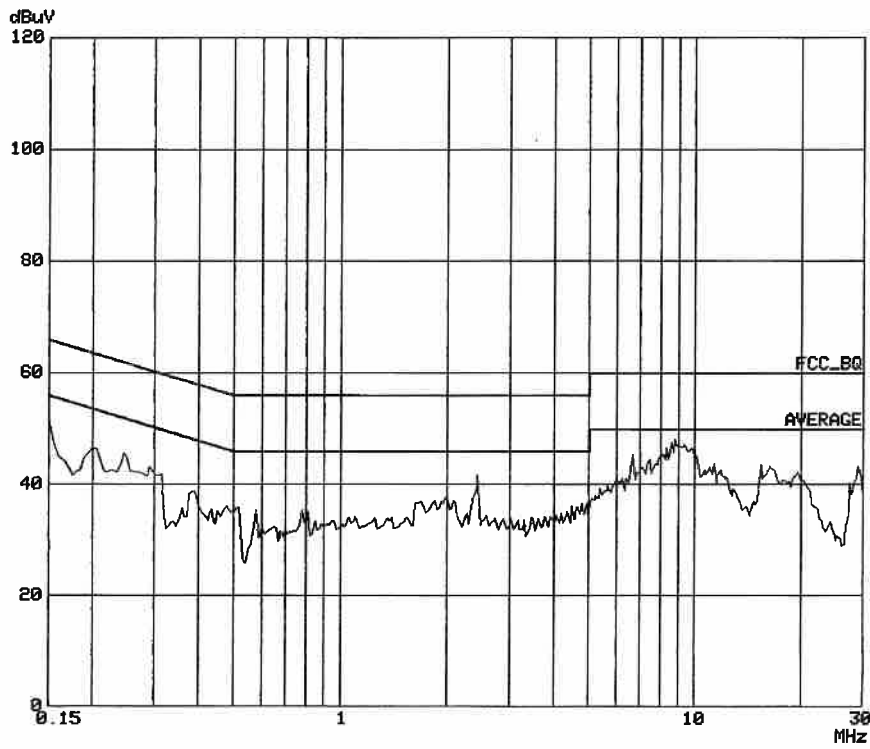
10.0V/div , 10ms/div

8.7 +36V Step response



+36V step from 1.66A to 8.3A

8.8 FCC B performance



8.9 EN55022 "B"

