SPECIFICATION

for

SWITCHING POWER SUPPLY

M/N : SNP-A129

Reviewed by Project Manager	Jim 12-24-18					
Typed by Document Assistant	12/24/18					
SKYNET ELECTRONIC			LAST REV. NO.			

1.0 INTRODUCTIONS

SNP-A129 is a single output, Universal AC input, External Desktop switching power supply with conformity to EN61000-3-2 harmonic regulations. It is specially designed by using ZVS technology.

In this power supply, one patented circuit, US pat 6, 507, 500B2 is designed in.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

The range of input voltage is from 90VAC to 265VAC, normal line is 115VAC(60Hz) / 230VAC(50Hz).

2.2 Input frequency

The range input frequency is from 47Hz to 63Hz.

2.3 Input current

The maximum input current is 3A at 115VAC or 1.5A at 230VAC.

2.4 Inrush current

The inrush current will not exceed 20A at 115VAC input or 40A at 230VAC AC input, cold start, 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

output	min. load	rated load	peak load	voltage accuracy
+24V	0A	5A	7A	22.80V to 25.20V

At factory, the output is adjusted to +24V + -1% at 60% of rated load and normal line.

***peak load** of 7A can last 5 sec. only at start up, 115/230VAC.

3.2 Ripple and noise

The peak to peak ripple and noise for all the outputs is less than 100mV at rated load and normal line input, Measuring is done by 15MHz band width limited oscilloscope and terminated each output with a 0.47uF capacitor.

3.3 Line regulation

The line regulation is better than + -1% while measuring at rated load and + -10% of normal line input voltage changing.

3.4 Load regulation

The load regulation is better than + -3%. Measuring is done by changing the measured output load + -40% from 60% rated load and normal line.

4.0 GENERAL FEATURES

4.1 Efficiency

The efficiency is than 85% typ. while measuring at normal line and rated load.

4.2 Hold up time

The hold up time is 16mS typ. at 115VAC input and rated load, which is measured from the end of the last charging pulse to when the main output drops down to 95% output voltage.

4.3 Protection

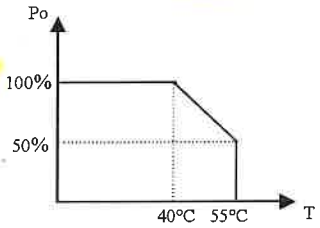
For some reason the power supply fails to control itself, the build-in over voltage protection circuit will shut down the outputs to prevent damaging external circuits. The trip point of crowbar circuit is around 26V to 31.0V.

The power supply will go into hiccup mode against short circuit or overload conditions, and will do auto-recovery while faulty conditions are removed.

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

0°C to 55°C (derating from 40°C, 50% rated load at 55°C)



5.2 Storage temperature

-20°C to 85°C

5.3 Altitude

Will operate properly at any altitude between 0 to 10000ft.

6.0 INTERNATIONAL STANDARDS

6.1 Safety standards

Designed to meet the following standards :

UL 1950

CSA 22.2 NO.234 & No.950

IEC 950/EN 60 950

6.2 EMI standards

Designed to meet the following limits :

FCC docket 20780 curve "B"

EN55022 class "B"

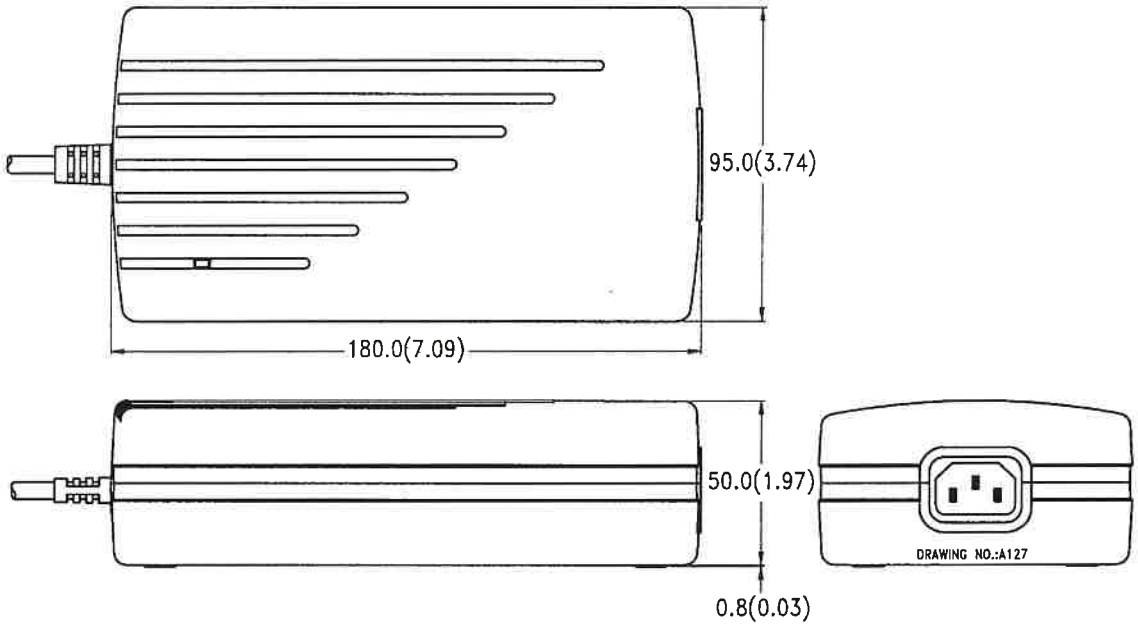
EN61000-3-2 class D

6.3 EMS standards

Designed to meet :

EN61000-4-2	8KV contact, 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	2KV	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 (inch) as above.

Tolerance is + -1mm

7.2 Connectors

AC inlet : Meet IEC320/CEE 22 standard.

DC output : using Molex 5557-06 or equivalent

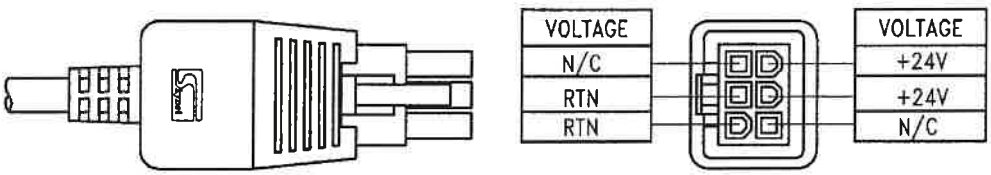
7.3 Power on indicator

Green light on the top of box.

7.4 Case color

Black

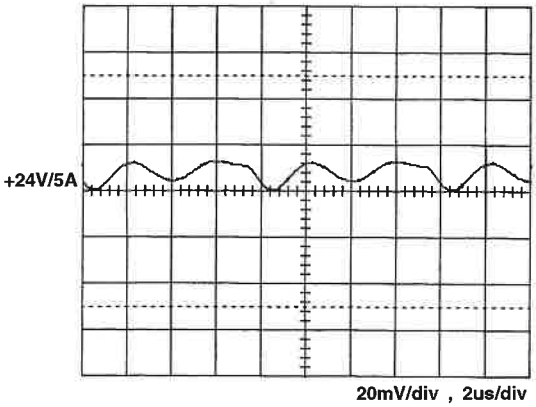
7.5 DC output pin assignment



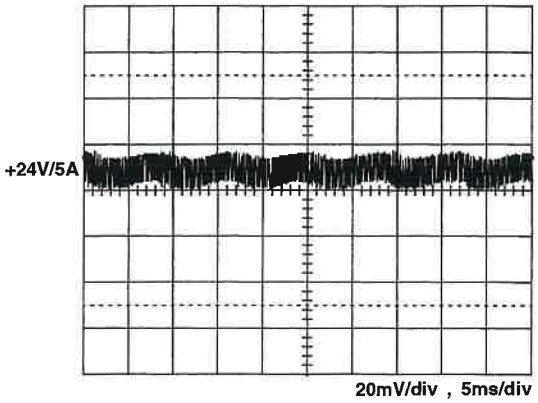
(Cable length 183cm approx.)

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

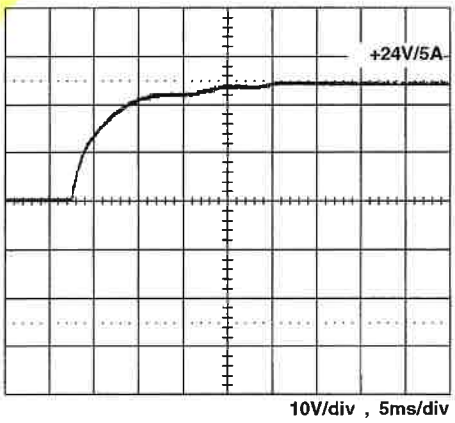
8.1 Switching frequency ripple



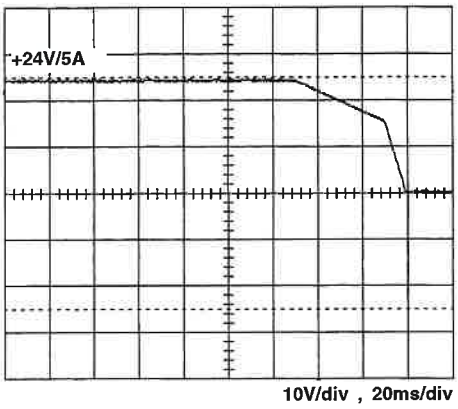
8.2 Line frequency ripple



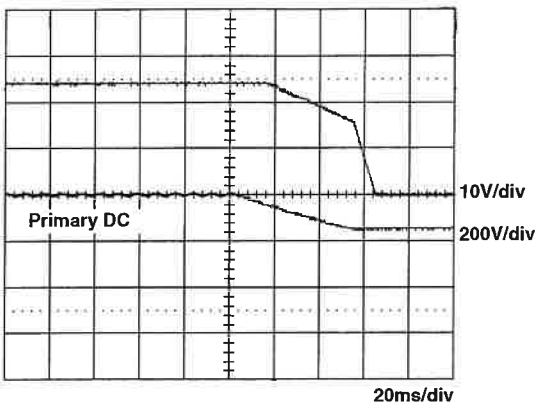
8.3 Output turn on wave form



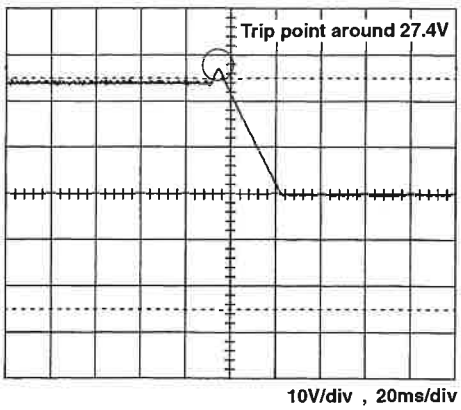
8.4 Output turn off wave form



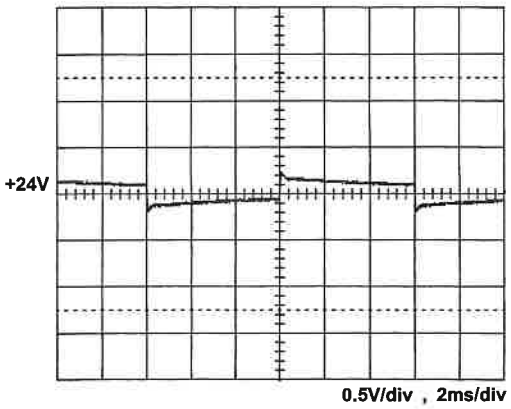
8.5 Hold-up time



8.6 Over voltage protection

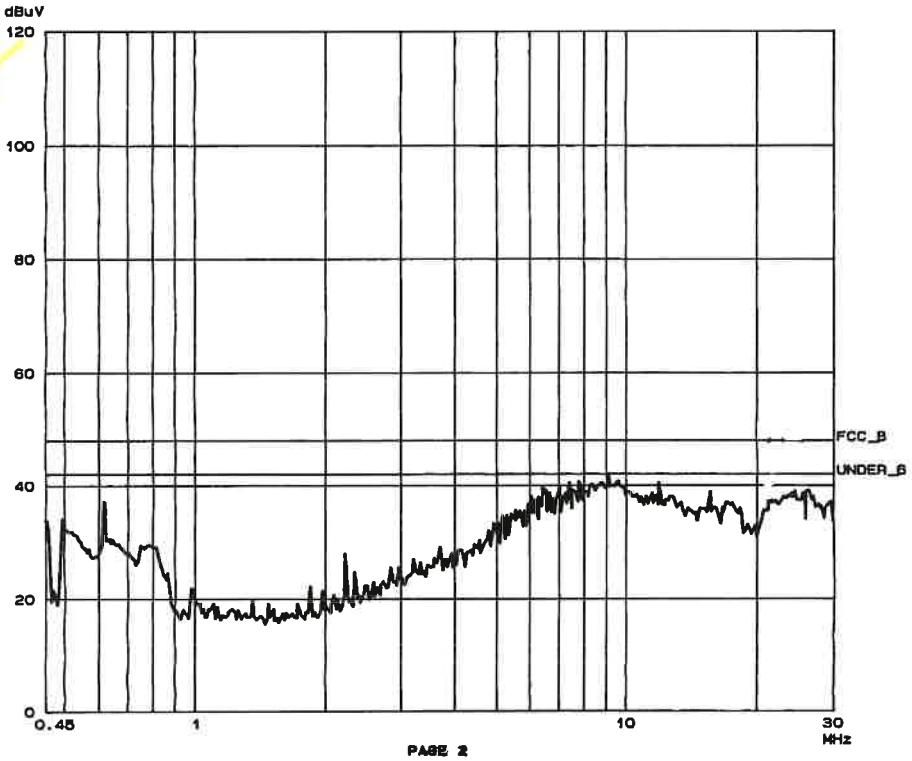


8.7 +24V step response



+24V step from 1A to 5A

8.8 FCC B performance



8.9 EN 55022 B